



What do we need to do to reduce smoking among teenagers?

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Tobacco consumption in New Zealand has fallen by almost half since the 1980s.¹ But this is mostly due to smokers consuming fewer cigarettes per day, on average, and some increase in quitting in middle age. Trends in the uptake of smoking, which occurs mostly among teenagers, have not been so encouraging. Up to the 1990s, the data (patchy as they are) suggest that prevalence of smoking among adolescents was falling, but between 1992 and 1997 rates among 14- and 15-year-old children increased by almost one third.¹ Since 1997 the trend has changed again, with some decline in smoking among girls, but no improvement among boys.² Rates are still high. About one quarter of 14- and 15-year-olds in New Zealand smoke at least monthly; just under 15% report that they smoke every day.² These averages disguise large social and ethnic variations. For instance, among Maori, the surveys indicate one third of fourth-form girls smoke daily.²

What can we do to reduce smoking in this age group? One way of tackling this question is to consider the settings in which teenagers live and study. The influences at home are well known. Adolescents whose parents smoke are more likely to smoke themselves, so it is important to support activities that will help adults quit. Promoting the smoke-free message is another worthwhile strategy. Living in a smoke-free home, regardless of whether one or more parents smoke, is associated with lower smoking rates among adolescents.³ Mass media campaigns, which reach teenagers by television, radio and printed material, are, of course, not confined to the home, or to this particular age group. Experimental studies provide moderately strong evidence that targeted campaigns can reduce tobacco use, especially when media activity is coordinated with school- and community-based prevention.⁴ But broad-based campaigns may also have important effects. The Australian National Tobacco Campaign (1996–1999) was directed towards the 18–40 age group, but its graphic style, emphasising the immediate harmful effects of smoking, caught the attention of teenagers, and modified their attitudes towards tobacco use.⁵

The message from the paper by Darling and Reeder in this issue of the Journal is that there is more to be done in schools.⁶ Their survey of NZ secondary schools found that only half are currently totally smoke free. We know that smoking bans at school are associated with lower prevalence of teenage smoking, but only when the ban is strongly and reliably enforced.³ In New Zealand, many schools seem to be applying double standards: one rule for students, and apparently another for staff and visitors. Inconsistencies of this kind undermine smoking policies. But Darling and Reeder also found that most staff support tighter restrictions on smoking as proposed by the Smoke-free Environments Bill. This Bill, currently before Parliament, will make all school buildings and grounds totally smoke free.

A recent paper in the *Lancet* shows how social settings may be exploited to influence the attitudes and behaviours of teenagers.⁷ Three thousand five hundred 10- to 14-year-olds were interviewed about their movie-watching habits. The researchers then

checked the movies that had been nominated, counted the number of times cigarettes and other tobacco products were shown, and related their findings to smoking in the study cohort over the following one to two years. After controlling for a large number of baseline variables (including parents' smoking habits), children in the highest quartile of exposure to smoking in the movies were 2.7 times more likely to initiate smoking than children in the lowest quartile. These findings fit with the results of cross-sectional studies, and the time-trend data are also consistent. The period when smoking rates among teenagers increased was a time when movie-going became more popular. Moreover, during the 1990s the proportion of film characters portrayed with a cigarette in hand increased. By 2000, the prevalence of smoking as it appeared in top-ranking movies was similar to real-life prevalence figures 50 years earlier.⁸ As a result of all these changes, the exposure of New Zealand adolescents to 'smoky' films increased threefold between the 1980s and the 1990s.²

An intriguing feature of the rise in adolescent smoking in the 1990s is that the same pattern was observed in many countries. For instance, the United States, Britain, Canada and Switzerland reported similar changes to those observed in New Zealand.^{2,4} What factors might be operating on a worldwide basis that could explain this surge in smoking among young people? Mass culture (including movies) and the tobacco industry spring to mind as possible explanations. It is plain from internal industry documents that 'big tobacco' operates as a global force, developing and selling its products in a coordinated fashion across the world.⁹ Although the industry pretends otherwise, wooing teenagers is an essential part of their strategy. An RJ Reynolds executive wrote in 1973, 'realistically, if our company is to survive and prosper, over the long term, we must get our share of the youth market'.¹⁰ The industry has maintained a stream of new smokers by designing cigarettes that appeal to youth, by targeted pricing strategies, by a heavy investment in advertising and promotion, and by ensuring that their products are placed where teenagers will see them. A 1989 Philip Morris document listed movies which the industry had paid to ensure its products were prominently displayed. Examples included 'The Muppet Movie', 'Robocop', 'Dream Team', 'Who Framed Roger Rabbit' and 'Crocodile Dundee'.¹⁰

Local anti-smoking programmes are important. We need smoke-free schools, as Darling and Reeder point out. Tobacco control for Maori and Pacific populations needs special attention. We also need stronger support for smoke-free homes, effective quit services and comprehensive media campaigns. New Zealand might even consider R18 ratings for movies that feature smoking⁸ (with exceptions, of course, for pipe-smoking wizards and hobbits).

But these actions will not be sufficient on their own. Of all the forces that are promoting teen smoking, the most powerful are international; for this reason the public health response needs to be on the same scale. The Framework Convention on Tobacco Control is a very welcome first step, but awaits implementation.¹¹ As Derek Yach, one of the architects of the Convention has argued, the motto for tobacco control needs to be 'think global, act local, act global'.⁹ It is unlikely that there will be a sustained reduction in teen smoking otherwise.

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