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- 6 **Tones K**. Models of mass media: hypodermic, aerosol or agent provocateur? *Drugs, Education, Prevention and* Policy 1996;3:29-37
- 7 Barry TE, Howard DJ. Review and critique of the hierarchy of effects in advertising. International Journal of Advertising 1990;**9**:121–35.
- 8 Katz E, Lazarsfeld P. Personal influence. New York: The
- Free Press, 1955.

 9 White R. Advertising: what it is and how to do it.
 London: McGraw-Hill, 1993.
- 10 Rubin AM. Uses, gratifications, and media effects research. Chapter 14 in Bryant and Zillman, eds. Perspectives on media effects. New Jersey: Lawrence Erlbaum Associates, 1986:281–301.
- Smith PR. Marketing communications: an integrated approach. London: Kogan Ltd, 1993.
 Hedges A. Testing to destruction: a critical look at the
- 12 Hedges A. Iesting to destruction: a critical look at the uses of research in advertising. London: Institute of Practitioners in Advertising, 1982.
 13 Elliot R, Wattanasuwan K. Brands of symbolic resources for the construction of identity. International Journal of Advertising 1998;17:131-44.
 14 Jenkins J. Tobacco advertising and children: some Canadian findings. International Journal of Advertising.
- Canadian findings. International Journal of Advertising 1988;**7**:357–67
- 15 Dawe F, Goddard F. Smoking-related behaviour and attitudes. London: ONS, 1997.
 16 Thomas M, Walker A, Wilmot A, et al. Living in Britain:
- results from the 1996 General Household Survey. London: The Stationery Office, 1998.

- 17 Amos A, Hillhouse A, Alexander H, et al. Tobacco use in Scotland – a review of literature and research. Edinburgh: ASH Scotland, 1992.
- 18 Baker MJ. The marketing book, 4th ed. Oxford: Butterworth Heineman, 1999.
- 19 Bagozzi RP. Marketing as an organised behavioural system of exchange. Journal of Marketing 1974:39:77-81.
- 20 Grönroos C. From marketing mix to relationship marketing: towards a paradigm shift in marketing. Management Decision 1994;32:4-20.
- 21 Gummesson E. Making relationship marketing operational. International Journal of Services Management 1994;**5**:5–20.
- 22 Alcalay R, Bell RA. Promoting nutrition and physical activity through social marketing: current practices and recommendations. Davis, California: University of California, 2000
- 23 Sly DF, Hopkins RS, Trapido E, et al. Influence of a counteradvertising media campaign on initiation by the Florida 'Truth' campaign. Am J Public Health
- 24 Bauer UE, Johnson TM, Hopkins RS, et al. Changes in youth cigarette use and intentions following implementation of a tobacco control program. Findings from the Florida youth tobacco survey, 1998-2000. IAMA 2000:284:723-8

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The continuing importance of emotion in tobacco control media campaigns: a response to Hastings and MacFadyen

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astings and MacFadyen have raised important questions about the optimal direction for future tobacco control media campaigns. There is much that we agree with. However, we disagree with their central recommendation that campaigns should reduce the use of messages that portray the serious consequences of tobacco use in an emotionally evocative way. They base this recommendation on four assumptions which we feel are questionable:

- · fear messages rely on a rational model of decision making, but the decision to smoke is not made rationally
- · these approaches are likely to become less effective over time because: (a) most people already know that smoking has serious consequences; (b) most smokers already want to quit; and (c) repetition of the same messages diminishes their power
- anti-tobacco communications should be part of a broader communication that promotes a whole set of healthy behaviours
- commercial marketers have developed new and effective strategies over the past 20 years and these strategies can work equally well for marketing non-smoking.

We disagree with the first three of these points and would like to quibble a bit about the fourth.

HOW AND WHY DO THESE "FEAR" MESSAGES WORK?

Most of the research on the effectiveness of fear appeals does indeed rely on models of rational cognitive processing. These models yield predictions about when fear appeals will be effective and when they won't, based on concepts such as "protection motivation" or subjective expected utility.2 They spawn complex experiments that attempt to produce variations in perceived severity of the danger, susceptibility to the danger, and perceived ability to perform the required response. Interestingly, these experiments frequently fail to yield support for the theoretical models.3 Instead, most studies show that the more fear aroused by the communication, the greater the persuasion.45 Likewise, we have evidence that the most effective anti-tobacco advertisements among both adults and teenagers in Massachusetts are those that depict the serious consequences of tobacco use in emotionally evocative ways.67 The evidence we have published to date relies on ratings of perceived effectiveness.

