THE NEW ZEALAND MEDICAL JOURNAL
Journal of the New Zealand Medical Association

Māori nurses and smoking: what do we know?

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Abstract

Aim A research partnership between NZNO, Whakauae Research, and Taupua Waiora aimed to determine Māori registered and student nurses' smoking behaviours and attitudes to smoking cessation.

Methods We analysed a national web-based survey that explored the behaviours and views of 410 NZNO Māori nurses, student nurses and other health workers using descriptive statistical analysis.

Results Findings confirm a smoking prevalence rate of 21.5% for all respondents—32% for Māori nursing students and 20% for Māori nurses. Of smokers, 75% of nurses smoke fewer than 10 cigarettes per day, 84% smoked outside their homes, and almost 20% indicated they were considering quitting within the next month. Most nurses who had attempted to, or had, quit did not use the range of smoking cessation interventions available.

Māori nurses see the value in smoking cessation for improving their own and other's health, although many did not necessarily see themselves as effective in supporting Māori with smoking prevention and cessation.

Conclusion Prevalence rates for smoking among Māori registered nurses was lower than previous research and many of those still smoking indicate a strong intention to quit. Quit attempts in this occupation group could be better informed by evidence. Increasing the number of Māori nurses who are smokefree will have the added benefit of increasing the efficacy of cessation interventions with patients and whānau (extended families).

As healthcare practitioners, Māori nurses (and community health workers) are strongly positioned to influence wider whānau (extended families) and Māori communities about smoking cessation. Each interaction with a patient provides Māori nurses with the opportunity to offer a smoking intervention. Currently 3487 registered nurses identify as Māori[1], of whom, almost 3000 belong to the New Zealand Nursing Organisation (NZNO).

Despite Māori nurses' potential to be influential in smoking prevention and cessation, those who smoke are disadvantaged personally and professionally—they are at risk of poorer health, suffer disapproval and misunderstanding of non-smoking colleagues,[2] and have difficulty giving smoking prevention and cessation information.[3–5] Earlier research has shown that nurses who smoked believe they were inadequate role models, and that their smoking affected their ability to effectively work with patients who also smoke.[4,6]

The high prevalence of smoking among Māori generally (41%),[7] Māori women (44%),[7] and nurses (30%)[2] calls for targeted smoking cessation support[8] and mechanisms that are sensitive to the difficulties they encounter, as healthcare practitioners, when quitting.[9,10] Unsuccessful smoking cessation programmes for Māori have been attributed to their individual focus[11] and their lack of relevance.[12,13] Therefore, to optimise Māori nurses as role models and increase the impact of cessation advice, they need support to become and stay smokefree.

The overarching goal of the research is for Māori nurses to be in a stronger position to realise their potential in the prevention of smoking uptake and healthcare promotion more widely. This survey is the first stage of research that will inform the design of a supportive smoking cessation intervention for Māori nurses who smoke.

Method

A national web-based survey collected demographic and baseline data, and determined the smoking behaviours and attitudes among Māori nurses who are members of NZNO. The 111-item survey was iteratively designed with a team of Māori, nursing and tobacco control researchers using elements from validated smoking surveys (e.g. New Zealand Tobacco Use Survey), and informed by the Māori, literature about smoking and quitting behaviours.

Questions were selected based on their relevance to the study's aim and for comparability. Demographic questions included nursing scope, field, and employment, and were replicated from previous NZNO surveys. The survey collected information about smoking behaviours and activities; motivation to quit; lapse/relapse triggers during previous attempts; and the impact of environmental and social triggers for quitting. Ethical approval was gained from the AUT Ethics Committee (12/190).

NZNO, with the endorsement of Te Rūnanga o Aotearoa, distributed the survey to Māori registered and student nurse members with e-mail addresses (N=1796). Whilst responses were received from 24 community health workers and midwives, the main focus was on nurses. The survey was advertised in Kai Tiaki Nursing New Zealand and on the NZNO web site. Reminder emails were sent 2 weeks after the initial invitation. Descriptive statistical analysis was performed using EXCEL. Non-Māori and non-nurse/nursing student responses received were excluded from the analyses.

