Saturday 5 August 2000

BMJ

Moving tobacco control beyond "the tipping point"

Ample funding, strong policies, and "unsticky" cigarettes are key

Next week over 4000 people from about 120 countries will attend the 11th world conference on tobacco or health in Chicago. To mark the occasion, the *BMJ*, *JAMA*, and the *Bulletin of the World Health Organization* are publishing theme issues. At a time of steadily increasing death and disease caused by tobacco and alarming trends in smoking in both developed and developing regions, conference delegates will discuss how to wipe out the "brown plague."

Malcolm Gladwell, author of the best selling book *The Tipping Point*,[1] believes he has the answer. He argues that ideas, messages, products, and behaviours spread like viruses. Fashion trends, crime waves, Pokémon, and many other phenomena that characterise everyday life are examples of "epidemics in action." New ideas, products, or behaviours will cross the threshold into epidemic transmission—that is, move beyond "the tipping point"—if three rules are met. Firstly, people with a "rare set of social gifts," who are capable of starting epidemics, are involved. Secondly, the "contagion" has the quality of "stickiness," so that it becomes irresistible and entrenched after exposure occurs. Thirdly, environmental factors—the times and places in which social epidemics occur—are favourable.

Gladwell fits teenage smoking into his model, as evidenced by "tipping people" (such as parents and peers) who initiate teens into smoking and a sticky drug (nicotine). He offers two solutions: treating smokers with bupropion, to address the link between smoking and depression; and reducing nicotine in cigarettes to "non-addicting" levels, to prevent progression from experimentation to dependence. Both strategies are aimed at reducing the stickiness of cigarettes.

Bupropion is indeed an effective smoking cessation medication for people with and without a history of depression.[2] Reducing nicotine in cigarettes to non-addicting levels was first proposed by Henningfield and Benowitz,[3] and the concept was then incorporated into a comprehensive strategy developed by the American Medical Association[4] and endorsed by the British and Australian medical associations.[5,6] Gladwell's proposals are therefore on target, but they won't move tobacco control beyond the tipping point unless a few essential ingredients are added to the mix.

Firstly, money is needed, and a lot of it. Because governments typically don't provide enough of it for tobacco control, it must come from those involved in the manufacture, sale, promotion, and use of tobacco. Tobacco taxes are the usual source, and these are what fund the comprehensive tobacco control programme in Massachusetts, evaluated in this issue by Biener et al (p 351).[7] Litigation can produce substantial funding, such as the $246bn made available through the "master settlement agreement" between 46 state attorneys general and US tobacco companies. Unfortunately, only eight states have allocated enough settlement money to fund a comprehensive tobacco control programme.[8] Retailers should be licensed for the privilege of selling tobacco, and revenues from licence fees should be used to fund enforcement of the minimum age of purchase. In 1990 the Bush administration recommended that tobacco retailers should be required to pay a $300 annual licence fee.[9]

Secondly, the money should be used to fund comprehensive tobacco control programmes like those in Massachusetts, California, Arizona, and a few other "model" states.[10] The US Centers for Disease Control and Prevention recommend that $6-20 per head be allocated annually to fund comprehensive tobacco control programmes, depending on the size of the population.[11] The funding and programmes must be sustained over the long term. Massachusetts has spent $6.50 per person per year on its successful campaign since 1993.[7] Bupropion, nicotine replacement therapy, and other tobacco dependence treatments will not tip the balance unless funding is provided to develop the infrastructure needed to deliver those treatments.[12]

Thirdly, a strong policy structure needs to be in place to support and complement programmes. In this issue Jha and Chaloupka review the policies that are effective in reducing tobacco use, including tobacco tax increases, bans on advertising, bans on smoking in public places and worksites, and prominent warnings on packages (p 358).[13] Tobacco control policies can be adopted at local, state, national, regional, and global levels. Regional and global approaches—in particular, European Union directives on smoking[14] and the World Health Organization's framework convention on tobacco control[15]—offer the greatest opportunity for widespread progress but also present the most challenging political obstacles. The US, ironically, has been a leader in many areas of tobacco control but has been weak on the framework convention.[16]

A final essential ingredient is the recruitment and supporting of more "tipping people." Leaders such as WHO director general Gro Harlem Brundtland, President Bill Clinton, former US surgeon general C Everett Koop, and tobacco litigator Stanley Rosenblatt (see page 322) have blazed the trails. But more funding

BMJ 2000;321:309–10

must be made available to the activists who work in the trenches. Perhaps at the 12th world conference on tobacco or health delegates will grow in number to 12 000, to match the legions that attended last month's global conference on HIV and AIDS.

