Awareness and perceived effectiveness of smoking cessation treatments and services among New Zealand parents resident in highly deprived suburbs

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Abstract

Aim To describe the awareness and perceived effectiveness of smoking cessation treatments and services among a population of mainly Māori and Pacific parents in South Auckland, New Zealand.

Method Parents of pre-adolescent children from 4 schools were surveyed from 2007–2009 using a self-complete questionnaire. Awareness and perceived effectiveness of cessation treatments and services were analysed by smoking status, ethnicity, gender and age. Relative risks were calculated using log-binomial regression to establish differences between smokers and non-smokers.

Results Awareness of Quitline, nicotine gum, and nicotine patch was higher among smokers (94%, 91%, 90%) than non-smokers (87%, 73%, 64%). Low percentages of smokers reported cessation interventions as effective (only 41% for Quitline—the intervention perceived effective by most). Awareness of varenicline, bupropion and nortriptyline was the lowest among both smokers and non-smokers (<31%).

Conclusion Poor awareness and low perceived efficacy of smoking cessation treatments and services among priority groups are barriers to accelerating the reduction of smoking prevalence in New Zealand.

Tobacco smoking is a major cause of mortality and morbidity globally. In New Zealand (NZ), smoking contributes to an estimated 5000 deaths annually, around 17% of total mortality.

Despite a comprehensive tobacco control programme that includes regular price increases, graphic health warnings on packets, restricted tobacco advertising and marketing, smokefree workplaces, social marketing campaigns and government funded cessation support and subsidised treatments, smoking prevalence is still around 20% overall and disproportionately higher among Māori (the indigenous people of NZ), Pacific Island communities, and in areas of high socioeconomic deprivation.

The NZ toll-free Quitline and the ready availability of subsidised nicotine replacement therapy (NRT) are central components of the NZ tobacco control programme. They represent a significant investment by Government in providing cessation support to smokers.

Nicotine patches, gum and lozenges are available through the Quitcard (exchange voucher) programme at only $NZ3 (increasing to $NZ5 from 1 January 2013) for an 8-week supply. Quitcards are issued by the Quitline service (phone, SMS or online...
support), primary care physicians, and available through trained Quitcard providers, largely healthcare workers based in community or hospital settings. NRT can also be purchased at full price over the counter in supermarkets and community pharmacies.

A number of treatments purporting to aid cessation—hypnosis, acupuncture, electronic cigarettes and Nicobrevin—are promoted as ways to stop smoking but are not recommended by the New Zealand Smoking Cessation Guidelines due to a lack of evidence of effectiveness.8

Interest among smokers in a number of settings in using alternative treatments appears to be high,9–14 but reported use of alternative cessation treatments is low.12,15–18 Nevertheless, 23% to 39% of smokers and recent quitters surveyed in the USA considered acupuncture and hypnosis to be effective treatments.19,20

Disappointingly, effective cessation treatments are underused.15 In 2009, only 2.1% of an estimated 70,000 smokers in a large multi-ethnic suburban population in Auckland, New Zealand’s largest city (population 1.4 million), reported having used subsidised NRT in a quit attempt,21 although older smokers and females were more likely to have used NRT than younger smokers and males respectively.21

A 2008 analysis of national Quitline data found that only 8.2% of the smoking population from this same area had ever called for quitting support.22 Analysis of Quitcard redemptions over six months in 2007 showed that only two thirds of callers from this region who had been provided with a Quitcard had exchanged it for NRT.23

Attempting to quit smoking without the assistance of behavioural support and or cessation treatments is common in New Zealand (just 34% use cessation products/advice).15 It is also common around the world, with two-thirds to three-quarters of quit attempts proceeding without assistance.16, 24

Internationally, there appears to be a commonly-held belief among smokers that cessation treatments are unnecessary and that strong self-control and a desire to quit are sufficient.9,10,25 The use of medications may be perceived as a sign of weakness, reflecting an inability to deal with one’s problems and to be in control of one’s own willpower and motivation,10,26 and using medications or treatments may be seen as not really quitting.27

Studies in a range of countries have found that smokers commonly believe cessation treatments are ineffective at helping them quit.9–12,28–31 In some of these surveys, cessation treatments were viewed with caution, as smokers perceived that they could be addictive, and that cessation treatments would not address the reasons people smoke.10,27–29

Further barriers to the use of cessation medication include concerns about the safety and side effects of treatments, particularly the risks of overdosing on nicotine, or that they may be more dangerous than cigarettes. Studies in New Zealand and the USA have found that many smokers mistakenly perceive that it is the nicotine in cigarettes that causes tobacco-related cancers.32,33

In order to identify strategies for increasing the use of evidence-based treatments among population groups with the highest smoking prevalence (Māori, Pacific Island and people of lower socioeconomic position), we set out to examine their awareness
of cessation medications and quit support services, and perceptions of their effectiveness.

