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Selling or promotion?

In Australia, the Tobacco Advertising Prohibition Act (1992) bans most forms of tobacco advertising and promotion. In response to restrictions, the tobacco industry has resorted to ''below the line'' activities such as event promotions at music festivals, fashion parades, private parties, bars, and nightclubs.[1–7] At these events, tobacco products are promoted under the guise of ''selling''. It is important to expose these promotional activities as they may constitute breaches of the Act.

An audit of nine heavily advertised large youth music events in Perth found that the tobacco industry was actively promoting tobacco products at these events. At the single indoor event, cigarettes were sold via a vending machine and there were no promotional activities. At the eight outdoor events, cigarettes were sold in tents set up as ''chill-out'' areas in which chairs were provided for people to relax. The tents were staffed by young women selling tobacco products, ancillary products, and merchandise (for example, beer holders bearing the Rizla cigarette paper logo). At two events ''cigarette girls'', dressed in Peter Stuyvesant brand colours, walked around the venues with trays of cigarettes for sale.

Approximately half of the events were not restricted to those aged 18 years and over, thus exposing patrons aged under 18 years to the promotional activities of the tobacco companies.

Not only do youth music events provide direct access to a primary target market for tobacco companies, but they also allow the marketers to build brand images by associating their brands with youth popular culture. Smoking becomes associated with the enjoyable experience of the music and fun atmosphere of the events, thus reinforcing the behaviour of current smokers and building more positive attitudes towards smoking among experimenters and non-smokers.

The state government of Western Australia recently introduced legislation which, if enacted, will assist in controlling the promotion of tobacco products at events. Specifically, the proposed Tobacco Products Control Bill 2005[8] will ban the mobile selling of tobacco products (currently not considered to be promotion, and permitted as ''selling''). It also contains provisions to prohibit the sale or supply of tobacco products via temporary premises at events that are expected to attract significant numbers of people aged under 18 years. This proposed new legislation will further restrict the marketing opportunities of tobacco companies.

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Response to E Yano and S Chapman

Professor Eiji Yano raises a number of issues in his letter[1] which responded to my commentary[2] on his article[3] about the Japanese spousal study, as does Chapman in his editorial.[4] Here I reply to the main points raised.

Studies of environmental tobacco smoke (ETS) exposure and lung cancer commonly identify a group of self reported non-smoking women and then compare risk according to the smoking habits of the husband. If some true smokers are erroneously included among the female subjects, an apparent relationship of spousal smoking with lung cancer may be seen even when no true effect of ETS exists. This has been mathematically demonstrated (for example, Lee and Forey[5]), with attempts to correct for it made by major independent authoritative reviews of the evidence on passive smoking and lung cancer.[6–8] The magnitude of the bias depends (among other things) on the extent to which women who smoke are misclassified as non-smokers. It can also be shown mathematically[5] that a given rate of misclassification of smokers as non-smokers is a much more important cause of bias than is the same rate of the reverse misclassification, of non-smokers as smokers. Since such reverse misclassification is also implausible, adult women having little reason to claim erroneously to be smokers, the major reviews[6–8] have all ignored its minor effects.

Given that in the Japanese spousal study (using a urinary cotinine/creatinine ratio (CCR) above 100 ng/mg as an index of true smoking) the reverse misclassification rate (8/298 = 2.7%) was much lower than the misclassification rate itself (28/98 = 28.6%), it becomes abundantly clear that reverse misclassification is not relevant to the passive smoking/lung cancer issue. It is difficult to understand why Yano places such emphasis on it.

Yano[1] states that I am ''confused with the calculation formula'' and that my ''definition of misclassification was obtained by dividing those with > 100 ng/mg CCR (n = 28) by self reported non-smokers (n = 318)''. It appears that Yano himself is confused. I had previously made it clear[2] that the denominator should not be 318, but 98, the number of women with a CCR value indicative of smoking (or perhaps 106, if one also includes those women who claimed to smoke but had a CCR < 100 ng/ml).

The misclassification rate calculation is clearly based on CCR > 100 ng/mg validly indicating smoking. Such an assumption is widely used,[9] though may be subject to some error, and was the best technique available at the time. Most smokers admit to smoking, so that self report has some validity as an indicator of true smoking status, but this does not help us estimate the magnitude of the misclassification bias. The observed lack of correlation in the Japanese spousal study between CCR in non-smokers (with CCR < 100 ng/mg) and other indices of ETS exposure suggests that inaccuracy in CCR measurement at low levels may be important. However, such inaccuracy may not be relevant to the misclassification rate calculation, which merely attempts to use CCR to distinguish smokers from non-smokers. Over half the self reported non-smokers with values over 100 ng/mg actually had values of 1000 ng/mg, and it would be very surprising indeed if errors in CCR measurement were so huge that these women were really non-smokers.

Though I would be happy to see results of further studies using up to date, state of the art chemical methods to detect nicotine metabolites in self reported non-smokers, the conclusion I reached in 1995 that misclassification rates are much higher in Japanese than in