Health Promotion Journal of Australia, 2014, **25**, 69–70
http://dx.doi.org/10.1071/HEv25n2_ED

Editorial

The Surgeon General's 'Smoking and Health': a continuing challenge

***C. Binns*[A], *P. Howat*[A,B], *J. Jancey*[A,D] *and S. Carter*[C]**

[A]School of Public Health, Curtin University, GPO Box U1987, Perth, WA 6845, Australia.
[B]Centre for Behavioural Research, Curtin University, GPO Box U1987, Perth, WA 6845, Australia.
[C]School of Public Health, Level 1 Building 1 K25, Medical Foundation Building, The University of Sydney, NSW 2006, Australia.
[D]Corresponding author. Email: j.jancey@curtin.edu.au

In the USA, the Surgeon General occupies a position equivalent to director of public health or chief medical officer in countries such as Australia. They are the head of the USA Public Health Service, a branch of the uniformed services in the USA. They are allowed more latitude in expressing their professional goals than other public servants and it has become customary for Surgeon Generals to issue reports on significant public health issues, ranging from osteoporosis to sexual abuse and HIV/AIDS.

Probably the best known report has been the first, issued by Rear Admiral Luther Terry in January 1964, 'Smoking and Health, Report of the Advisory Committee to the Surgeon General of the Public Health Service, US Department of Health, Education, and Welfare, Public Health Service' to give its full title.[1] Like most of his advisory committee Dr Terry was a heavy smoker. In 1964 it was estimated that 42% of American adults smoked and in Australia in the same year 58% of men and 28% of women smoked. 'Smoking and Health' was not the first report on the effects of smoking as it brought together a synthesis of the results of 7000 published studies. It was not until some years later the irony in the title was noted and it was realised that a title such as 'Smoking or Health' would have been far more appropriate.

The principal data on the death rates of smokers and of non-smokers came from seven large cohort studies of men that commenced between October 1951and October 1959.[1] One of the best-known studies included was the study of UK medical practitioners by the two epidemiological knights, Richard Doll and Bradford Hill.[2,3] Sixty years ago in this study 83% of male doctors smoked compared to an estimated 2% today. Doll and Hill found increased death rates in the smokers from all causes and all cancers and specifically from lung cancer, chronic bronchitis and coronary thrombosis. Doll and Hill had published an earlier review in 1950 in which they noted that several smaller pre-war studies from Germany and the USA had found a relationship between tobacco and lung cancer. Then in 1962 the Royal College of Physicians in London issued their report on Smoking and Health with what became one of the best known covers of a medical book, the sinister threatening image of a lighted cigarette against a black background.[4] The report stated that

> Three-quarters of the men and half of the women in Britain smoke. Men smoke more heavily than women. Smoking is now widespread among schoolchildren, especially boys. Many doctors have given up smoking since the dangers of the habit have become apparent only half of them now smoke and less than a third smoke cigarettes.

Then finally in 1964 the Surgeon General issued his report.[1] The delay of at least 14 years has been attributed to the massive disinformation program instigated by the tobacco industry, a tactic that has continued to the present.[5,6] However the delay did allow the incorporation of more data in the US Smoking and Health report and it became the first major public health report to incorporate a meta-analysis.

Since the original reports from the UK and USA, the number of diseases and pathological effects of tobacco smoke exposure has continued to rise. In 2007 the World Cancer Research Fund estimated that tobacco causes an estimated 20% of all cancer deaths. In 2002, out of all new cases of cancer in low-income countries, over 1 in 5 in men and almost 4% in women were attributable to tobacco. In high-income countries, one-third of all new cancer cases in men and just over 1 in 8 in women were attributed to tobacco smoking. Cigarette smoke is now recognised as a major causative factor for colorectal cancer, liver cancer and probably breast cancer. Smoking by a mother or exposure to second-hand smoke is now recognised to decrease the production of breastmilk, the most important factor in early life nutrition.[7]

The influence of Smoking and Health has been felt worldwide, with concerted action against smoking led by the World Health Organization. A review of data from 187 countries shows that since 1980 the global prevalence of adult male smoking has declined from 42 to 30%. Programs that followed its release have saved the lives of 8 million Americans and reduced the smoking rate to 18% (2% of doctors) in the USA and 15% in Australia.[8–10]

The UK and USA reports have had a major impact on the direction of health promotion and, importantly, on influencing governments to support tobacco control measures. The success of tobacco control in Australia and other countries can be attributed to the recognition

that effective health promotion action involves a combination of policy, economic and environmental interventions as well as education. Australia has been a world leader in these strategies with innovative approaches dating back to the 1970s and beyond. Over the last four decades in particular, tobacco control in Australia has been blessed with numerous players who have collectively contributed to tobacco 'health promotion'. Many of these contributors have worked tirelessly behind the scenes; some are now deceased.