**Methods**

We analysed data from a large quasi-experimental smoking prevention trial, *Keeping Kids Smokefree*, conducted from 2007–2010 in South Auckland, an urban area of high ethnic diversity and socioeconomic deprivation.

The study aimed to test interventions to reduce uptake of smoking among pre-adolescents. An allied objective of the study was to increase smoking cessation among parents. A detailed account of the method of data collection and recruitment is described elsewhere. In brief, baseline and follow up surveys of a singular parent/caregiver of participating children were conducted between 2007 and 2009.

Data for the current study were drawn primarily from follow-up surveys. Demographic information on ethnicity, gender and smoking status was drawn from the 2007 baseline survey. Students delivered the questionnaires to parents and returned them once completed. Data were entered into Epi Info, checked and validated against the original questionnaire by a data entry supervisor at the study centre.

Participants were asked to indicate their awareness and or perceived effectiveness of various smoking cessation treatments and services. The treatments and services included in the questionnaire represented the majority of the smoking cessation treatment options available in NZ at the time (nicotine patch, gum, inhaler, Microtab and lozenge), three pharmacotherapies available on prescription (bupropion, nortriptyline, and from 2009, varenicline), and three alternative treatments (hypnosis, acupuncture and Nicobrevin).

The services included were Quitline and the Aukati Kai Paipa programme (a face-to-face smoking cessation service aimed at Māori, and delivered by local Māori community health providers around NZ).

For the purpose of analysis, four response options (*I have never heard of this treatment/service* (not aware); *I have heard of it but I don’t know if it works* (aware, not perceived effective); *I don’t think this treatment/service works* (aware, not perceived effective); *I think this treatment/service works* (aware, perceived effective)) were recoded into two binary variables (Aware/not aware; perceived effective/not perceived effective). The variable ‘not perceived effective’ is taken to denote not only perceived ineffectiveness, but also encompasses uncertainty over the effectiveness of the treatments/services.

Participants specified whether they had ever smoked, and if so, how much tobacco they currently smoked. Participants who had never or no longer smoked were coded as non-smokers, while participants reporting smoking at least one cigarette per day were coded as current smokers. The questionnaire did not distinguish between daily and non-daily smoking or account for people smoking less than one cigarette per day. Participants identified their ethnicity by selecting from Māori, Pākehā/European, Pacific Island, or Other. Participants selecting Pacific Island or Other were asked to specify their ethnicity in a free text field. Multiple responses were prioritised to a single category in the order Māori, Pacific Island, Asian and New Zealand European/Pākehā using Statistics New Zealand’s prioritisation standard.

Age was grouped into three age ranges 16-24, 25-44, and 45 and over. Gender was inferred from the participant’s relationship to the school student, with gender roles such as mother, aunty, other female caregiver being coded as female and gender roles such as father, uncle, and other male caregiver being coded as male.

Frequencies and cross tabulations were performed to describe awareness and perceived effectiveness of each treatment by age, gender, ethnicity and smoking status. Differences between age, gender and ethnic groups were assessed using Pearson’s Chi-squared tests. In cases where one or more cells had a value of less than 5, Fisher’s exact test was used. A p-value < 0.05 was considered statistically significant. Data was analysed using SAS v 9.2 (SAS Institute., Cary, NC, US).

Relative risks (RR) were calculated using log-binomial regression to establish differences between smokers and non-smokers while adjusting for ethnicity. Differences in awareness or perceived effectiveness between smokers and non-smokers were considered to be statistically significant if the 95% confidence intervals (CI) did not include the value one.
As the survey instrument was a self-complete questionnaire, it was not uncommon for some questions to be left unanswered or for responses to be invalid. The denominator reported is that of valid responses excluding missing data.

Ethics approval for the study was obtained from the University of Auckland Human Participants Ethics Committee (Ref. 2006/416). The study was registered with the Australian and New Zealand Clinical Trials Registry (ACTRN12611000591954).

Results

The response rate was 67% (3722/5557) over the three years of parent follow-up surveys. Participants surveyed were mainly female (74.5%), aged 25–44 years old (71.0%). Approximately 43% were Pacific Island, 25% were Māori, 23% Asian, and almost 10% were NZ European.