Ronald M Davis *North American editor, BMJ*

(rdavis1@hfhs.org)

1 Gladwell M. *The tipping point: how little things can make a big difference.* New York: Little, Brown and Company, 2000.
2 Britton J, Jarvis MJ. Bupropion: a new treatment for smokers. *BMJ* 2000;321:65-6.
3 Benowitz NL, Henningfield JE. Establishing a nicotine threshold for addiction. *N Engl J Med* 1994;331:123-5.
4 Henningfield JE, Benowitz NL, Slade J, Houston TP, Davis RM, Deitchman SD, for the Council on Scientfic Affairs, American Medical Association. Reducing the addictiveness of cigarettes. *Tobacco Control* 1998;7:281-93.
5 Beecham L. Doctors call for nicotine in cigarettes to be reduced. *BMJ* 1998;317:1271.
6 Robotham J. Nicotine-free cigarette hope for young smokers. *Sydney Morning Herald* 1998 30 Oct. www.smh.com.au/news/9810/30/text/national7.html
7 Biener L, Harris JE, Hamilton W. Impact of the Massachusetts tobacco control programme: population based trend analysis. *BMJ* 2000;321:351-4.
8 Campaign for Tobacco-Free Kids. *State tobacco settlement.* www.tobaccofreekids.org/reports/settlements/ (accessed 30 July 2000).
9 US Public Health Service. Model sale of tobacco products to minors control act. A model law recommended for adoption by states and localities to prevent the sale of tobacco products to minors. Washington, DC: US Department of Health and Human Services, 1990.
10 Wakefield M, Chaloupka F. Effectiveness of comprehensive tobacco control programmes in reducing teenage smoking in the USA. *Tobacco Control* 2000;9:177-86.
11 US Centers for Disease Control and Prevention. *Best practices for comprehensive tobacco control programs.* Atlanta: CDC, 1999. www.cdc.gov/tobacco/bestprac.htm
12 Thun M, Glynn TJ. Improving the treatment of tobacco dependence. *BMJ* 2000;321:311.
13 Jha P, Chaloupka FJ. The economics of global tobacco control. *BMJ* 2000;321:358-61.
14 Action on Smoking and Health. *Tobacco policy in the European Union: Fact sheet No. 20.* London: ASH, April 1999. www.ash.org.uk/html/factsheets/html/fact20.html (accessed 30 July 2000).
15 World Health Organization. *Framework Convention on Tobacco Control.* http://tobacco.who.int/en/fctc/ (accessed 30 July 2000).
16 Joossens L. The big disappointment: USA weak on convention. *Tobacco Control* 2000;9:134-5.

Protecting children from passive smoking

The risks are clear and a comprehensive strategy is now needed

Environmental tobacco smoke is a serious health risk to children. Regulatory measures to protect children, such as eliminating smoking in day care settings, schools, and public places, do not address their main source of exposure to tobacco smoke—their homes. Formal structures for protecting children in the home are usually only used in certain circumstances involving custody and adoption,[1] and legislation to ban smoking in homes is unlikely, so other strategies to reduce children's exposure to environmental tobacco smoke must be put in place.

In this issue of the *BMJ*, three separate but thematically related papers provide support for a comprehensive approach to protect children from environmental tobacco smoke.[2–4] Jarvis et al report that much of the reduction in exposure among English children aged 11-15 that occurred between 1988 and 1998 was due to reduced prevalence of parental smoking, as well as reduced smoking in the home (p 343).[2] Thus public education and programmes directed at reducing exposure in the home need to be combined with policies and programmes for the public aimed at preventing smoking and encouraging smokers to give up.

In California, where a comprehensive approach to tobacco control is well under way, Hovell et al found a major effect of behavioural counselling on childhood exposure in an ethnically diverse, low income population, indicating that specific interventions of this type can be successful (p 337).[3] Wakefield et al report that a ban on smoking in the home significantly reduced initiation and prevalence of smoking among students aged 14-17 in the United States (p 333).[4] Smaller effects were seen for partial restrictions. School bans that were enforced and restrictions in public places were also associated with lower smoking rates. These findings indicate other potential benefits, beyond physical protection from environmental tobacco smoke, which accrue from more restrictions on smoking. Not only do children model their behaviour on that of adults[5 6] but parental and societal attitudes toward tobacco use, as shown by bans on smoking in homes, schools, and public places, may also reduce the number of adolescents who take up smoking.

Papers pp 333, 337, 343

While a comprehensive approach is needed, this does not negate the need for focused interventions. The findings of Hovell et al show the potential of more focused techniques that impact directly on smoking parents.[3] In our jurisdiction (Ontario, Canada) attitudes of the public, both smokers and non-smokers, towards smoking in the home in the presence of children increasingly favour restrictions, suggesting that the climate is right for behavioural interventions aimed at parents.[7]

The time is also right for interventions aimed at health professionals, in particular, family physicians and paediatricians. Recent revisions to the Ontario Child and Family Services Act require that physicians report their suspicions to the Children's Aid Society if they suspect physical harm or even a risk of harm resulting from failure to protect the child or a pattern of neglect.[8] While reporting is difficult for physicians in cases of abuse and even more so when there is risk of abuse, it is likely to be particularly difficult with smoke exposure, since smoking in the presence of others is still considered acceptable by most of society. Nevertheless, such requirements may sensitise physicians to the need to intervene in cases of exposure to environmental tobacco smoke by giving advice to parents, including help in smoking cessation. Furthermore, they make clear the urgency of specific interventions to prepare physicians for this role and help them in carrying it out.

Increasing the scope and effectiveness of smoking restrictions in public places and workplaces will continue to be a cornerstone of any comprehensive strategy. Recent studies have highlighted the important

BMJ 2000;321:310–1