

SECTION II: GOVERNMENTAL RESPONSES TO DRUG USE

The path to Australia's tobacco health warnings

RON BORLAND & DAVID HILL

Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria, Australia

Abstract

Australia introduced new health warnings and contents labelling on cigarettes and other tobacco products from January 1995. The changes were based on recommendations emerging from research commissioned for that purpose. The research demonstrated the need for changes, that changes could increase the noticeability of the warnings and contribute to an increase in relevant knowledge, and that the changes were acceptable to the public. The tobacco industry fought the changes and some modifications resulted, but new stronger warnings with elaborations on the back of the pack, an information number to call and elaborated contents labelling have been implemented.

Introduction

Regulations mandating a new regimen of health warnings and product labelling of tobacco products in Australia were introduced from 1 January 1995. Providing potential users with such information is a basic standard of consumer ethics in civilized societies. This paper summarizes the research that was done to support implementation of the new warnings. It also documents the broader processes that were followed from agreement to implementation. Reactions of the tobacco industry demonstrate that attempts to introduce warnings more consistent with known risks are likely to be strongly opposed. This means the research base needs to be strong and resilient to hostile critical appraisal.

Australia has had mandated warnings on all cigarette packets since 1973 when "Warning—Smoking is a health hazard" was introduced. This warning was replaced in 1987 by one of

four rotating warnings: "Smoking causes lung cancer", "Smoking causes heart disease", "Smoking reduces your fitness" and "Smoking damages your lungs". These warnings were placed at the bottom of packs on the front and back and took up 15% of the surface area of each. The regulations differ somewhat for imported products and forms of tobacco other than factory-made cigarettes. The focus here is on locally manufactured factory-made cigarettes unless specifically noted. The vast majority of cigarettes sold in Australia (approximately 97%) are made locally.

In 1991 the Ministerial Council on Drug Strategy, the vehicle for coordinating State and Federal efforts for drug control, set up a Tobacco Working Party of officials charged with reviewing the (then) existing warnings and making recommendations about any changes that might be warranted. The Centre for Behavioural

Correspondence to: Ron Borland PhD, Deputy Director, Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria, 1 Rathdowne Street, Carlton South, Victoria 3053, Australia. Fax: 61 3 92791270; e-mail: ron@accv.org.au

Research in Cancer (CBRC) was approached by the Working Party and commissioned to provide a report (CBRC, 1992). This made the case and provided the basis of recommendations for change.

Conditions for warnings to be effective

To be effective, health warnings need to be noticed, persuasive and provide guidance for appropriate action. To be noticed, health warnings need to stand out from the surrounding pack design and they need to be large enough to be read easily. To be persuasive, the warnings need to be understood, believed and judged to be personally relevant by the reader. It follows that having warnings about a broad range of the ill-effects of smoking increases the chance that people reading those warnings will find at least one ill-effect to which they relate. Finally, the effectiveness of any call to action is enhanced by specific instructions about the first step to take.

Given that tobacco smoking is habitual and addictive, it was considered most improbable that smoking behaviour could easily be "switched off" by manipulations of package warnings or contents information. However, it is plausible that behavioural effects on smoking attributable to tobacco pack manipulations might be found among smokers contemplating quitting (Prochaska & DiClemente, 1983). Australian research (Mullins, Borland & Hill, 1992) suggests that approximately 9% of smokers are taking action to quit at any time, and over a year more than 40% make quit attempts.

The second and even more important group who could be influenced by manipulations of health warning information and contents labelling on packages are those people who are tempted to try smoking, are experimenting with it, or are contemplating taking it up. Early adolescence is the developmental stage at which most experimental smoking begins and later adolescence and early adulthood is when most of the shift to daily consumption takes place.

The research programme that resulted in the CBRC (1992) report was designed to show that the existing health warnings and product labelling requirements were inadequate, and to explore some alternatives that might increase their salience and potential effectiveness. The aim was to achieve maximal effectiveness within

the bounds of what was likely to be acceptable to the community at that time.

Legibility of warnings

The first task of the research was to test whether the old warning system was sufficient. Systematic scrutiny of a selection of current cigarette packs revealed considerable variability in the legibility and contrast of the warnings, ranging from black on white (most legible) to light blue on silver (hard to read). Some had lines and other design features running through all or parts of the warning. Several that were legible when viewed face on became illegible when the angle of viewing was changed. Using standard psychometric procedures we were able to demonstrate that the most legible could be read twice as far away as the least legible. We also established that all but the most legible would not be able to be read at the distances between purchaser and cigarette pack in corner (convenience) stores, the main place where young people (illegally) purchase cigarettes. This evidence was used to make a case that the presentation of the warnings needed to be controlled by regulation and that if this was not so, some warnings would be "designed into" packs in ways that made them less potentially effective. This research may have done no more than demonstrate the obvious, but in tobacco control, something being obvious to any impartial observer does not seem to preclude the industry arguing the opposite. The data weakened the potential for an "our opinion against theirs" type of debate.