Smoking prevalence was 27.6% but there were significant differences in smoking prevalence by ethnicity and age group with Māori (51.7%) and 25–44 year olds (29.4%) having higher smoking prevalence (Table 1).

Table 1. Participant characteristics and smoking status

<table>
<thead>
<tr>
<th>Variables</th>
<th>All participants</th>
<th>Smoking status known</th>
<th>P-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Non-smoker (row %)</td>
<td>Smoker (row %)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2306</td>
<td>1483 (72.7)</td>
<td>558 (27.3)</td>
</tr>
<tr>
<td>Male</td>
<td>789</td>
<td>519 (72.0)</td>
<td>202 (28.0)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Māori</td>
<td>784</td>
<td>329 (48.3)</td>
<td>352 (51.7)</td>
</tr>
<tr>
<td>Pacific</td>
<td>1349</td>
<td>924 (74.7)</td>
<td>296 (24.3)</td>
</tr>
<tr>
<td>Asian</td>
<td>731</td>
<td>612 (91.8)</td>
<td>55 (8.2)</td>
</tr>
<tr>
<td>NZ European</td>
<td>287</td>
<td>162 (68.6)</td>
<td>74 (31.0)</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-24</td>
<td>3456</td>
<td>72 (80.0)</td>
<td>18 (20.0)</td>
</tr>
<tr>
<td>25-44</td>
<td>2453</td>
<td>1407 (70.6)</td>
<td>587 (29.4)</td>
</tr>
<tr>
<td>45+</td>
<td>888</td>
<td>530 (76.1)</td>
<td>166 (23.9)</td>
</tr>
<tr>
<td>Smoking prevalence</td>
<td>2835</td>
<td>2053 (72.4)</td>
<td>782 (27.6)</td>
</tr>
</tbody>
</table>

*Calculated from Pearson’s Chi-square

Awareness of cessation treatments and services—Participants were most aware of the Quitline, nicotine gum, and nicotine patch, followed by hypnosis, acupuncture and Nicobrevin. Participants were less aware of newer forms of NRT (inhaler, lozenge, Microtab), prescription only treatments (varenicline, bupropion, nortriptyline), and the Aukati Kai Paipa service, with between half to a quarter of participants being aware of these treatments. Smokers were significantly more likely to be aware of the nicotine patch, nicotine gum, hypnosis, Nicobrevin and the Quitline service, than non-smokers (Table 2).
Female smokers had significantly (p<0.05) higher awareness of the Quitline (96.3% vs 88.2%), nicotine gum (93.7% vs 82.9%), nicotine patch (92.8% vs 83.1%), hypnosis (76.0% vs 65.8%), acupuncture (72.2% vs 65.8%), and Nicobrevin (70.4% vs 50.0%) than male smokers.

There were no significant differences in awareness of newer NRT (inhaler, lozenge, Microtab), prescription only treatments (varenicline, bupropion, nortriptyline), or the Aukati Kai Paipa service by gender among smokers (data not shown).

There were significant differences in awareness of the Quitline, nicotine gum and patch, hypnosis, acupuncture, Nicobrevin and the Aukati Kai Paipa service by ethnicity amongst smokers (Table 3). Māori, Pacific, and NZ European smokers were more aware of the Quitline than Asian smokers.

Māori and NZ European smokers were more aware of nicotine gum and patch, hypnosis, acupuncture, and Nicobrevin than Pacific and Asian smokers. Māori smokers were more aware of the Aukati Kai Paipa service than smokers of other ethnic groups.

Smokers aged 16–24 years old were significantly (p<0.05) more aware of the nicotine Microtab (than smokers aged 25–44, and 45 years or older) (66.7% vs 33.9% and 38.9%), and bupropion (60.0% vs 28.5% and 31.0%). There were no significant differences in awareness of other treatments or services by age group (data not shown).
Table 3. Ethnic differences in awareness of treatments among smokers

