As a largely iatrogenic disease it should be preventable and efforts to this end should be directed particularly towards improved care of vascular access sites.

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Contemporary Themes

Smoking, tobacco promotion, and the voluntary agreements

HOWARD T COX

The control of advertising and promotion of tobacco goods has been a controversial political issue for many years. While a growing number of countries have enacted legislation in an attempt to control these activities,¹⁻³ Britain, despite repeated calls for legislative action by numerous distinguished medical bodies,⁴ has made depressingly little progress. The sole piece of British legislation aimed at curbing tobacco advertising remains the Television Act 1964 (since replaced by the Independent Broadcasting Act 1973), which made it possible for the

Home Secretary to prohibit cigarette commercials in 1965. Indeed, this Act, along with another prohibiting the sale of tobacco goods to children, constitutes one of only two pieces of legislation in the control of smoking. Its present inadequacy is illustrated by the proliferation of cigarette brand names on television through the medium of sport sponsorship.

Control of tobacco promotion

Spurning the use of legislation, successive British governments have attempted to deal with the issue of tobacco promotion by means of a series of so called voluntary agreements between the Department of Health and Social Security (and other government departments) and the advisory council of the tobacco industry.⁴⁻⁶ I would suggest that these agreements, as well as pre-empting legislative measures, provide the tobacco industry with several benefits. At the same time, they have effectively

Unit for the Study of Health Policy, Guy's Hospital Medical School, London SE1 1YR

HOWARD T COX, MSc(ECON), research assistant

Correspondence to: Department of Economics, Kingston Polytechnic, Penrhyn Road Centre, Kingston upon Thames KT1 2EE.

converted the DHSS from an executive health agency into little more than an arbiter between the conflicting interests of health and sales of tobacco.

Opponents of controls on tobacco promotion have argued that advertising does not influence the level of aggregate consumption and that its effect is limited to changes in shares of the market for different brands.⁶⁻⁷ Much of this debate has taken the form of econometric studies of the market for tobacco goods in a particular country. One such statistical analysis of the demand for cigarettes in Britain, designed to test the hypothesis that aggregate cigarette consumption was influenced by changes in the volume of advertising, was undertaken in 1975 by McGuinness and Cowling.⁸ Their results indicated that, after imposing a specific dynamic relation—that is, lag structure—between advertising and consumption, a significant ($p < 0.05$), positive relation existed between the two variables. This relation was found to be stronger in the long run but remained small; in the short run, for example, a 10% increase in advertising volume was shown to produce only a 0.14% increase in cigarette consumption. Two critiques of this study have since appeared (both supported by the tobacco industry) casting doubt on the importance of advertising as an independent determinant of the level of national cigarette consumption. The first of these (published in 1980) by Johnston, while not explicitly contradicting the finding of a significant relation, argued that its size in the long run was actually some 40% smaller than had been estimated by McGuinness and Cowling.⁹ A subsequent study by Metra Consulting with an improved database (made available by the Imperial Tobacco Company, who requisitioned the study) found no reason to accept the hypothesis that changes in the volume of advertising constituted a relevant determinant of aggregate cigarette consumption.¹⁰ The corresponding debate in the United States seems to have reached a similar conclusion. Studies by, among others, Schmalensee, Hamilton, and Fujii found coefficients on advertising to be small and generally not significant.¹¹⁻¹³

Such a result suggests that, given an existing volume of tobacco advertising, marginal additions to (or subtractions from) this total do not notably affect the overall level of tobacco consumption. It is, however, mistaken to argue, as Hamilton has done, on the basis of this result that, "Since cigarette consumption has not been increased much by advertising, then consumption would not be reduced much if advertising were banned."¹⁴ Given the extent of tobacco promotion in Britain, it is perhaps not surprising that marginal changes have had a negligible impact on aggregate levels of consumption. This finding, however, provides no evidence at all on which to judge the effectiveness of a comprehensive ban of tobacco promotion.

