

## PERSONAL VIEWS

# The future of tobacco

Tobacco is a perpetually controversial topic. It causes millions of deaths every year and will continue to do so as addiction to nicotine spreads in developing countries in the most popular form of its delivery, the cigarette.

The history of the public health war against tobacco is filled with victories and losses. Many of the victories, such as advertising bans, have been pyrrhic, in that restrictions that fall short of full eradication have been circumvented, and successful marketing has continued through means that are uncontrolled by national parliaments—Formula One motor racing is a good example. Attempts to regulate tobacco as a drug have failed in the United States and have not been seriously attempted elsewhere, although the European Union has some limited restrictions on tar, nicotine, and carbon monoxide. Canada requires disclosure of the constituents of smoke but applies no restrictive regulations.

The decline in the prevalence of smoking is depressingly slow. The smokable forms of the drug are still used by between a quarter and a half of adults in most countries, and use is increasing among women. Although not well quantified, consumption of other forms of tobacco, such as chewing, are widespread in India and elsewhere in Asia. Global consumption of tobacco is falling slowly at present, but the amount consumed remains at more than 5 million tonnes a year. The driving force behind this massive consumption is, of course, nicotine addiction—even if the effectiveness of nicotine delivery varies greatly

with mode of use, the chemistry of the product, and the nicotine requirements of the user (which may also vary greatly). The power of the drug is shown by the fact that a serious national attempt to help UK smokers quit produced an abstinence rate after 12 months of only 15% (*Addiction* 2005;100: 84-91)

The development of competitor products is a logical way forward

With a global picture like this it is difficult to see tobacco going out of fashion, and existing antismoking policies have not solved the problem, even if such places as California have come relatively close, with the application of sensible policies and large resources by public health standards.

Two alternative approaches exist. One is prohibition of tobacco. The literature of tobacco control does not regard prohibition as a serious or sensible policy, probably because of the experience with the attempt to prohibit alcohol in the United States in the 1920s, which merely sent the drug underground and facilitated the rise of a new class of criminal.

The second alternative is to find other nicotine delivery systems to compete with tobacco—a policy that would, reasonably, be developed in parallel with increased restriction (but not prohibition) of sales of tobacco. Alternative nicotine delivery systems exist in the form of nicotine replacement therapy and variations of cigarette like devices that deliver lower levels of some toxicants (which have yet to succeed in the marketplace). Nicotine replacement therapy is neither as addictive nor as widely available as tobacco. Without changes to both of these characteristics it is unlikely to compete effectively with tobacco.

If prohibition is ruled out, then the development of competitor products is a logical way forward. This would require a huge change in attitude among various constituencies. The tobacco control lobby has not embraced the concept in any united way, and many among its ranks find it extremely difficult to condone any form of continuing addiction. Others among them think that existing tobacco control policies will

prevail over time and are more likely to do so if seriously large resources are applied. Promoting the idea in parliament of more effective (and therefore presumably addictive) non-tobacco nicotine products, to be marketed freely, is also not a surefire way to political acclaim.

Regulators, who are usually subject to political direction, are unused to encouraging or facilitating development of more addictive sources of clean nicotine—and moreover have no current mandate to do so. Finally, the pharmaceutical industry would need to develop these products, and these companies would surely need encouragement and guarantees of access to the market.

The question of whether such a policy would increase or decrease rates of quitting is complex and the answer speculative. An effective competitor for tobacco would probably increase quitting among people who are resolved on quitting but might serve as a bridging source of nicotine among non-quitters when smoking is forbidden, as in many work-places.

Therapeutic nicotine has been found safe for short term use (Neal L Benowitz (ed), *Nicotine Safety and Toxicity*), but long term use has not really occurred so has not been studied adequately. However, any risks ought to be minuscule when compared with those associated with tobacco.