Results

Demographics—We received 386 responses from nurses and nursing students, and 24 responses from midwives and other community/healthcare assistants who identified as Māori. The 23% response rate was consistent with other NZNO member surveys (25-35%), and represents approximately 12% of the Māori nursing workforce. Most respondents (96%) were female, similar to the total nursing population (92.6%).[1] Registered nurses comprised 63% of the respondents, while 25.5% were student nurses—the remainder included enrolled nurses and other community health workers. Table 1 shows most nurses were employed by DHBs in inpatient (n=108) or community settings (n=43), with 61 employed by Māori and Iwi health providers. Most nurses worked in mental health and addictions (n=43) and primary health or practice nursing (n=38) areas (Table 1). Table 1 shows the majority of respondents' (77.1%) total annual income was more than $41,000 per year, and that 60.8% had children and/or adults dependents. The respondents were a younger age profile than the total nursing population—58% were less than 45 years of age, compared to 43.7%.[1] The majority (73.2%) were currently employed, while 20.5% (some students were currently employed) indicated they were student nurses. The geographical distribution (Table 1), determined by District Health Board (DHB), represented the NZNO geographical spread.

Table 1. Respondents' demographics

Demographic		Percentage (%)	Number (n)	Demographic	Percentage[1] (%)	Number (n)
AGE PROFILE (n=410)				**TOTAL INCOME PER YEAR (n=407)**		
Age Range (years)	16–25 yrs	10%	41	<$10.000	3.7%	15
	26–35 yrs	20%	83	$11,000–$40, 000	19.2%	78
	36–45 yrs	28%	116	$41,000–$70,000	34.2%	139
	46–55 yrs	27%	112	$71,000–$100,000	19.4%	79
	56–65 yrs	13%	53	>$100,000	13.8%	56
	>66 yrs	0.5%	2	Prefer not to say	9.7%	40
	No response	0.7%	3			
GEOGRAPHIC DISTRIBUTION (n=324)				**FINANCIAL DEPENDENTS (n=407)**		
Greater Auckland		25%	81	Dependent children only	45.4%	186
Central		13.9%	45	Dependent children & older adults	10%	41
Greater Wellington		13%	42	Dependent older adults	2.7%	11
Hawkes Bay		12.7%	41	Other	2.7%	11
Te Tai Tokerau		10.2%	33	No responsibilities	38.4%	158
Bay of Plenty		10.2%	32			
Midlands		9.6%	31	**SCOPE OF PRACTICE (n=410)**		
Canterbury		9.6%	31	Registered Nurse (incl. Nurse Practitioners)	62.9%	258
South		7.1%	23	Student Nurses	25.6%	105
Lakes		6.5%	21	Enrolled Nurses	5.6%	23
Top of South Island		1.4%	5	Community Health Workers	2.9%	12
West Coast		0.3%	1	Others (incl. Midwives, Kaiawhina)	2.9%	12
MAIN PLACE OF EMPLOYMENT (n=391)				**MAIN FIELDS OF PRACTICE (n=312)**		
DHB – Inpatient		27.5%	108	Mental health/addictions		43
Other*[3]		14.2%	56	Primary health/practice nursing		38
Māori and Iwi health provider		11.4%	45	Aged care		27
DHB – Community		10.5%	43	Community nursing		26
Education institution		7.7%	30	Medical incl. educating patients		22
Aged care provider		5.9%	23	Child health/neonatology		16
NGO		4.6%	18	Education incl. clinical		16
Māori and Iwi based community health		4.1%	16	Emergency & trauma		12
PHO provider		3.6%	14	Non-practising		12
General practice		3.1%	12	Other[3]		100
Other[4]		6.5%	26			