Health knowledge insufficient

The second task was to determine if warnings could add to knowledge people already had. In Australia, knowledge that smoking is dangerous is ubiquitous. However, it was possible that the population had inadequate knowledge, and that important information was not top of mind. We explored this in several ways, asking questions of representative samples of both smokers and non-smokers. The sampling method used has been used by our group to plot smoking prevalence in Australia since 1974 (Hill & White, 1995) and to monitor the impact of the Quit campaign and other smoking-related activity in Victoria. Using this method Hill (1988) had

reported on the immediate impact of the move from the single "smoking as a health hazard" warning to the four rotating warnings in Victoria. In 1987, shortly after their introduction, when asked "As far as you know, what do the health warnings on cigarette packs say?", 71% of smokers recalled at least one warning correctly, with "Smoking causes lung cancer" most remembered (51%) and "Smoking damages your lungs" least at 17%. This question was also asked in 1988, 1990 and 1991, and there was little change in patterns of recall with only "Smoking causes heart disease" showing any evidence of improved recall over the years. There was also a significant shift in recall of "Smoking reduces your fitness" across the years, due to a drop from a peak in 1988. This peak awareness may have been due to an advertising campaign promoting that warning in 1988. The study also showed smokers had better recall than non-smokers and that while younger people (both smokers and non-smokers) had better recall than older people, recall even for young smokers only averaged two of the four correct. The warnings had not all become top of mind prompts for the health effects about which they warned and their influence had peaked shortly after their implementation.

In the same survey in 1991 we also asked about knowledge of the tar, nicotine and carbon monoxide (CO) levels (in ranges) of smokers' usual brands. The levels of each of these products is provided on all packs, on one side of the pack. For most brands tar levels were known, so we could check answers, and found that only 51% of smokers knew the tar level of their brand. For nicotine and CO, correct answers were even less frequent.

Approval of stronger warnings

To gain some idea of likely public acceptance of change, we included questions in a telephone survey of smokers and recent ex-smokers. In response to a question about the adequacy of the health information on packets, 38% said there should be more, 54% thought the amount sufficient and 2% said there should be less. Younger smokers were more likely to want more information, as were those interested in quitting. When those who first did not want more information were asked if they'd approve if it would lead to fewer young people taking up smoking, approval rose to 88%. Respondents were then

asked if they would approve "of rules to make cigarette packets less colourful and attractive". Here 60% approved unconditionally and 87% approved if it would reduce uptake. This survey suggested that change was likely to be acceptable to smokers, and that if the change was likely to discourage smoking uptake it would be strongly accepted.

Arguments for stronger warnings

This evidence was used to argue in the CBRC report that existing smokers were not adequately informed and that potential smokers were likely to be even less informed. For the product labelling, we argued that providing information about what the constituents were and what harm they could cause was needed to make the existing information more salient to smokers. We also argued that the plateauing of effects of the warnings meant regular changes to warning regimens were important and that the warnings needed to be more prominent. There was a strong case for strengthening the warnings. To gather ideas as to what form these should take, other warning systems for tobacco were reviewed. Research (largely unpublished) on tobacco warnings was reviewed, some warnings for other products were also considered and a series of brainstorming sessions were organized to generate new ideas.

It can be argued that the more noticeable changes to a pack are, the more likely they will be perceived as changing a pack's image, thus making the pack less attractive. This will be so because warnings are unlikely to be seen as attractive elements of pack design, especially when the aim is to make the warning contrast with the rest of the pack, rather than blend. Teenagers (mean age of 14.9) were exposed in one study to colour photographs of packs varying in design. The packs were presented two at a time and the subjects were asked to indicate which of the two packs they would least like to be seen with. The results are summarized in Table 1. Note that the higher the percentage choosing a given alternative, the less attractive that feature made that pack seem. Pack modification affects attractiveness.

Elaboration of dangers

On the basis that warning could only identify one (or at most, a couple) of the many dangers associated with smoking, we proposed providing

Table 1. Features of modified cigarette packs which make them seem less attractive (and by inference more noticeable) to teenagers (n = 120)

Feature	Percentage stating that they would least like to be seen with a pack with this feature	
	Long	Short
Message length	64	36
Size of warning message area	25% of the pack 75	15% of the pack 25
Location of warning	Top of pack 64	Bottom of pack 36
Border to warning	Pinking edge ^a 64	Straight lines 36
Background contrast	Black on fluorescent 73	Black and white 27

^aAs would be created by pinking scissors, i.e. serrated border. Source: CBRC (1992).

more comprehensive supplementary information. Possibilities for this included inserts in packs and use of the back of the pack. To test whether providing such information could be informative, we collated two pages of warning information. Three groups of adolescents (mean age 12.9 years) were used, two getting different information and the third nothing. They were then tested on knowledge with questions relating to the two sets of information and other aspects of tobacco use. Performance was relatively better for items where relevant information had been provided (CBRC, 1992). Reading relevant information can increase knowledge in adolescents at an age where they might be expected to be experimenting with tobacco use.

