Market impact of tobacco pack warnings — current warning labels and beyond

Caroline Miller

Cancer Control, Cancer Council South Australia, South Australia.

Email: cmiller@cancersa.org.au

Abstract

Tobacco is a unique consumer product, warranting unique regulation and controls, including clear consumer advice and restrictions on marketing. In 2006, the Australian Government followed the lead of Canada and a handful of other nations and introduced new warnings on to cigarette packets. The warnings consisted of graphic or pictorial warnings, demonstrating tobacco related pathology and promoting quitting. These warnings covered 30% of the front of the pack and 90% of the back of the pack, and featured the Quitline number prominently. This is consistent with Australian obligations under the World Health Organisation's Framework Convention on Tobacco Control, and also consistent with its more detailed recommendations for implementation. The impact on smokers of graphic health warnings on cigarette packers have been well evaluated over the past decade, both within and between selected countries. It is well established that graphic health warnings are more effective than plain text-based warnings. Furthermore, there is no doubt that health warnings on cigarette packets provide information to smokers, engage smokers, and influence smokers' cognitions, feelings and behavioural intentions. Research and evaluation has also demonstrated that some pack warnings have greater impact than others. It has demonstrated that pack warnings lose impact and need to be refreshed. This evidence has been applied and a new set of warnings is now under development by the Australian Government for release in 2012, in line with plain cigarette packaging.

Background

Tobacco is unique as a consumer product, not because it is hazardous, nor because it can be lethal. Tobacco is unique in that when used as intended by the manufacturer, it kills its long-term users – probably half of them. The scale of harm tobacco causes to the people who buy and consume it, makes it unlike any other product on the market. It also justifies intervention and regulation of the product, to warn consumers of the risks associated with consumption.

Government health warnings on cigarette packets are one form of tobacco regulation. Unlike food, there is no mandatory disclosure of ingredients in tobacco products (although voluntary disclosure occurs and constituents are posted to an Australian Government website). Like other consumer warning labels, warnings on tobacco packets are designed to inform consumers of its toxic constituents. Mandating health warnings on tobacco packaging is a cost-effective way to help draw consumers' attention to the harms associated with the product. Smokers can see the warnings when they handle the packet. It has been estimated that a 20-a-day smoker would be exposed to cigarette packet warnings 7000 times a year.³

In stark contrast to its deadly nature, tobacco is a consumer product that has been marketed heavily and with sophistication, thereby glamorising and normalising tobacco use. The tobacco industry has had a long history of failing to warn consumers and has actively denied the harmful effects of its products. Internal tobacco industry documents reveal public relations and marketing strategies

to deny scientific findings about the health consequences of tobacco use, and tobacco smoke exposure, to resist regulation of tobacco and to promote and sell tobacco. ^{4,5} Health warnings on cigarette packets have faced a long history of opposition from the tobacco industry. ^{6,7}

The first warning appeared on Australian tobacco products in 1973, consisting of the benign "Warning. Smoking is a health hazard", in small font at the bottom of the packet. Warnings were broadened and strengthened in 1987 but remained in small text, integrated into the colour scheme on the bottom of the packet. The next generation of cigarette packet warnings introduced in 1995 (black-text on white box) were more prominent, easier to read and communicated the harms of smoking more powerfully than the generation of warnings that had preceded them. The placement of the new warnings - in large font, high contrast, black text on a white box, taking up 25% of the top of the packet - was superior to the warnings that preceded them in their contrast to the design elements of the packets. However, research at the time found that while the warnings were prominent, they were still not as salient as the producers' trademarks and other commercially designed components of the pack. There was more work to be done in Australia to counter the glamorising brand imagery on packs.

During this time, the tobacco packet itself became of increasing significance, as opportunities for conventional paid tobacco advertising and sponsorship were eliminated in Australia and elsewhere, starting with bans on television advertising in 1976. In the context of bans on advertising in mass media, internal tobacco industry

FORUM

documents have shown that tobacco companies viewed cigarette packet itself as an increasingly important component of marketing strategy, as a vehicle for communicating brand image and for creating significant in-store presence at the point of sale. Industry documents also revealed the careful balancing act that companies have employed in using pack design and colour to communicate impressions about different products and to ensure that cigarette packaging appeals to selected target groups, including young adults and women.

The cigarette pack as a communication medium changed markedly when in March 2006, Australian legislation came into force requiring new consumer health warnings on cigarette packets. The look of tobacco packets changed dramatically, as 30% of the front of the packet and 90% of the back of the packet were taken up with prominent, full colour warnings, containing graphic imagery and a Quitline telephone number. The 2006 warnings reduced further the discretionary space for tobacco companies' design elements.