Note: [1]Percentages have been rounded to one decimal place. [2]Includes student nurses who may affect the income distribution. [3]Other includes accident and medical centre (n=2); community hospital (rural) (n=4); government agency (MOH, ACC, prisons, etc) (n=6); nursing agency (n=5); Pacific health provider (n=1); private surgical hospital (n=3); self-employed (n=5). [4]Other includes assessment & rehabilitation (n=8); cancer nursing (n=2); district nursing (n=7); family planning/sexual health (n=3); infection control (n=2); intellectually disabled (n=3); intensive or coronary care/high dependency unit (n=6); nursing administration/management (n=9); nursing professional advice (n=3); obstetrics/maternity (n=4); occupational health (n=2); other – nursing (n=11); palliative care (n=3); perioperative care/theatre (n=8); prison nursing (n=2); public health (n=10); school nursing (n=8); surgical (n=9).

Smoking behaviours—We found 21.5% of respondents currently smoked, with 16.6% smoking at least once a day (Figure 1). Figure 2 shows 75% of respondents smoked ≤10 cigarettes a day.

The majority of registered nurses (52.6%) no longer smoked, although 20% currently smoked and 12.8% smoke at least once a day. However, just over a third of the student nurse group smoked, with 36.2% aged between 26 to 35 years.