So, tobacco will prevail as the world's major source of nicotine, unless some key establishments change their attitudes. Given that we now have a large tobacco control community with substantial skills and resources, it is a pity that a more coherent leadership in global policy has not been developed. The question of freely available, addictive non-tobacco nicotine products needs to be resolved. Otherwise we leave the field open to tobacco and to an unregulated tobacco industry whose history in relation to lower risk products is profoundly discouraging and whose product is a continuing disaster.

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Nigel Gray

### **The future of tobacco**

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Stephen L. Hansen,MD (3 November 2005)

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## **The Future of Tobacco** 2 November 200

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Send response to journal:

[Re: The Future of Tobacco](#)

In addressing "The Future of Tobacco", Nigel Gray suggests two alternative approaches. One is the prohibition of tobacco, the other concentrates on finding other nicotine delivery systems to compete with tobacco. He dismisses the first option because of the notorious failure of the alcohol prohibition in the United States in the 1920s. Indeed, a "Prohibition" patterned after the former would not be a practicable solution.

However, a fundamentally different kind of "prohibition" not only deserves serious consideration but also follows compellingly from the extraordinary new stance Philip Morris, the most successful U.S. based multinational cigarette maker, has recently adopted. After more than half a century of blatant denial, PM is suddenly fully embracing the death and destruction its products inflict (philipmorris.com website). Yet, despite PM's agreement with "the overwhelming medical and scientific consensus that cigarette smoking causes lung cancer, heart disease, emphysema and other serious diseases in smokers," it still conducts "business as usual", continues to advertise and sell its cigarettes at home and abroad. *< and persists in harvesting the world's children as customers indispensable for securing future profits. >* The perfunctory warning labels about the risks of smoking can in no way compete with the massive pictorial impact of insidious advertising imagery that uniquely affects the young mind. *< This duplicitous behavior is totally incongruous with any honest and civilized approach to trade, especially as public health on a national and global scale is concerned. >* . I am not aware of any product other than cigarettes that, after being found defective and endangering life, was not withdrawn from the market, either voluntarily by the manufacturer or by regulatory or legal fiat of government.

(NOTE: The two statements added here between < and > in the above paragraph had been eliminated by the BMJ Editor from the published version of my RESPONSE).

The stage appears to be set to examine if the sale of a product that kills half of its long term users and whose manufacturer now unreservedly endorses its multiple risks and dangers can any longer be tolerated by society. As one ponders the realities of the free enterprise system, one is inevitably led to appreciate the role that government must play on behalf of its people. In their wisdom, the Framers of the

Constitution granted Congress the right to regulate commerce, empowering the US government in the "Commerce Clause" of Article 1, Section 8, of the Constitution to stop the interstate trade of dangerous merchandise, an authority that could conceivably be exercised in the case of tobacco. Such action must be clearly distinguished from prohibition, since individuals would still be able to grow tobacco strictly for personal use.

The second alternative considered by Nigel Gray aims at a nicotine delivery device not based on tobacco. Although this would greatly reduce the burden of toxic and carcinogenic exposure of the user, the fact that nicotine itself is a tumor promoter and can be converted in the body to the tobacco-specific nitrosamine, NNK, one of the most potent lung carcinogens known, would argue against its extended use as a substitute for tobacco. However, sebacylcholine, an agent that is chemically different from nicotine but duplicates certain effects of nicotine, should be tested as a potential substitute (K.H. Ginzl, A hypothesis on the peripheral origin of smoking satisfaction and its implication for nicotine replacement. Proc.7th World Conference on Tobacco and Health, Perth, Western Australia, 1990, pp. 426-427).

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Competing interests: None declared

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**Re: The Future of Tobacco** 3 November 2005

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Send response to journal:  
[Re: Re: The Future of Tobacco](#)

Prof. Ginzl has it just right. This is a politically achievable goal of tremendous public health import. Polls support delegalization of the sort envisioned here. Let's unify around this approach for the long run - people are ready for tobacco to go.

Competing interests: None declared

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