<table>
<thead>
<tr>
<th>Treatment (n)</th>
<th>All* N (%)</th>
<th>Māori N (%)</th>
<th>Pacific N (%)</th>
<th>Asian N (%)</th>
<th>NZ European N (%)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quitline (709)</td>
<td>609 (94.4)</td>
<td>309 (95.4)</td>
<td>256 (95.5)</td>
<td>40 (81.6)</td>
<td>64 (94.1)</td>
<td>0.007†</td>
</tr>
<tr>
<td>NRT gum (676)</td>
<td>613 (90.7)</td>
<td>294 (95.5)</td>
<td>221 (86.7)</td>
<td>38 (79.2)</td>
<td>60 (92.3)</td>
<td>&lt;0.0001†</td>
</tr>
<tr>
<td>NRT patch (693)</td>
<td>625 (90.2)</td>
<td>299 (94.3)</td>
<td>229 (87.1)</td>
<td>35 (72.9)</td>
<td>62 (95.4)</td>
<td>&lt;0.0001†</td>
</tr>
<tr>
<td>Hypnosis (644)</td>
<td>471 (73.1)</td>
<td>241 (82.0)</td>
<td>157 (64.6)</td>
<td>23 (51.1)</td>
<td>50 (80.6)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Acupuncture (637)</td>
<td>430 (67.5)</td>
<td>219 (75.5)</td>
<td>148 (60.9)</td>
<td>20 (45.5)</td>
<td>43 (71.7)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Nicobrevin (639)</td>
<td>418 (65.4)</td>
<td>216 (74.0)</td>
<td>143 (59.3)</td>
<td>17 (38.6)</td>
<td>42 (67.7)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>NRT inhaler (634)</td>
<td>294 (46.4)</td>
<td>137 (47.9)</td>
<td>103 (42.6)</td>
<td>21 (47.7)</td>
<td>33 (53.2)</td>
<td>0.410</td>
</tr>
<tr>
<td>NRT lozenge (638)</td>
<td>280 (43.9)</td>
<td>123 (42.9)</td>
<td>104 (42.1)</td>
<td>20 (42.5)</td>
<td>33 (55.0)</td>
<td>0.321</td>
</tr>
<tr>
<td>Aukati Kai Paipa (584)</td>
<td>232 (39.7)</td>
<td>134 (48.4)</td>
<td>72 (34.6)</td>
<td>8 (20.5)</td>
<td>18 (30.0)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>NRT Microtab (637)</td>
<td>228 (36.8)</td>
<td>104 (36.0)</td>
<td>78 (32.2)</td>
<td>20 (46.5)</td>
<td>26 (41.3)</td>
<td>0.230</td>
</tr>
<tr>
<td>Varenicline/Champix (433)</td>
<td>131 (30.3)</td>
<td>58 (31.0)</td>
<td>46 (27.2)</td>
<td>11 (31.4)</td>
<td>16 (38.1)</td>
<td>0.565</td>
</tr>
<tr>
<td>Bupropion/Zyban (637)</td>
<td>190 (29.8)</td>
<td>90 (30.8)</td>
<td>69 (28.9)</td>
<td>15 (34.1)</td>
<td>16 (25.8)</td>
<td>0.776</td>
</tr>
<tr>
<td>Nortriptyline/Norpress (632)</td>
<td>168 (26.6)</td>
<td>75 (25.5)</td>
<td>64 (27.1)</td>
<td>16 (36.4)</td>
<td>13 (21.0)</td>
<td>0.338</td>
</tr>
</tbody>
</table>

*Numerator is sum of each ethnicity  †Fisher’s exact test

Perceived effectiveness of smoking cessation treatments and services

Smokers were most likely to perceive the Quitline as effective, followed by nicotine patch, the Aukati Kai Paipa service, and nicotine gum (Table 4). However, smokers were significantly less likely to perceive the Quitline, nicotine gum or patch, Nicobrevin, or the Aukati Kai Paipa service as effective, compared with non-smokers.