Figure 1. Frequency of respondents' smoking

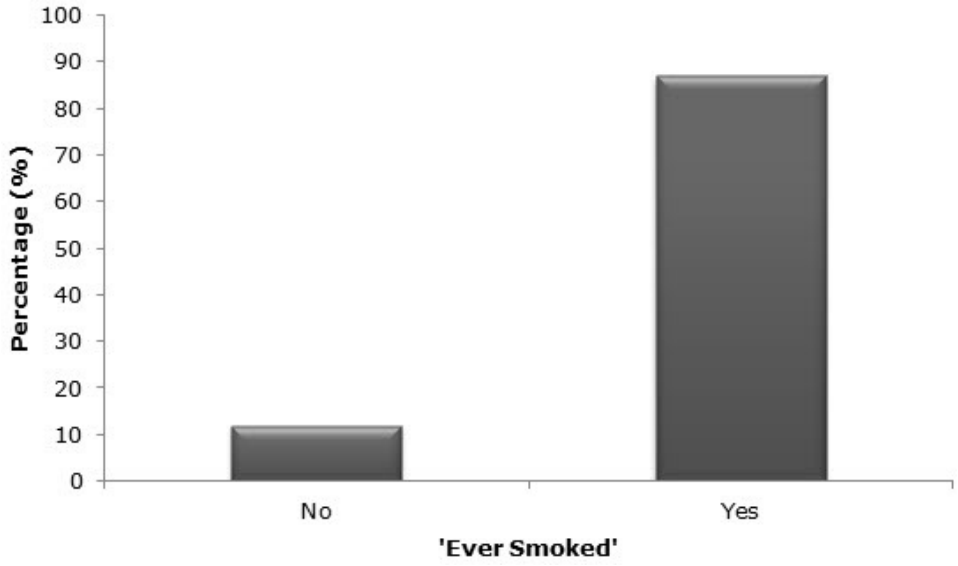


Figure 2. Number of cigarettes smoked per day

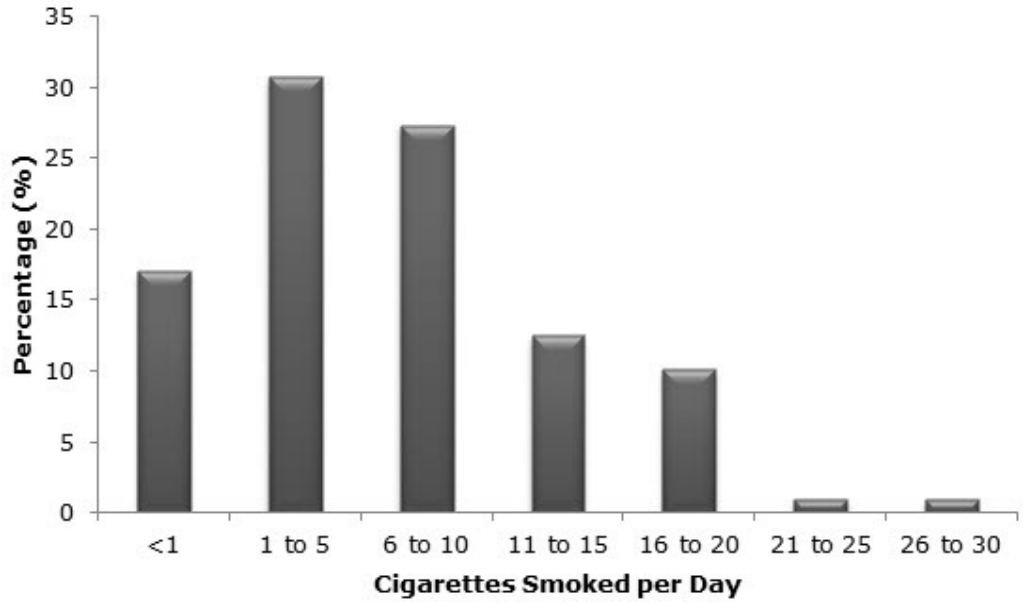


Figure 3 shows 87% (n=356) declared they had ‘ever smoked’. Of these, 65.8% had smoked more than 100 cigarettes—of those, 68.5% did not currently smoke and 5% smoked at least, or less often than, once a month. Tailor-made cigarettes were preferred by most respondents (59.1%) (Figure 4). While only 16% (n=8) of respondents smoked inside their house, 40% (n=23) smoked in the car and 16% (n=14) did this frequently.

Figure 3. Ever smoked status

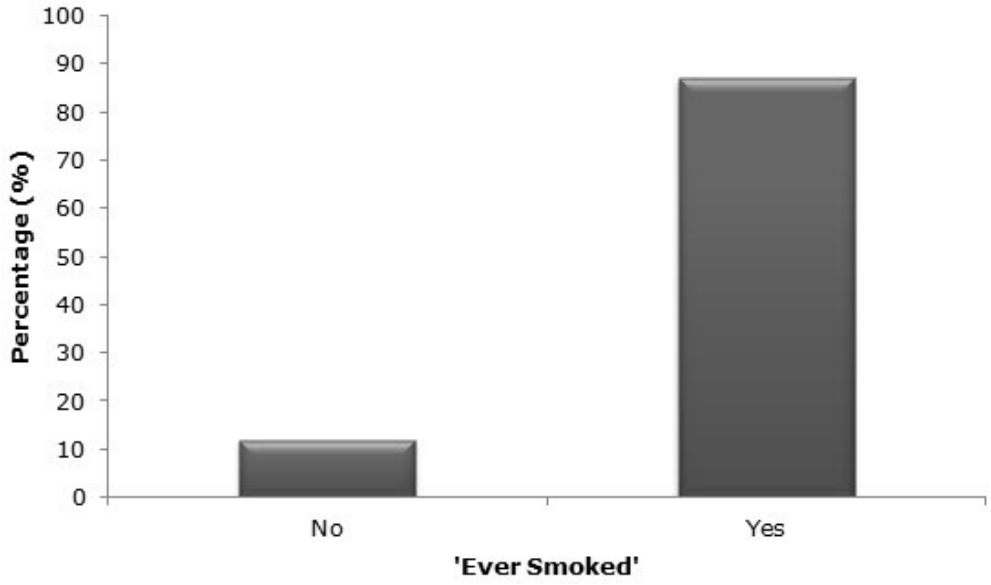
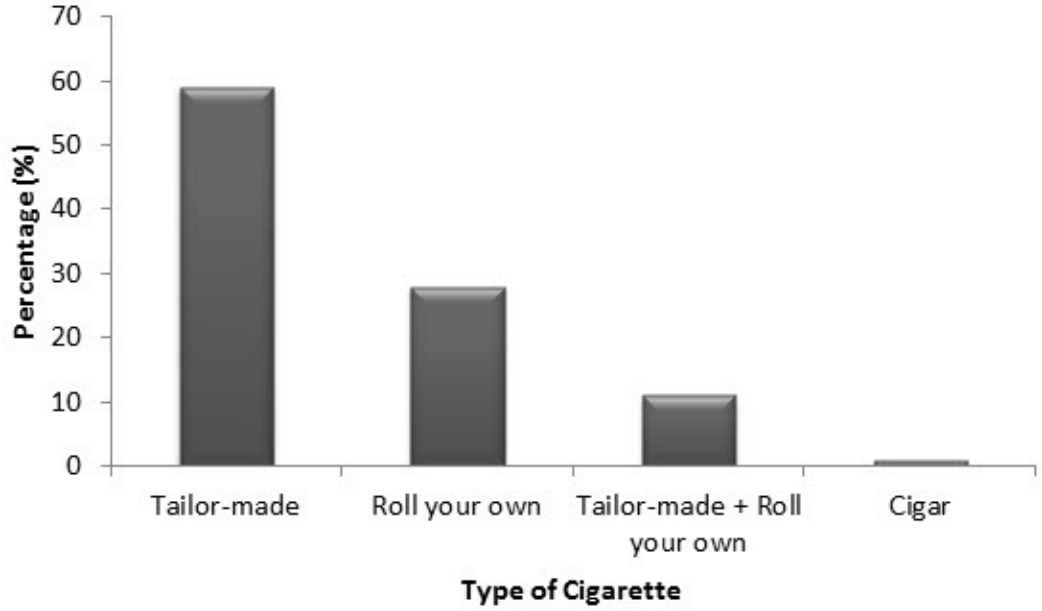