Recommendations to government

"Generic" (standardized) packaging was recommended based primarily on research of others (Beede & Lawson, 1991, 1992). As expected, this recommendation was not adopted but governments did call for more research on this issue. We recommended that 12 rotating warnings be used on the front of packs at the top, taking up not less than 25% of the surface area (see Fig. 1) and that the back of pack should be taken up totally by an elaboration of the front of pack warning, a summary of the main health consequences of smoking and of the telephone number for an information line which smokers could ring to get further information and help to quit.

In the regulations six warnings were adopted (Smoking Kills, Smoking Is Addictive, Smoking Causes Lung Cancer, Smoking Causes Heart Disease, Your Smoking Can Harm Others, Smoking When Pregnant Harms Your Baby), only one-third of the back was taken, the summary of health effects was dropped and the information line was restricted to information and not active help for cessation. For product labelling we recommended that one side of the pack be given over to a more detailed description of contents as shown by the example in Fig. 1. This recommendation was essentially adopted. Both warnings and contents labelling are black on white with layout prescribed as was recommended.

Acceptability to public

Once we had a clear idea of what we were going to recommend, we sought input from the community on its acceptability. A small sample of adolescents was questioned in naturally occurring groups of two to seven on the streets. Half were smokers. The groups were shown mocked-up versions of packs incorporating the recommended changes. There was strong support for the changes to the warnings and product labelling, but there was a mixed reaction to standardized packs. The size of the warnings was most noticed, and for standardized packs, the destruction of the positive images associated with smoking was the most salient feature.

To assess whether these reactions were broadly shared, we commissioned a national sur-

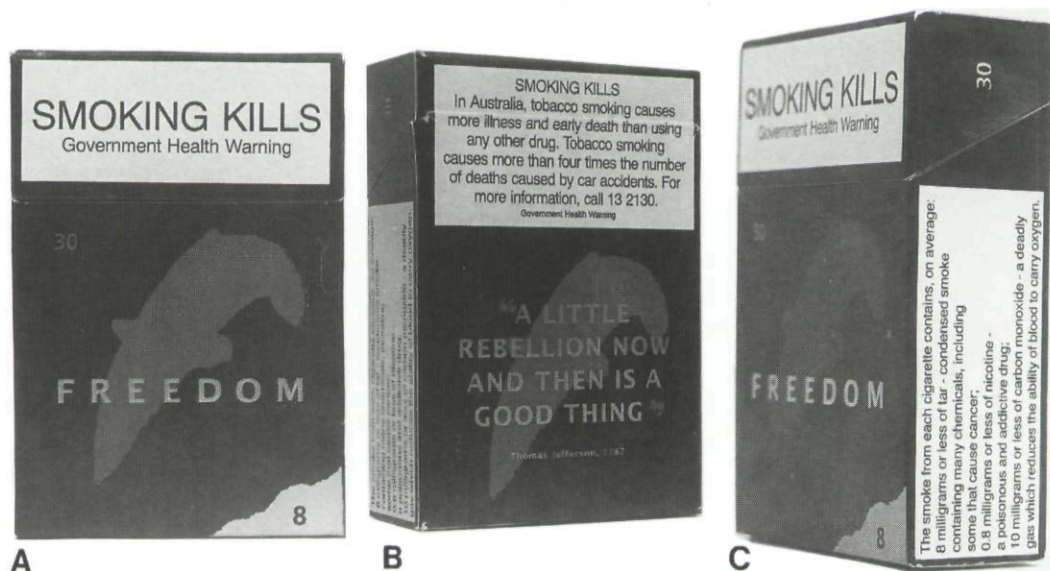


Figure 1. (A) The front, (B) the back and (C) one side of a cigarette pack showing the warnings and contents information. NB: The brand "Freedom" was launched at the time of the introduction of the warnings as part of an attempt by the industry to depict the new warnings as an infringement of the freedom of the smokers, presumably that of being able to smoke without being reminded of the risk they are running.

vey (CBRC, 1992: unpublished, available from the authors on request). Respondents were shown photographs depicting the proposed changes (and where relevant the current requirements) and asked about approval or disapproval. Those who disapproved or had no view were also asked if the proposal were to "discourage children from taking up smoking, would you approve or disapprove of it being required on all cigarette packs?" As can be seen from Table 2, there was strong support for the contents labelling and warning changes and mixed support for standardized packaging. In all cases, approval increased given that it would discourage uptake. Very few disapproved of all three warning and contents labelling changes, and a majority supported them all unconditionally.