Table 4. Perceived effectiveness of treatments by smoking status

<table>
<thead>
<tr>
<th>Treatment (n)</th>
<th>Perceived effectiveness of Treatment</th>
<th>RR** (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All participants**</td>
<td>Smokers N (%)</td>
</tr>
<tr>
<td>Quitline (2291)</td>
<td>1180 (51.5)</td>
<td>278 (41.4)</td>
</tr>
<tr>
<td>NRT gum (1894)</td>
<td>495 (26.1)</td>
<td>125 (20.3)</td>
</tr>
<tr>
<td>NRT patch (1875)</td>
<td>601 (32.1)</td>
<td>179 (28.5)</td>
</tr>
<tr>
<td>Hypnosis (1396)</td>
<td>258 (18.5)</td>
<td>88 (18.6)</td>
</tr>
<tr>
<td>Acupuncture (1373)</td>
<td>201 (14.6)</td>
<td>59 (13.7)</td>
</tr>
<tr>
<td>Nicobrevin (1215)</td>
<td>255 (20.0)</td>
<td>72 (17.1)</td>
</tr>
<tr>
<td>NRT inhaler (1080)</td>
<td>177 (16.4)</td>
<td>32 (10.8)</td>
</tr>
<tr>
<td>NRT lozenge (949)</td>
<td>166 (17.5)</td>
<td>36 (12.9)</td>
</tr>
<tr>
<td>Aukati Kai Paipa (754)</td>
<td>259 (34.6)</td>
<td>60 (25.8)</td>
</tr>
<tr>
<td>NRT Microtab (839)</td>
<td>131 (15.6)</td>
<td>25 (10.9)</td>
</tr>
<tr>
<td>Varenicline/Champix (463)</td>
<td>86 (18.6)</td>
<td>24 (18.3)</td>
</tr>
<tr>
<td>Bupropion/Zyban (654)</td>
<td>113 (17.3)</td>
<td>30 (15.8)</td>
</tr>
<tr>
<td>Nortriptyline/Norpress (613)</td>
<td>93 (15.2)</td>
<td>21 (12.6)</td>
</tr>
</tbody>
</table>

*Numerator is sum of non-smokers and smokers.
**Relative Risk with 95% Confidence Intervals adjusted for ethnicity. Non-smoker was the reference group.

Male smokers were significantly more likely than female smokers to perceive nicotine gum (26.1% vs 17.7%, p<0.05) and nicotine lozenge (19.7% vs 10.3%, p<0.05) to be
effective. There were no significant differences in perceived effectiveness by gender for any other treatments (data not shown).

NZ European smokers (36%) were more likely to perceive hypnosis as an effective treatment than Māori (16.6%), Pacific (16.6%), or Asian smokers (17.4%). Asian smokers were more likely to perceive the nicotine inhaler as an effective treatment (28.6%) than Māori (8.0%), Pacific (13.6%), or NZ European smokers (3.0%). There were no other significant differences in perceived effectiveness by ethnicity among smokers (data not shown).

Smokers aged 45 years and over (35.2%) were more likely to perceive nicotine patch as an effective treatment than smokers aged under 25 (6.7%), and aged 25–44 (27.4%). Smokers aged over 45 years were also more likely to perceive acupuncture (age 45 plus, 23.6%, vs age 16–24, 9.1%, and age 25–44, 11.3%) and Nicobrevin (age 45 plus 25.3% vs age 16–24, 0.0%, and age 24–44, 15.6%) as effective treatments than younger smokers. There were no other significant differences in perceived effectiveness by age group among smokers (data not shown).

Discussion

In this study conducted mainly with Māori and Pacific parents of pre-adolescent children, resident in a socio-economically deprived area of Auckland, awareness of Quitline (89%), gum (78%) and patch (75%) was high, and Quitline (52%), Aukati Kai Paipa (35%), and patch (32%) were the services and treatment considered most likely to be effective.

At the time of this study the Quitline had been in place for seven years and patch and gum were first subsidised in 2000. Therefore, the higher awareness of these could be in part attributable to their longer period of availability, the resulting higher profile via advertising of Quitline and earned media coverage of subsidised NRT. Quitline also supplies Quitcards, giving access to the subsidised patch and gum (and lozenge), so these would be expected to be highly correlated.

Our findings that smokers were more aware of smoking cessation treatments and services than non-smokers, and yet were generally less likely to perceive any particular cessation treatment as effective are consistent with the literature.9–11,29–31,37,38

It is concerning that awareness of hypnosis, acupuncture and Nicobrevin persists at a higher level (52-60%) than the wider range of recommended cessation treatments (26-46%).

We had expected awareness of the nicotine lozenge to be higher, since it was first subsidised in 2008. Nortriptyline and bupropion were subsidised from 2003 and 2009 respectively and varenicline partially so from 2010, but these prescription medicines are recommended as second line therapies after NRT in the New Zealand Smoking Cessation Guidelines. Contraindications also limit the number of smokers able to use these treatments.

Slightly lower awareness of patch and gum among Pacific and Asian people and lower awareness of Quitline among Asian people is unsurprising as campaigns promoting cessation have predominantly targeted NZ Europeans and Māori, who in
2008/2009 made up 70% and 21% of Quitline registrations respectively,\(^{39}\) while Pacific and Asian clients accounted for just 6% and 3% of registrations.