Although we agree with Hastings and Mac-Fadyen that ratings alone are not a sufficient indicator of effectiveness, we do think they have merit. Consumer research has shown that such ratings are predictive of message acceptance and, in the case of commercial advertising, intentions

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to purchase.8-10 Similarly, we interpret higher ratings of perceived effectiveness as greater acceptance of the anti-tobacco message. Furthermore, we have preliminary data from our current research that tends to support the view that perceived effectiveness is a reasonable proxy for actual effectiveness. We are in the process of collecting data on a representative sample of Massachusetts adults, and over-sampling individuals who reported having quit smoking in the past two years. We ask them whether they used various forms of help in order to quit such as nicotine replacement therapy (NRT), self help brochures, pamphlets, or tapes, or consultation with a health professional. We also ask, "Did any television commercials about tobacco contribute to your quitting?". Those who answer in the affirmative are asked to describe such an ad. Among the 386 recent quitters accrued so far, more reported the helpful influence of a television commercial (29%) than either NRT (18%), professional consultation (13%), or self help materials (5%). Most of the advertisements produced by the Massachusetts Tobacco Control Program are those that depict the serious consequences of tobacco use. The specific ads accounting for the majority of those described were ads featuring Pam Laffin (a young woman who developed emphysema early in life from smoking), those featuring Rick Stoddard (a man whose wife died from lung cancer at age 46), and "Cigarette pack" in which a man places a photograph of his daughter on his pack of cigarettes as a reminder of why he should quit. All three of those executions have been rated by independent judges as being emotionally moving.

We suspect that the effectiveness of Massachusetts' televised anti-tobacco advertisements resides largely in their ability to elicit emotional arousal. The study of fear appeals has traditionally confused the threatening content of the messages (for example, cigarettes will kill you) with the emotional responses they invoke. Our research suggests that fear is only one of several emotions being evoked. Others include: intense sadness for loved ones left behind when family members die; anger at tobacco companies for their relentless pursuit of profits regardless of the human costs; and empathy and hope for smokers who are struggling to kick the habit, as in "Cigarette pack." The approach that seems to have worked best in Massachusetts is dubbed "Real people; real stories". These executions draw empathic connections from the audience and seem best able to stimulate emotional arousal. Although they have constituted a large proportion of the ads shown since 1993, the audience does not seem to be tiring of them. Preliminary analyses of 1066 youth respondents (age 12-17 years), and 2824 adult respondents found that over 80% of both groups answer "no" to the question, "Do you think anti-smoking ads on TV and radio exaggerate the dangers of smoking?". These results are consistent with other surveys of populations exposed to emotional anti-smoking advertising.1

Several streams of research support the notion that emotional arousal mediates the effectiveness of mass communication. Advertising research consistently finds that emotional messages are remembered better than non-emotional ones,¹²

and are more likely to promote higher order cognitive processing.13 14 In other words, they lead people to generate their own persuasive messages. Research in health communications also suggests that advertisements high in "sensation value" (reflecting content that is novel, stimulating, graphic or explicit, among others) are more likely to increase viewers' attention, motivation to call a hotline, ad recall, and intentions to perform the target behaviour, than those with lower sensation value.14 Hence, while we concur with Hastings and MacFadyen's assertion that rational models are likely to be inadequate to explain the audience's behavioural responses to anti-tobacco advertising, we think that the approaches they would avoid are effective because of their non-rational aspects. We doubt that the ads' effectiveness has much to do with communicating the information that smoking is dangerous or that quitting would be a good idea. Our research indicates that advertisements designed to elicit strong negative emotions were seen as more effective by smokers who were at higher rather than lower stages of readiness to quit, and seen as most effective by those who had quit smoking during the course of the campaign.6

We venture that these advertisements work in different ways for different people. They may provoke discussion among family members, they may get kids to nag parents about quitting or non-smoking spouses to put pressure on their addicted partners. They remind contemplators that it is time to move to action. And perhaps, most importantly for non-smoking youth, they repeatedly associate cigarette smoking with unpleasant images. We don't claim to have the answers about why these ads are effective, and we have set ourselves the research task of finding the answers. We do believe it is time to discard the label "fear appeals" or "fear messages" as being a misleading characterisation of the approach under discussion.

SHOULD WE FOCUS ON ONE HEALTH BEHAVIOUR OR MANY?

Hastings and MacFadyen argue that public health media campaigns should be promoting a host of healthy lifestyles rather than focusing on individual behaviours. Although this seems like an inspiring goal, we fear that it would be an extremely hard sell. Indeed, experimental interventions that have taken this approach and tried to encourage women to quit smoking and lose or maintain weight at the same time, have generally produced worse outcomes then interventions that focus on one behaviour at a time.15 16 Smoking cessation takes sustained effort, persistence after many failures, and the ability to resist the pervasive lure of cigarette advertisements, nicotine cravings, and the memory of the relief they can provide from stress, hunger, or loneliness.17 Perhaps the emotional advertisements work in part because they provide equally compelling reasons for the smoker to keep trying to quit.

HOW DO WE ASSESS EFFECTIVENESS?