Figure 4. Type of cigarette smoked



Quitting—Just over 50% indicated they were thinking of quitting, and nearly 18% were thinking of quitting within the next 30 days. Figure 5 indicates the most common reasons for quitting was personal health (78%).

Of the respondents who had previously attempted or successfully quit (n=279), few had used cessation interventions, such as Aukati Kai Paipa (14%, n=20), Quitline (25%, n=42), or nicotine replacement therapy (15%, n=129) [calculated on the total of 6-items that related to the various forms of nicotine replacement therapies]. Most respondents (an average of 82%) did not use any interventions. Figure 6 shows 64 had made multiple quit attempts.

Figure 5. Main reasons for trying to quit

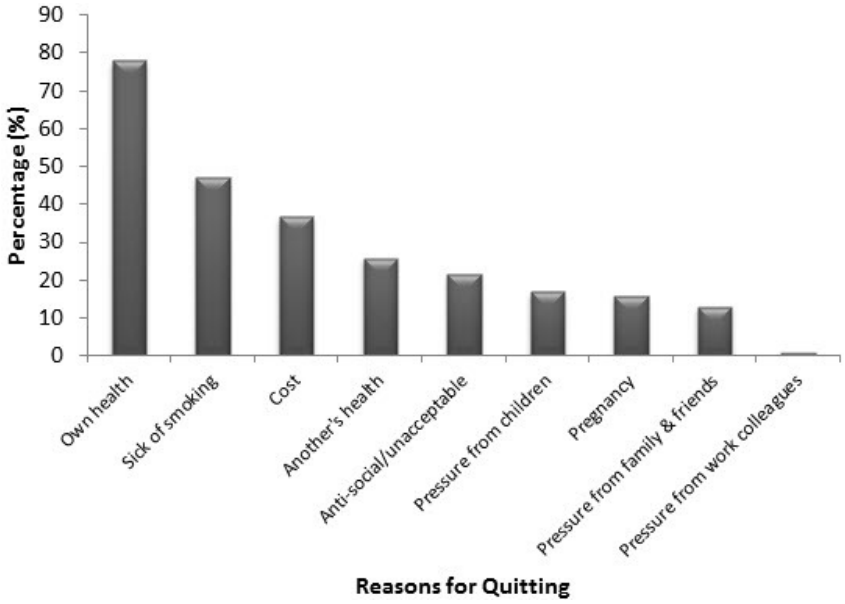
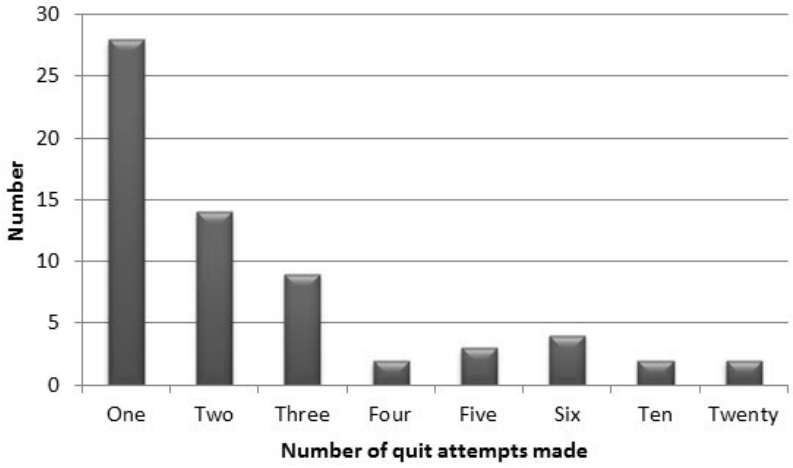