With all of the impact attributed to the Smoking and Health Report, it is not surprising that the current head of the Centers for Disease Control states that the most effective public health programs are grounded in an evidence-based technical package: a selected group of related interventions that, together, will achieve and sustain substantial and sometimes synergistic improvements in a specific risk factor or disease outcome.[11] Since the Smoking and Health Report, there have been another 53 reports issued by the Surgeon General, the majority related to smoking. The latest report, a commentary on the journey since the 1964 report, notes that in the USA there have been 20 million deaths due to tobacco in the past 50 years. Productivity losses in the USA from premature death alone now exceed $150 billion per year and the annual costs of direct medical care of adults attributable to smoking are now estimated to be over $130 billion.[12]

China, where there are a purported 350 million smokers and 740 million passive smokers, epitomises the ongoing challenge for tobacco control globally.[13,14] Sadly, an increase in smoking rates continues for younger age groups and females in China. Over 1.2 million deaths per year are attributed to tobacco use. This annual death toll is projected to rise to beyond 2 million by 2025. The conditions that have supported tobacco control in Australia are sorely lacking in China. A lack of public awareness, weak government support, strong resistance by the tobacco industry coupled with non-existent health promotion have dogged the Chinese futile attempts to curb smoking to date.[14] The urgent need for comprehensive health promotion interventions is now recognised.[13,14]

The scope of the damage caused by tobacco remains a major challenge to health promotion in Australia and around the world, especially in low-income countries as illustrated by Chinese tobacco related statistics. Many countries will need the suite of health promotion strategies that has made Australia a world leader in dealing with the tobacco issue. In Australia, however, it is time for a stock-take. More pressing priorities such as obesity and harmful alcohol use require a larger proportion of our health promotion resources and attention.[15] However, vigilance on the tobacco front is required for some time in the future, especially considering the devious nature of the tobacco industry that is under siege in this country. New cohorts of young people also need to be reminded of the health risks through ongoing community and school education.[16] Of prime importance will be ongoing rigorous policy and environmental supports that reinforce non-smoking as the norm. There is no doubt that there will be enormous opportunities as well as obligations for ongoing leadership in tobacco control in Australia (especially for Indigenous people[17]) and globally of our health promotion.

References

1. US Surgeon General. Smoking and Health, Report of the Advisory Committee to the Surgeon General of the Public Health Service. Washington DC; US Department of Health, Education, and Welfare: 1964.
2. Doll R, Hill AB. The mortality of doctors in relation to their smoking habits; a preliminary report. *BMJ* 1954; **1**(4877): 1451–5. doi:10.1136/bmj.1.4877.1451
3. Doll R, Hill AB. Lung cancer and other causes of death in relation to smoking; a second report on the mortality of British doctors. *BMJ* 1956; **2**(5001): 1071–81. doi:10.1136/bmj.2.5001.1071
4. Royal College of Physicians. Smoking and health. London: Pitman Medical Publishing; 1962.
5. Pollock D. Denial and delay – the political history of smoking and health, 1951–64; Scientists, Governments and Industry as seen in the papers at the Public Records Office. London: Action on Smoking and Health; 1999.
6. Daube M. Fifty years on more action is still needed to end tobacco smoking in Australia. *Med J Aust* 2014; **200**(1): 12. doi:10.5694/mja13.00125
7. National Health and Medical Research Council. Infant feeding guidelines for health workers. Canberra: NHMRC; 2012.
8. Cancer Council of Victoria. Tobacco in Australia: facts and issues. 4th edn. Melbourne: Cancer Council; 2012.
9. Frieden TR. Tobacco control progress and potential. *JAMA* 2014; **311**(2): 133–4. doi:10.1001/jama.2013.284534
10. Holford TR, Meza R, Warner KE, Meernik C, Jeon J, Moolgavkar SH, *et al*. Tobacco control and the reduction in smoking-related premature deaths in the United States, 1964–2012. *JAMA* 2014; **311**(2): 164–71. doi:10.1001/jama.2013.285112
11. Frieden TR. Six components necessary for effective public health program implementation. *Am J Public Health* 2014; **104**(1): 17–22. doi:10.2105/AJPH.2013.301608
12. US Department of Health and Human Services. The health consequences of smoking – 50 years of progress: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014.
13. Smith DR, Wei N, Wang R-S. Tobacco smoking habits among Chinese medical students and their need for health promotion initiatives. *Health Promot J Austr* 2005; **16**(3): 233–5.
14. Zhang J, Ou JX, Bai CX. Tobacco smoking in China: prevalence, disease burden, challenges and future strategies. *Respirology* 2011; **16**(8): 1165–72. doi:10.1111/j.1440-1843.2011.02062.x
15. Australian National Preventive Health Agency. National preventive health research strategy 2013–2018. Canberra: ANPHA; 2013.
16. Marck K, Glover M, Kira A, McCool J, Scragg R, Nosa V, *et al*. Protecting children from taking up smoking: parents' views on what would help. *Health Promot J Austr* 2014; **25**(1): 59–64. doi:10.1071/HE13029
17. Power J, Grealy C, Rintoul D. Tobacco interventions for Indigenous Australians: a review of current evidence. *Health Promot J Austr* 2009; **20**(3): 186–94.