Changes in smoke-free home status in an immigrant Lebanese community in Sydney, Australia

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The smoking prevalence among the Lebanese-born population in Sydney, Australia, has been reported as significantly higher than that in the general population (males 42% compared with 27%, and females 28% compared with 21%).[1] Similarly, in 1998, only about one-third (36%) of Lebanese households were smoke-free, compared with 72% in New South Wales (NSW).[2]

While there is known variation in smoking status in NSW by country of birth,[3] it is unclear if rates of smoking in a particular non-English speaking community are influenced by national smoking cessation campaigns in English. There is some evidence of general effects, with smoking rates in English and non-English speaking adolescents being highly correlated over time with relative funding of the Quit campaign during the 1980s and early 1990s.[4]

To monitor changes in smoking prevalence and smoke-free home status among the Sydney Lebanese-born population, telephone surveys were conducted in 1997 and 2001 respectively (in Arabic or English). The survey participants were randomly selected according to postcodes with a high proportion of people born in Lebanon and using typical Lebanese surnames identified in the electronic telephone directory.[1] Eligible households were those with a member of the household aged 18 years and over born in Lebanon. One eligible person per household was randomly selected in both surveys. The 2001 survey sampling frame differed only from the previous survey by covering a wider geographic areas. There were 242 completed interviews in the 1997 survey and 342 completed interviews in the 2001 survey, with the response rates 74% and 82% respectively. The two samples did not significantly differ by demographic characteristics.

In both surveys smoking status was assessed with the question: "Which of the following best describes your smoking status: I smoke daily, I smoke occasionally, I don't smoke now but I used to, I have tried it a few times but never regularly, or I've never smoked?" Smoke-free home status was also assessed with the question: "Which of the following best describe your home situation: my home is smoke free, people occasionally smoke in the house, or people frequently smoke in the house?" Chi-square tests were used to compare proportions in determining the changes of smoking status and smoke-free home status between the two surveys.

Compared with the 1997 survey, the proportion of smoke-free homes significantly increased by almost 10% in the 2001 survey (see Table 1). This was mainly due to the reduction of responses in the "people occasionally smoke in the house" category.

Table 1: Smoke-free home status and smoking prevalence for persons born in Lebanon living in Sydney in 1997 and 2001.

	1997 telephone survey n=242 %	2001 telephone survey n=342 %
Smoke-free home status		
My home is smoke free (includes smoking is allowed outside only)	36.4	45.6
People occasionally smoke in the house	40.9	31.9
People frequently smoke in the house	22.7	22.5
	Chi-square=6.155,	df=2, $p<0.05$
Smoking prevalence		
Males	42.5	38.7
Females	27.7	21.5
Total	34.0	27.5

There was also a reduction of smoking rates for both males and females (see Table 1). However, these changes were not statistically significant. This could probably be explained by the small sample size of the surveys, which have only enough power to detect a 15% change in smoking prevalence among the survey respondents.

The change in individual smoking status is consistent with the results of the evaluation of the National Tobacco Campaign that demonstrated a 1.8% reduction in prevalence over 18 months in November 1998.[5] Local tobacco control programs (including tobacco cessation and smoke-free homes messages[6,7]) may have added to the national campaign, but given their small budget could at best have only had a modest impact. Recall of the national program (48%) was more than twice as high (22%) as recall of the local Arabic cessation message, although recall of the local smoke-free homes campaign was good (53%).[7]

These data support the hypothesis that national campaigns (at least tobacco control campaigns) can have a positive impact on migrant communities.

Acknowledgements

The authors gratefully acknowledge the contributions of the Smoke Free Home Project Team from the Central Sydney Area Health Service and the Arabic Tobacco and Health Project Team.

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