Figure 6. Previous quit attempts made (n=64)



Nurses and smoking—The majority of nurses agreed that stopping smoking was a priority for Māori health (84%) and that helping people to quit was important (94%) (Table 2). While 44% agreed Māori nurses were more effective in providing smoking cessation advice to Māori than non-Māori, 40% responded neutrally. We found 73.5% indicated that smoking did not help them in relating to their clients.

Being a nurse and a smoker was a conflict for 68% of the nurses, while 44% reported that nurses' smoking compromised the provision of effective smoking cessation advice to others.

Table 2. Views about smoking cessation role and nurses who smoke

Nurses' Role in Smoking Cessation		Percentage (%) Agreement/Disagreement				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Māori nurses give more effective smoking cessation advice to Māori than non-Māori nurses	19	25	40	13	1
2[R]	Stopping smoking is a priority compared to other health needs of Māori	55	29	6	6	4
3	Smoking helps me relate to my clients better	1.7	8	16.5	22	51.5
4	Helping people to quit is really important thing I can do to help improve their health	67	27	5	0.7	0
Nurses Who Smoke						
5[R]	There is conflict between being a nurse and being a smoker	33	35	18	10.8	4.5
6	I'd feel guilty if I was seen smoking while wearing my nurses uniform	65	19	11	3	2
7	Nurses who smoke can give effective advice to others about smoking cessation	10	24	21	20.5	24.5

Note: [1] Percentages were calculated to first decimal point

Smoking cessation strategies – Table 3 shows the majority of respondents thought smokefree workplaces helped to reduce smoking. According to 61% of respondents who smoke, increasing tobacco tax punishes smokers and makes them poorer, although 47% of respondents thought increasing the cost would assist quitting. One in three smokers indicated that being told not to smoke made them more determined to smoke. Almost 50% thought being told not to smoke in their cars was excessive. Removing visibility of cigarettes and the branding on packaging had little influence on reducing of the temptation or appeal of cigarettes for most smokers.