The impact of a legislative ban on promotion is itself likely to be difficult to estimate by a purely quantitative analysis. A World Health Organisation expert committee has suggested that legislation to control smoking has four phases of effectiveness¹⁵: (a) the publicity generated when the intention to legislate is announced by the government; (b) the publicity generated while a measure is being discussed by the legislative assembly; (c) the immediate impact of the legislation (and concomitant publicity) when implemented; and (d) the long term effect of legislation as part of a smoking control programme.

Other functions of advertising

The case for a ban on tobacco promotion rests on much wider issues than the ability of advertising systematically to influence levels of consumption. It is necessary to take into account other strategic objectives facilitated by these expenditures. In particular, the existence of advertising on any appreciable scale helps to maintain an image of smoking as a socially acceptable activity. The removal of this support through legislation provides a qualitatively different environment within which individuals may decide whether or not to smoke.

Another important function of advertising is that it allows the industry to respond to and encourage changes in the demand

for different types of tobacco product, the most recent example of which has been the "low tar" cigarette. The ability to direct smokers towards these cigarettes has been cited as an important reason for retaining cigarette advertising. It has also been pointed out, however, that "there is no reason why this cannot be done by governments and health education authorities, together with accurate discussion of the advantages and disadvantages of the product."¹⁶ In Finland, maximum levels of tar delivery have been progressively reduced by legislation. The concerted effort by the tobacco companies to increase the sales of low tar cigarettes through advertising appears, at least in part, to be an attempt to circumvent the health issue while maintaining commercial viability.

Advertising also plays a strategic part in rivalry between firms. Traditionally, advertising, rather than price competition, has been the main instrument used to gain larger shares in such oligopolistic markets, as price cutting is mutually destructive. With certain exceptions, referred to below, the tobacco companies operating in Britain have largely been able to compete on advertising and other forms of sales promotion, avoiding costly "price wars." Moreover, for the industry as a whole, brand advertising, as well as providing the main form of competition, facilitates the process of differentiation of products, which presents an important barrier to entry into the market by other firms.

Voluntary agreements

It is important to recognise that these additional roles of advertising are unaffected by the terms of the voluntary agreements reached by the representatives of the tobacco industry and the Departments of Health and the Environment. Indeed, the very existence of such agreements offsets the threat of legislative controls and thus secures the objective of maintaining an environment which supports smoking as a socially acceptable activity. Additionally, the agreement ensures the continued allocation of a "disproportionate amount of advertising to cigarette brands in the two lowest tar groups."¹⁴ It therefore supports the important strategy of the tobacco advertising to reduce the perceived link between smoking and illness.

The voluntary agreements play an ambiguous part in rivalry between firms. A detailed report by the secretariat of the United Nations Conference on Trade and Development pointed out that, "Competition and co-operation among the transnational conglomerates are not mutually exclusive."¹⁷ This cooperation was well illustrated during the early years of the present century by the agreement whereby the Imperial Tobacco Company and the newly created British American Tobacco Company restricted their sales operations to the United Kingdom and the rest of the world, respectively.¹⁸ This harmonious relation was maintained until 1978, when British American Tobacco entered the British market. Their entry further complicated an already unstable market brought about by the changes in the regulations of the European Economic Community that relate to the way in which duty was imposed on tobacco. These changes led to "a frenzy of new product launches and price cutting,"¹⁹ and were responsible for a decline in the share of the market controlled by Imperial from about two thirds to below a half.

Assessing the situation early in 1982, the *Financial Times* pointed out that, "The marketing theories suggest that renewed market hostility is likely. In a declining market, volume sales can still be maintained—and even increased—by aggressive promotion at the expense of the competition."²⁰ To a large extent, however, such a hostile atmosphere among the most important cigarette manufacturers has been avoided by recourse to a system of overt collusion—the voluntary agreements. These have allowed for controlled, phased, across the board reductions in expenditure on posters and cinema advertising and have attempted to stabilise expenditure on sport sponsorship at the 1975 level. Thus the voluntary agreements have enabled the tobacco companies to function, in certain important ways,

as a cartel. Official acknowledgment that certain aspects of the agreements could contravene the Restrictive Trade Practices Act is shown by reference to a statutory instrument,²⁰ which approves the voluntary agreements and rules that these may not be registered with the Office of Fair Trading as being restrictive trading agreements relating to goods.

