



## **Supporting smoking cessation in pregnancy – action is urgently needed**

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Smoking in pregnancy is a crucial health issue, with both immediate and downstream health and social effects. Smoking has serious adverse impacts on fetal, infant and child health as well as ongoing effects on the health of the mother and other people in the household. It is also an important issue for those wanting to reduce health sector costs, given the evidence for short-term economic savings following reductions in smoking among pregnant women.<sup>1</sup> In New Zealand, smoking rates continue to be high in the principal child-bearing years – 33% amongst women aged 25 to 34 years – and particularly high for Maori and Pacific women – 48% and 53% respectively in the same age group.<sup>2</sup>

In this issue of the Journal, McLeod et al publish a valuable study on factors associated with smoking at conception and during pregnancy.<sup>3</sup> Even allowing for the lower response rate from women of lower socioeconomic status who smoked, they found associations of higher smoking prevalence and lower quit rates with low socioeconomic status, Maori ethnicity and not being employed. These results are entirely consistent with a large body of evidence from New Zealand and around the world relating to smoking. The particularly high rate of smoking among Maori women at the time of conception (55%) highlights the critical need to provide more smoking cessation support for these women and their partners. The finding that three quarters of the pregnant women smokers in this population continued to smoke (after the first trimester) is of substantial concern.

There have been some recent positive developments in smoking cessation support for pregnant women, with the Ministry of Health funding several interventions. These include training programmes to improve smoking cessation counselling and support by lead maternity carers as well as other health professionals. The Ministry has also funded 37 Aukati Kaipaipa programmes that focus in particular on providing culturally appropriate smoking cessation support for Maori women who are hapu (pregnant). The programmes appear to have proved popular with participants, but evaluation data have yet to be published.

A recent mass media campaign run by the Quit Group has included a television advertisement promoting smoke-free pregnancy (part of the 'It's about whanau' campaign). The preliminary evaluation data on this campaign suggest a favourable impact for Maori,<sup>4</sup> but the impact for pregnant women has yet to be reported. Evaluation data on an earlier mass media campaign indicated some favourable attitudinal shift towards quitting among pregnant Maori women, but the campaign was of such low intensity that most were not even aware of it.<sup>5</sup>

One programme for smoking cessation in pregnancy for which data have been published is the 'SmokeChange Programme'. The study suggested a number of

beneficial outcomes,<sup>6</sup> but the evaluation was limited by the lack of a comparison group receiving standard care.

The collective impact of these various interventions at the national level is not known. Among pregnant women in Christchurch there have been statistically significant absolute reductions in smoking rates since 1994: 4.7%, 6.6% and 3.8% for the first, second and third trimesters respectively.<sup>7</sup> Yet the finding by McLeod et al, that none of the women surveyed who stopped smoking in the first trimester had reported participating in a structured smoking cessation programme, is of major concern (especially since these women have been in contact with a maternity care provider).

No national estimate for the rate of smoking in pregnancy appears to have been published since 1998 (based on data from Plunket for 1995–96)<sup>8</sup>. Given the importance of the issue, and the investment in new interventions by the health sector, it would seem that there is a need for nationally representative surveillance data that are both accurate and timely. A system of sentinel reporting by a randomly selected sample of lead maternity carers is one possible option. Further research is also needed to assess the impact of current interventions and to better define related hazards (eg, the proportion of pregnant women who are exposed to second-hand smoke). All such studies should ideally include biochemical validation of smoke exposure and smoking status, given the past New Zealand experience of under-reporting.<sup>9</sup> Any such data collection needs to be carefully implemented to allow for the sensitivity of the women's status and the need not to 'blame the victim' for nicotine dependency.

The study by McLeod et al appropriately argues for smoking cessation programmes that are tailored to the needs of pregnant women (and take into account their educational level and ethnic group). In particular, there is a critical requirement for programmes to meet the needs of Maori women. This could be achieved in part by appropriate provider training and incentives. Expanding the Aukati Kaipapa programmes (in terms of programme intensity and coverage) would also be fruitful.

The findings of this study also suggest that programmes may need to consider such factors as the particular relevance of first pregnancy, alcohol use, the occurrence of morning sickness and partner smoking status. McLeod et al argue for the integration of structured smoking cessation programmes with antenatal care. Such integration could make better use of the often close relationship between lead maternity carers and pregnant women.

The suggestion concerning financial incentives for providers delivering smoking cessation support is important. New Zealand already uses specific financial incentives for delivering other interventions, for example, the immunisation benefit. Given the successful use of both monetary and non-monetary incentives in the promotion of immunisation,<sup>10</sup> it would seem appropriate to trial the use of direct financial incentives to encourage pregnant women to quit. New Zealand has had some favourable experience with smoking cessation contests<sup>11</sup> and these could be specifically adapted for pregnant women and their partners.

Enhancing the national Quitline may reduce smoking by young women in general. One randomized controlled trial of telephone support for pregnant women in Christchurch found no significant effect on smoking rates but did report various psychosocial benefits.<sup>12</sup>

Treatment initiatives need to be accompanied by far more effective prevention campaigns that utilise the gamut of tobacco control policy instruments (eg, expanding smoke-free environments) as well as including more intensive, nationwide, mass media campaigns designed for pregnant women smokers (eg, as undertaken in California) or for young women generally.

The interventions detailed above would be substantially better resourced if even a small fraction of government revenue from tobacco taxation was specifically allocated for smoking cessation and tobacco control (as argued elsewhere)<sup>13</sup>. Raising tobacco taxes may have a direct beneficial impact, as evidence indicates that pregnant women are particularly sensitive to cigarette prices.<sup>14</sup>

Preventing smoking uptake and increasing cessation may also be more effective if smoking in pregnancy is seen within a societal context that can include social and economic stress. More successful government policies to address the determinants of social and economic inequalities, such as ethnic disparities in socioeconomic status and employment, could contribute to tobacco control efforts.

In summary, there is a need for improvements in surveillance, research and policies. If the health of women and their children is to be protected from tobacco use, the Government must support the health sector by commitment to ambitious targets and substantially higher levels of funding.

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