At the time, Australia was among the first handful of countries to introduce such warnings; Canada had led the world, introducing pictorial health warnings in 2000, closely followed by Brazil. Australia was ahead of what was required under the international obligations of the World Health Organisation's Framework Convention on Tobacco Control (FCTC). These warnings constituted a major step forward from the text-based warnings that preceded them (see box 1). The policy was introduced by the Australian Government despite heavy opposition from the tobacco industry, which argued the policy intervention would not work and the mooting of legal challenges. Since 2006, more and more countries have moved to pictorial warnings, with large and extremely

potent images required in an increasing number of jurisdictions. It is expected that this trend will continue as parties adopt the recommended warnings.

Graphic health warnings influence smokers' beliefs and behaviour

There is no doubt that health warnings on cigarette packets influence smokers, and that graphic health warnings are more effective than plain text-based warnings.

Warnings are an important source of information about the health effects of smoking. Warnings have become second only to television as a source of information about the risks of smoking, in Australia and across many other countries. ^{12,13} Smokers have greater knowledge about particular health effects in countries where those health effects are the subject of warnings than in countries where they are not. ^{12,14} Introduction of stronger and more graphic health warnings has been shown to have increased knowledge of the specific diseases mentioned on warnings subject matter contained in the warnings in Canadian and Australian smokers. ^{12,15}

In Australia, some warnings have been shown to have greater influence than others. Consistent with the broader literature surrounding persuasive message framing used in other areas of tobacco control, serious, emotive, negative-framed messages had the greatest impact, while statistic-based, less tangible, or positively framed messages had less impact on smokers. Warnings that conveyed new information demonstrated greater impact on recall and smokers' beliefs than more familiar information images. The policy-relevant implications are that fresh messaging and visceral images have the greatest impact.

Box 1: Article 11 of the FCTC 'Packaging and labelling of tobacco products'. 10,11

Requirements include that Parties ensure that each package of tobacco products carries health warnings that:

- are in the country's principal language/s
- are rotating; large, clear, visible and legible
- cover 50 per cent or more of the principal display area but no less than 30 per cent
- may include pictures
- ensure packaging is not misleading or likely to create the impression that a particular product is less harmful than another.

Guidelines intended to assist Parties to meet their obligations under Article 11 were adopted by the FCTC Conference of the Parties in 2008. The Guidelines are based on international evidence and include a number of key recommendations regarding health warning design such that health warnings should:

- cover as much of the main display areas as possible
- be placed on the front and back of packaging recognising that the front is the most visible part of a package
- be placed at the top rather than the bottom of packaging to increase visibility
- include both pictures and text as evidence shows they are far more effective than text only warnings
- cover a range of topics as different warnings resonate with different people;
- and be rotated; rotation of messages and changes in layout and design are important to maintain saliency and increase effectiveness.

As well as being an important source of information, warnings influence smokers' thoughts and behaviours, predictive of quitting. Canadian and Brazilian research first documented smokers' engagement with the graphic warnings in those countries, with subsequent flow-on to quitting intentions and behaviour.^{14,16-18}

An International Tobacco Control policy evaluation project has monitored the impact of many different policy interventions, including the impact of health warnings on tobacco. It's longitudinal and multi-country design allows ecological study of tobacco control policy interventions with real time controls in other countries, as well as trends over time within countries, publishing findings comparing UK, US, Canadian and Australian warnings across time.

The International Tobacco Control project demonstrated that large, comprehensive warnings, such as those on Canadian and Australian cigarette packs, were more likely to be noticed and rated as effective by smokers than warnings in other countries. 19 In 2009, they showed that pack warning style (ie. graphic warnings compared to text only warnings) increased salience (being read and noticed), cognitive responses (increased thoughts of harm from smoking and thoughts of quitting), and the behavioural responses of forgoing cigarettes and avoiding the warnings. All four of these important indicators of impact increased markedly among Australian smokers following the introduction of graphic warnings.²⁰ In addition, the same project published findings across the UK, US, Canada and Australia, showing that forgoing cigarettes as a result of noticing warnings and quit-related cognitive reactions to warnings were consistent prospective predictors of actually making quit attempts.²¹ Consistent with this, the Australian Quitline recorded a doubling of calls in the year after the introduction of graphic warnings featuring Quitline numbers.22

Warnings lose impact and need to be refreshed

Specific warning labels lose impact over time. The peak levels of smokers' responses to warnings is in the period immediately after their introduction on to packs.²³ There is some decline in cognitive responses as consumers become used to seeing the images on the packs; warnings appear to lose some, but not all of their impact with time.