We agree with Hastings and MacFadyen that simply asking smokers how effective they think particular advertisements are is not the best method of determining effectiveness. The best Debate 77

method would be one that could clearly link exposure to specific advertising approaches to attitude and behaviour change. Some communications researchers have done experimental comparisons of approaches in laboratory settings, but these fail to generalise to the real world where exposure is uncontrolled and the audience experiences many different approaches. Tracking variations in calls to quit lines in response to ads with varying approaches comes closer to the ideal, but does not help us assess effectiveness for smoking prevention or the vast majority of smokers who shun help givers. New research is in progress that improves upon the methodologies used to date. For example, at least two research grants recently funded by the National Cancer Institute are examining ways of linking advertising exposure to smoking change at the population level (Lois Biener at the University of Massachusetts, Boston, USA, and Melanie Wakefield at the Anti-Cancer Council of Victoria, Melbourne, Australia). However, we will have to wait for these efforts to run their course before knowing how well they stand up to scrutiny.

WHERE DO WE GO FROM HERE?

We do not mean to say that all anti-tobacco advertisements should be emotionally wrenching real life stories. There probably needs to be some variety and unpredictability in the elements of a campaign. However, we would argue that the core approach should retain the elements of emotional arousal that comes from telling the truth about tobacco. Anti-tobacco programmes could undoubtedly profit by exploring some of the new approaches being used by commercial marketers. The relationship building techniques described by Hastings and MacFadyen can and should be used to promote smoking cessation. However, we question the wholesale application of commercial marketing strategies to tobacco control communications. Unselling cigarettes seems a very different task than selling a product. The wisdom, for example, of a tobacco control programme adopting a single brand image seems to fly in the face of the need to communicate with every age group and subculture in order to reduce the social acceptability of tobacco use. A better strategy would seem to be a multifaceted one that has the flexibility and sustainability to apply to the entire population of teenagers and adults who are presently smokers, and those who are at risk of taking it up.

REFERENCES

- 1 Rogers RW. Cognitive and physiological processes in fear appeals and attitude change: a revised theory of protection motivation. In: Cacioppo J, Petty R, eds. Social psychophysiology. New York, Guilford Press, 1983:153-76.
- 2 Sutton SR. Fear-arousing communications: a critical examination of theory and research. In: Eiser JR, ed. Social psychology and behavioral medicine. London, Wiley, 1982:303–37.
- 3 Witte K, Allen M. A meta-analysis of fear appeals: implications for effective public health campaigns. Health Education and Behavior October 2000;27:591–615.
- 4 LaTour MS, Rotfeld HJ. There are threats and (maybe) fear-caused arousal: theory and confusions of appeals to fear and fear arousal itself. *Journal of Advertising* 1997:26:45–59.
- 5 **Sutton S**. Shock tactics and the myth of the inverted U. *Br J Addiction* 1992;**87**:517–19.
- 6 Biener L, McCallum Keeler G, et al. Adults' response to Massachusetts anti-tobacco television advertisements: impact of viewer and advertisement characteristics. Tobacco Control 2000;9:401–7.
- 7 Biener L. Anti-tobacco ads by Massachusetts and Philip Morris: what teenagers think. *Tobacco Control* (in press).
- 8 Gardner M. Mood states and consumer research: a critical review. *Journal of Consumer Research* 1985;12:281–300.
- 9 Holbrook M, Batra R. Assessing the role of emotions as mediators of consumer response to advertising. *Journal of Consumer Research* 1987;14:404–20.
- 10 Altsech MB. The assessment of creativity in advertising and the effectiveness of creative advertisements. Dissertation Abstracts International, Section A: Humanities and Social Sciences 1997;57(8-A):3585.
- 11 Wakefield M, Freeman J, Boulter J. Changes associated with the national tobacco campaign: pre and post campaign surveys compared. In: Hassard K, ed. Australia's National Tobacco Campaign. Evaluation Report Volume One. Canberra: Commonwealth of Australia, 1999.
- 12 Lang A, Dhillon K, Dong Q. The effects of emotional arousal and violence on television viewers' cognitive capacity and memory. *Journal of Broadcasting & Electronic Media* 1995;39:313–27.
- 13 Keller PA, Block LG. Increasing the persuasiveness of fear appeals: the effect of arousal and elaboration. Journal of Consumer Research 1996;22:448–59.
- 14 Donohew L, Lorch EP, Palmgreen P. Applications of a theoretic model of information exposure to health interventions. *Human Communication Research* 1998;24:454–68.
- 15 Hall SM, Turustall CD, Vile KL, et al. Weight gain prevention and smoking cessation: cautionary findings. Am J Public Health 1992;82:1238–43.
- 16 Pirie PL, McBride CM, Hellerstdt W, et al. Smoking cessation in women concerned about weight. Am J Public Health 1992:82:1238–43.
- 17 Carter S, Borland R, Chapman S. Finding the strength to kill your best friend - Smokers talk about smoking and quitting. Sydney: Australian Smoking Cessation Consortium and GlaxoSmithKline Consumer Healthcare, May 2001. URL: http://www.health.usyd.edu.au/ tobacco/worddocs/Killbestfriend.pdf

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