It would, of course, be naive to suggest that the concessions made in the voluntary agreements are entirely advantageous to the tobacco companies and will have no beneficial impact on health. Nevertheless, it is clear that the voluntary agreements are double edged instruments, pre-empting more restrictive action and providing concealed benefits to the industry.

From the perspective of public health policy, two aspects of this analysis lend support to those arguing for legislation to control tobacco promotion. Firstly, the econometric debate concerning the impact of marginal changes in advertising volume on tobacco consumption is irrelevant for the purposes of evaluating the effect of comprehensive legislative controls on advertising and promotion. More recent econometric evidence concerning the relative impact of legislative versus voluntary controls in a group of 15 countries of the Organisation for Economic Co-operation and Development strongly suggests that the legislative controls have had a greater impact on consumption.²¹ Secondly, in addition to the recent evidence showing the tobacco industry's avoidance of certain aspects of the voluntary controls,²² it is argued that these controls provide certain benefits to the industry. In particular, they allow the industry to restructure its portfolio of advertising expenditure, away from those areas where legislative controls are relatively easy to implement—for example, cinema and poster advertising—towards the grey areas of sponsorship, adventure holidays, and clothing manufacture. It is indeed ironic that the voluntary controls, originally designed to control the excesses of the tobacco industry, may ultimately serve to make effective control far more difficult to achieve.

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What policy should be adopted in withdrawing hypnotics and anxiolytics from patients who have been receiving these drugs for a long time?

A withdrawal syndrome has been described in patients discontinuing anxiolytic and hypnotic medication that have been taken for a long time.¹⁻³ This is particularly pronounced if the patient has raised the dose above the generally recommended therapeutic levels and is a special problem with the barbiturates. Nevertheless, definite symptoms have been seen even in patients stopping benzodiazepine taken in normal dose for longer than a few months; these include anxiety, tension, apprehension, dizziness, insomnia, and anorexia. More severe symptoms are nausea and vomiting, tremor, muscle weakness, postural hypotension, and a range of perceptual symptoms such as persistent pain, paraesthesiae hyperacusis, photophobia, depersonalisation, and a feeling of motion. Most symptoms subside within a few weeks of discontinuing benzodiazepine anxiolytics or hypnotics but a few persist for several months. Fits or psychotic features may accompany discontinuation from high doses of barbiturates or benzodiazepines. In all cases withdrawal should be gradual—over four to six weeks in patients taking therapeutic doses, longer in those taking high doses. A patient taking a barbiturate should transfer to a benzodiazepine over four weeks or so as an initial measure and then the benzodiazepine should be withdrawn. Antipsychotic medication is not advised as it lowers the convulsive threshold. A β adrenoceptor antagonist such as propranolol may help if physical withdrawal symptoms are pronounced. Some patients become depressed and may need a course of an antidepressant. The most important measures are sympathy, support,

explanation of symptoms, and a readiness to accept unusual and prolonged symptoms as withdrawal phenomena and not as a neurotic overreaction.—M LADER, professor of clinical psychopharmacology, London.

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What is the Lord hip prosthesis?

The Lord or madreporic stemmed total hip prosthesis was first used in 1975. A seven year follow up study was presented in 1983.¹ The prosthesis is characterised by a rough surface on the implant designed to give fixation in bone without the use of bone cement. The rough surface has been described as being similar to that produced by madreporae found in coral reefs; these form a rough surface created by a multitude of small spheres giving rise to exceptional locking fixation. The acetabular component may be either a metal screw ring or a mobile cup, depending on the condition of the acetabulum. The prosthesis is manufactured by Howmedica International Inc.—S C GALLANNAUGH, consultant orthopaedic surgeon, Hastings.

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