Table 3. Views about smoking cessation

View		Total Respondents (n=410) (%)	Nurses Who Smoke (n=88) (%)
1	Increasing the tax on tobacco just punishes smokers and makes them poorer	47%	61%
2	Increasing the cost of smoking will be the extra push some will find helpful to quit	66%	47%
3	I think employers are right to refuse to employ nurses who smoke	32%	16%
4	A smoke free workplace makes it easier to cut down	76%	61%
5	Being told you can't smoke in your own car is going too far	45%	49%
6	Being told not to smoke in your own car is going too far	21%	31%
7	Cigarettes not being visible behind the counter reduces the temptation to buy them	53%	29%
8	Unbranded packaging will reduce the appeal of cigarettes	35.4%	19.3%

Discussion

The survey reveals useful information about Māori nurses' and student nurses' smoking behaviours and attitudes. While 87% indicated they had 'ever smoked', 68.5% did not currently smoke. Importantly, Māori registered nurses' smoking prevalence appears to have reduced from 30.7%[2] to 20%. Nevertheless, this remains higher than the prevalence for all nurses and midwives (13.6%),[2] but is lower than the rate for Māori women in the general population.[7] In view of the high prevalence of Māori who smoke and the negative impacts on health, supporting Māori nurses to quit smoking is a priority.

Māori nurses have indicated that helping people to quit is an important activity, particularly for improving Māori health. Yet, nurses are under-utilised in health promotion activities,[4,5] and we found, that being a smoker compromises their ability to support Māori to stop smoking or prevent smoking uptake. The indications are that nurses who smoke may be amenable to a tailored quit intervention—over half signalled their intention to quit smoking, and almost one in five considered quitting within the next 30 days.

Of concern are the results for Māori student nurses with over one-third currently smoking at the time of the survey. Higher smoking rates for students may be partly explained by the higher smoking rates in the general population's younger age groups.[7] What this signals is the need for targeted smoking cessation interventions with Māori student nurses.

Personal health and being sick of smoking are key motivators for Māori nurses' to quit smoking. Remarkably most respondents who had either quit or attempted to quit, did not access the range of cessation support programmes available. While many smokers attempt to quit cold turkey,[14,15] best practice guidelines suggest a combination of support programmes and pharmaceutical interventions is most effective.[16] Tailored by Māori for Māori approaches and interventions (e.g. such as noho marae[17] , group quit and win initiatives such as WERO[18] and whānau[12, 19] approaches) appear to be more effective for supporting Māori smokers.

We found that strategies to support smoking cessation, such as increasing costs of tobacco were viewed differently by smokers and non-smokers with current smokers identifying some strategies such as tax increases and point of sale display restrictions as less effective. In addition, we found the belief that smoking as a right and choice was reinforced by respondents' negative reactions to directive messages about not smoking or smoking in cars, and that authoritative messages made them more determined to smoke; a finding supported by previous research[20].

A positive finding was the small number smoking inside their houses, possibly reflecting the impact of health messages about smoke free homes, particularly for children. However, further health promotion or legislation is needed to curb smoking in cars; a point currently being supported by Māori politicians and health advocates[21].

Furthermore, policies promoting the non-employment of staff who smoke as a District Health Board strategy to reduce smoking and model healthy behaviours[22] were not supported by most respondents. Although non-smokers were more supportive of a ban, implementation of such a policy would be difficult to enforce and would need widespread support and education. Further exploration is required to determine the most appropriate approaches employers can initiate to support existing smokers to quit.

This web-based survey may be limited by selection bias and access to computers to complete it. The respondent profile, however, was representative of Māori nurses belonging to NZNO, and of Māori nurses in general.[1]

Conclusion

Registered nurses had a lowered smoking prevalence rate than expected, although surprisingly one in three student nurses' smoked. Māori nurses value smoking cessation for improving their own and other's health, although many do not see themselves as effective in supporting Māori with smoking prevention and cessation advice.

Most nurses who had attempted to, or had quit did not access available smoking cessation interventions – the reasons for this are unclear but could indicate the need for a tailored kaupapa Māori smoking cessation intervention. Many of the issues raised by the survey will be qualitatively explored in the next phase of the research.

The strong indication of intention to quit in this group is a positive indicator that they are open to a range of supportive interventions.

Competing interests: None identified.

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Acknowledgements: We thank the Health Research Council for funding this project and NZNO (Te Rūnanga o Aotearoa) for initiating the research and partnering with Whakauae and Auckland University of Technology to undertake the project.

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