Knowledge of cessation treatments often comes from smokers’ social networks, particularly other smokers\(^ {14,28}\) rather than health professionals. While knowing someone who had successfully quit by using an evidence-based cessation treatment could be a powerful influence on decision making processes,\(^ {14,30}\) knowing someone who used an evidence-based treatment without success could influence decision making away from using such treatments.

Before smoking cessation treatments such as NRT or prescription medications were widely available, smokers who quit smoking mostly did so without professional support.\(^ {40}\) Qualitative research conducted in New Zealand 2009/2010 found Māori and Pacific Island smokers perceived willpower as sufficient for quitting smoking.\(^ {41}\)

Furthermore, there was a notion amongst some that smoking addiction was a myth, or just a habit, and that if smoking is not really addictive, then an external intervention such as a medication or a stop smoking service could not be of any assistance.\(^ {41}\)

Dessaix et al\(^ {42}\) argued that smokers place high value on use of willpower in a quit attempt, but that when they used treatments such as NRT, there was an expectation that the treatment should act like a magic bullet, that the treatment would do the quitting on their behalf, and when the quit attempt is not successful, blame is placed upon the treatment for not working.

**Strengths and limitations**—The study had a large sample size of 3722. It is a strength that all parents of the four participating schools were approached, meaning there was near full enumeration of the sample rather than using only a random subset.

Three-quarters of participants were mothers of child-bearing age of mainly Māori and Pacific ethnic groups. This could be seen as a strength as it provides hitherto unavailable information on a priority population group for tobacco control efforts: Māori women of child-bearing age have the highest prevalence of smoking (61% of Māori women aged 20–24 and 55% of Māori women aged 25–44 smoke tobacco) in New Zealand,\(^ {43}\) followed by Pacific women (29% aged 15-64).\(^ {2}\)

Māori women have a high prevalence of smoking while pregnant (45% at registration with a maternity carer, and 29% smoking following delivery).\(^ {44}\)

This study was cross-sectional in nature so no conclusions can be made about temporal associations. The modest response rate of 67% and the differential rate of invalid responses between explanatory variables such as age, gender, ethnicity and smoking status, and the treatment items in the questionnaire weakens any conclusions drawn.

Participants were prompted with the names of treatments and services, which may have inflated awareness of some treatments—unprompted responses may provide a truer representation of awareness of treatments, consequently a self-complete questionnaire may not be the appropriate survey instrument.

**Conclusions and recommendations**—If NZ is to attain its smokefree 2025 goal of less than 5% smoking prevalence, the rate of decline must accelerate—at the current rate of declining prevalence (23.7% in 1996, 20.7% in 2006) it will take generations
to arrive at a smokefree society.\textsuperscript{45} One way to accelerate this is to provide smokers with better and more frequent access to effective support so that they can make ‘more supported quit attempts more often’.\textsuperscript{46}

While other aspects of a tobacco control program (taxes, smokefree environments, media campaigns) generate motivational tension, and make triggers to quit more salient,\textsuperscript{47} treatments need to be readily available and smokers need to be attracted to using them. Lack of awareness of treatments and services, and perceived lack of efficacy are two barriers that should be addressed.

Recommendations for triggering quit attempts and wider use of effective cessation treatments and services among Māori, Pacific peoples and other priority populations have included culturally salient group quit smoking contests aimed at triggering clusters of smokers to quit, with greater access to treatments and behavioural support; offering smoking cessation more directly to smokers in the community; and greater use of communications media such as phone, email and social networking platforms.\textsuperscript{48}

Campaigns and events to trigger mass quitting, such as World Smokefree Day, No Smoking Day,\textsuperscript{49} and Stoptober\textsuperscript{50} could be synergistically deployed to raise awareness of effective and available treatments thereby triggering more supported quitting. More could be done to raise awareness of some of the newer treatments available, particularly the prescription only treatments, and the NRT inhaler.

More effort needs to be placed on emphasising the safety and effectiveness of NRT and other cessation treatments. This could be done using the warning labels on tobacco packaging to communicate directly to smokers.\textsuperscript{32}

Surveys of NZ doctors, midwives, and nurses in 2006/7 found that knowledge of evidence-based smoking cessation treatments was poor,\textsuperscript{51, 52} though knowledge should have improved with the release of the NZ Smoking Cessation Guidelines and the introduction of the government health target \textit{Better help for smokers to quit} and associated ABC programme.\textsuperscript{46,53}

Further research is needed to assess if health professionals have greater awareness and perceptions of treatments and services than previously found. Deficiencies found should be addressed with training and education at undergraduate and postgraduate levels.

\textbf{Competing interests:} Nil.

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