In 2008, the Australian Government commissioned a comprehensive evaluation of the effectiveness of the graphic health warnings introduced two years earlier.²⁴ It found that the graphic health warnings had achieved their intended purpose by increasing consumer knowledge of the health effects related to smoking, and encouraging smoking cessation. However, a number of areas were identified for improvement, including the importance of regularly updating and refreshing the health warnings to maintain effectiveness.

Another issue identified by the Australian Government with the Australian warnings, in their current form, was the size of the warning on the front of packaging (only 30% of packet area), noted as significant because the front of the pack was seen as the most important panel to display a health message as it was the most frequently seen part

of a pack.²⁵ The Australian Government also reported the same issue identified with the 1995 text-based warnings – smokers reporting that the health warnings on the front of packs were 'too small' and 'too difficult to read'. Branding and use of colour on the packaging was still reported by smokers to overpower the warning on the front of packs, with some surprised that a greater amount of space was allotted to tobacco industry branding rather than the health warning. The Canadian Government has also published compelling qualitative research demonstrating that smokers believe that branding still dominates the packet.^{26,27}

Plain packaging

Australia will be a world leader when it introduces plain cigarette packaging by 1 December 2012, replacing the current colourful branded components of tobacco packaging with standardised drab brown colouring and standard fonts. Extensive research shows that plain packaging will reduce misconceptions about relative harmfulness of various brands and reduce the overall appeal of smoking.²⁸⁻³¹ Furthermore, plain packaging will improve the effectiveness of health warnings, which are currently undermined by the other elements of tobacco packaging. Plain packaging is the new frontier in the packaging and labelling of cigarette products to protect consumers.

Future directions

The combined literature on graphic health warnings on cigarette packets now comes from a number of countries, and the case for their effectiveness is well made. There is very strong evidence that graphic warning labels have been successful in attracting the attention of smokers and in communicating to smokers, information that has influenced their beliefs about the consequences of smoking. There is also good evidence of translation into interest in quitting, which will reduce the toll from tobacco, the ultimate aim of tobacco control policy interventions.

In terms of their consolidation as a policy initiative outside of Australia, the FCTC has now published its guideline recommending graphic warnings, giving them greater status for signatories to the WHO global health treaty. By the end of 2011, over 40 countries had either introduced or announced their intention to introduce graphic health warnings on cigarette packets.

For countries like Australia that have had graphic health warnings for some time, a key issue is that these health warnings need to be updated and refreshed. In September 2011, in recognition of the need for refreshing of warnings, after review of the existing warnings and developmental market testing, the Australian Government released detailed consultation paper proposing a second round of new graphic cigarette warnings for introduction in 2012. The introduction would coincide with and complement plain cigarette packaging. The plans include: 14 revised images and messages; warnings that cover 75% of the front of pack and 90% of the back of pack; with rotation of warnings every 12 months.

Graphic health warnings on cigarette packets are another example of an effective intervention in the tobacco control. They contribute to the steady decline in the glamourous

FORUM

promotion of tobacco, including how it is packaged, and increased consumer comprehension of the true nature of tobacco and the consequences of smoking. Along with other potent interventions, they have been shown to increase motivation to quit and quitting behaviour, making graphic health warnings on cigarette packets another evidence-based strategy in the toolkit for successful tobacco control.

References

- Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. BMJ. 2004;328:1519.
- Department of Health and Ageing. Cigarette Ingredient Disclosure. [Internet]. 2005. Accessed: 16 December 2010. Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/tobacco-ingred.
- Scollo MM, Winstanley MH. eds. Tobacco in Australia: Facts and Issues. Third ed. Melbourne: Cancer Council Victoria. 2008.
- Cummings KM, Morley CP, Horan JK, Steger C, Leavell NR. Marketing to America's youth: evidence from corporate documents. Tobacco Control. 2002;11(Supp 1):i5-i17.
- Yach, D, Bettcher D. Globalisation of tobacco industry influence and new global responses. Tobacco Control. 2000;9: 206-216.
- Chapman S, Carter S. "Avoid health warnings on all tobacco products for just as long as we can": a history of Australian tobacco industry efforts to avoid, delay and dilute health warnings on cigarettes. Tobacco Control. 2003;12(suppl III):iii13-22.
- Mahood G. Warnings that tell the truth: breaking new ground in Canada. Tobacco Control. 1999;8:356-61.
- Wakefield M, Morley C, Horan JK, Cummings KM. The cigarette pack as image: new evidence from tobacco industry documents. Tobacco Control. 2002;11(Suppl 1):i73-i80.
- Department of Health and Ageing. Tobacco Health warnings. [Internet] 2005. Accessed on 25 November 2010. Available from: http://www.health. gov.au/internet/main/publishing.nsf/Content/tobacco-warn.
- World Health Organisation, WHO Framework Convention on Tobacco Control. Geneva: World Health Organisation. 2003.
- 11. World Health Organisation, Guidelines for implementation of Article 11 of the WHO Framework Convention on Tobacco Control (Packaging and labelling of tobacco products) (decision FCTC/COP3(10)). Geneva: World Health Organization. 2009.
- International Tobacco Control Policy Evaluation Project, FCTC Article 11 Tobacco Warning Labels: Evidence and Recommendations from the ITC Project, Buffalo, New York: Roswell Park Cancer Institute. 2009.
- Miller CL, Quester PG, Hill DJ, Hiller JE. Smokers' recall of Australian graphic cigarette packet warnings and awareness of associated health effects, 2005-2008. BMC Public Health. 2011;11:238.
- Hammond D, Fong GT, McNeill A, Borland R, Cummings KM. Effectiveness of cigarette warning labels in informing smokers about the risks of smoking: findings from the International Tobacco Control (ITC) Four Country Survey. Tobacco Control. 2006;15(Suppl 3):iii19–25.