Industry response

The response of the tobacco industry to the report and to the initial decision of the Ministerial Council, which accepted all the recommendations in the CBRC report (except the call for generic packing) was strong. It was clear from the public reactions of the Tobacco Institute of

Australia (TIA) and from extensive tobacco industry lobbying that the proposed changes were threatening to the industry. The industry also fought the new Canadian warnings (Mahood, 1995). In this way the industry response supported our position that stronger warnings would be effective deterrents to smoking.

Another industry tactic was to sue the Anti-Cancer Council of Victoria under the Trade Practices Act (1974). The objective of this Act is to provide consumers and other businesses protection against unfair trade practice. To succeed, the TIA would have had to show that the conduct of research was a form of "trade", that its methods were invalid or conclusions wrong, and that its publications adversely effected the businesses of tobacco companies. The TIA action sought to suppress the CBRC publication and extract an admission of error. It succeeded in neither, but if its intent was to harass and divert researchers energies to self-defence, it did succeed. It appears to us that the writ was designed to help the tobacco industry in their lobbying by implicitly impugning our report, and to act to discourage us or others from doing such work in future. The tobacco industry has a history of attacking

Table 2. Public approval of proposed changes to tobacco labelling

	Smoking status*	Unqualified approval (%)	Approval if it discourages children from smoking (%)
(a) Preference for proposed contents labelling	Smokers	76	90
	Non-smokers	88	96
	All Australians	85	94
(b) Preference for proposed front-of pack warning	Smokers	76	93
	Non-smokers	88	96
	All Australians	85	96
(c) Use of back-of-pack	Smokers	64	89
	Non-smokers	82	96
	All Australians	78	94
All three above changes	Smokers	49	82
	Non-smokers	71	92
	All Australians	65	89
(d) Legislating for standardized packaging	Smokers	37	81
	Non-smokers	53	89
	All Australians	49	87

*Smoking status determined on basis of smoking factory-made cigarettes. Source: CBRC (1992, unpublished).

scientific work it considers unfriendly (DiFranza, 1992).

One argument the tobacco industry used in attempting to discredit our report was that we had not demonstrated that the warnings would have any effect on smoking. Indeed, we had acknowledged this in the report. It is important to remind legislators that it is not possible to demonstrate benefits in advance for new strategies that can only be implemented widely. What is needed is research to show that there is a plausible case that it will work and very little chance of negative effects.

Conclusions

The new warning system goes further than the previous warnings towards providing the moral imperative of adequate information, and thus should contribute to tobacco control efforts. In terms of the rationale behind the new warnings, the failure to include a summary of the main health effects of smoking on the back can be considered a setback, at least in terms of the consumers right to know. While the new warnings may have some impact on the image of cigarette packs, the producers' trade marks and packaging style remain the most salient features of the packets. Consideration still needs to be

given to some form of generic or standardized packaging. The current phone number on packs provides rather prosaic recorded advice, and is precluded from providing direct assistance with cessation. To fund an effective advice system would cost very little in comparison with the costs of smoking, but to date governments (both State and Federal) have not had the will to act.

Basing recommendations for change on an integrated body of research was an important part of making the case for change, and it is also likely to mean that the effects of the changes are more likely to be beneficial.

References

- BEEDE, P. & LAWSON, R. (1991) Brand image attraction; the promotional impact of cigarette packaging, *New Zealand Family Physician*, 18, 175-177.
- BEEDE, P. & LAWSON, R. (1992) The effect of plain packages in the perception of cigarette health warnings, *Public Health*, 106, 315-322.
- CENTRE FOR BEHAVIOURAL RESEARCH IN CANCER (CBRC) (1992) *Health warnings and product labelling on tobacco products* (Melbourne, Anti-Cancer Council of Victoria).
- DIFRANZA, J. R. (1992) If the science is irrefutable, attack the scientist, *Tobacco Control*, 1, 237-238.
- HILL, D. (1988) New cigarette pack warnings: are they getting through? *Medical Journal of Australia*, 148, 478-480.

- HILL, D. J. & WHITE, V. M. (1995) Australian adult smoking prevalence in 1992, *Australian Journal of Public Health*, 19, 305-308.
- MAHOOD, G. (1995) Canadian tobacco package warning system, *Tobacco Control*, 4, 10-14.
- MULLINS, R., BORLAND, R. & HILL, D. (1992) Smoking knowledge, attitudes and behaviour in Victoria, in:

Quit Evaluation Studies, no. 6, 1990-1991 (Melbourne, Victorian Smoking and Health Program).

PROCHASKA, J. O. & DICLEMENTE, C. C. (1983) Stages and processes of self-change in smoking: towards an integrated model of change, *Journal of Consulting and Clinical Psychology*, 51, 390-395.

This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.