- 15. Environics Research Group Limited, The health effects of tobacco and health warning messages on cigarette packages- survey of adults and adult smokers: Wave 9 surveys. Ottawa:Health Canada. 2005.
- Hammond D, Fong GT, McDonald PW, Cameron R, Brown KS. Impact of the graphic Canadian warning labels on adult smoking behaviour. Tobacco Control. 2003;12(4): 391–5.
- Hammond D, Fong GT, McDonald PW, Brown KS, Cameron R. Graphic Canadian Cigarette Warning Labels and Adverse Outcomes: Evidence from Canadian Smokers. Am J Public Health. 2004;94(8):1442-1445.
- Anvisa. Cigarette packs will display stronger images. [Internet] Cited 28
 October 2003. Accessed December 2011. Available from: http://www.anvisa.gov.br/eng/informs/news/281003.htm.
- Hammond D, Fong GT, Borland R, Cummings KM, McNeill A, Driezen P. Text and Graphic Warnings on Cigarette Packages: Findings from the International Tobacco Control Four Country Study. American Journal of Preventive Medicine. 2007;32(3):202-209.
- Borland R, Wilson N, Fong GT, Hammond D, Cummings KM, Yong HH, et al. Impact of Graphic and Text Warnings on Cigarette Packs: Findings from Four Countries over Five Years. Tobacco Control. 2009;(18):358-64.
- Borland R, Yong HH, Wilson N, Fong GT, Hammond D, Cummings KM, et al. How reaction to cigarette packet health warnings influence quitting: Findings from the ITC Four Country survey. Addiction. 2009;104:669-75.
- Miller CL, Hill DJ, Quester PG, Hiller JE. Impact on the Australian Quitline of new graphic cigarette pack warnings including the Quitline number. Tobacco Control. 2009;18(3):235-7.
- 23. Borland R, Hill D. Initial impact of the new Australian tobacco health warnings on knowledge and beliefs. Tobacco Control. 1997;6(4):317–25.
- 24. Elliot and Shanahan Research. Evaluation of the Effectiveness of the Graphic Health Warnings on Tobacco Product Packaging 2008. Canberra: Department of Health and Ageing. 2009.
- 25. Australian Competition and Consumer Commission, Consultation Paper: Proposed Tobacco Labelling (Graphic Health Warnings) Mandatory Standard, Canberra: Commonwealth of Australia. 2011.
- Createc. Effects of modified packaging through increasing the size of warnings on cigarette packages: Quantitative study of Canadian adult smokers and vulnerable non-smokers. Ottawa: Health Canada. 2008.
- 27. Createc. Effects of modified packaging through increasing the size of warnings on cigarette packages: Quantitative study of Canadian youth smokers and vulnerable non-smokers. Ottawa: Health Canada. 2008.
- Wakefield MA, Germain D, Durkin SJ. How does increasingly plainer cigarette packaging influence adult smokers' perceptions about brand image? An experimental study. Tobacco Control 2008;17:416-21.
- Germain D, Wakefield MA, Durkin SJ. Adolescents' perceptions of cigarette brand image: does plain packaging make a difference? Journal of Adolescent Health 2009;46(4):385-92.
- Moodie C, Mackintosh AM, Hastings G, Ford A. Young adult smokers' perceptions of plain packaging: a pilot naturalistic study. Tobacco Control 2011;published first online Available from: http://tobaccoccontrol.bmj.com/ content/early/2011/07/12/tc.2011.042911.short?q=w_tobaccoccontrol_ ahead_tab.
- Quit Victoria, Plain packaging of tobacco products: a review of the evidence, Melbourne: Cancer Council Victoria. 2011 Available from: http://www.cancervic.org.au/downloads/mini_sites/Plain-facts/TCUCCVEvOverview_FINALAUG122011.pdf