Early release, published at www.cmaj.ca on April 12, 2010. Subject to revision.

Legislating for health-related gain: striking a balance

Alan Maryon-Davis MB MSc

∞∞ See related research article by Naiman and colleagues

When is it right to use the big stick of legislation to change people's unhealthy habits? How can governments avoid being accused of interfering too much in our private lives? What is the optimal balance between laissez-faire-ism and nanny-state-ism when it comes to promoting health and preventing ill health?

Naiman and colleagues report on their 10-year population-based study of the association between anti-smoking legislation and admissions to hospital for cardiovascular and respiratory conditions.[1] They found consistent reductions in rates of admission for several common cardiovascular and respiratory conditions after a smoking ban in restaurants. Despite some limitations in their methodology — in particular, a lack of data on individual smoking status — their study adds to the growing body of evidence that legislation banning smoking can save lives, and that it begins to do so quickly.[2]

However, effectiveness is just one consideration. Such factors as acceptability, practicality, equity, risks and costs also need to be considered — and not just within the health sector. In the United Kingdom, for example, where smoking bans in workplaces and enclosed public spaces has been in force since 2006, acceptance by the public has been consistently high.[3] Indeed, evidence from repeated opinion polls demonstrating strong public support for a ban is likely to have been pivotal in easing the legislation through Parliament.

Not surprisingly, commercial interests remain vociferous in their condemnation of anti-smoking legislation. The tobacco industry has been assiduous in fostering counter-arguments, warning that infringement of personal choice, potential job losses and impracticability of enforcement would result. Interestingly, although the health-related gain from the ban on smoking in the UK has been striking (as exemplified by the reduced number of acute coronary events in Scotland),[4] a fully modelled cost-benefit analysis, including impact on leisure venues, businesses and jobs, is not yet available.

Anti-smoking legislation raises the wider issue of how far government should go in using enforcement to help achieve better public health. Few people question the need for laws to ensure sanitation, decent housing, clean air and water, food safety, road safety, health and safety at work, and similar legislation to protect us from obvious dangers. But the issue becomes much less clear-cut when it comes to legislation that restricts unhealthy behaviours and lifestyles.

Many independent commentators have sought to draw a distinction between laws and regulations that restrict access or exposure to potentially harmful substances or situations and those that directly restrict people's behaviour, especially in their own private space. Legislation banning smoking involves both types of restrictions — protecting the nonsmoker from second-hand smoke and infringing on the smoker's right to smoke.

Key points

- Evidence supports the view that anti-smoking legislation saves lives, but effectiveness is only one of several components needed to determine the effect of legislation.
- Individual freedoms, cost effectiveness to society and potential unintended consequences should be considered when introducing public health legislation.
- Whole-systems modelling and cost-benefit analyses should be undertaken to inform evidence-based debate and decision-making.
- Potential health-related gains of legislation enforcing healthy behaviours have to be weighed against negative outcomes, including infringement on personal liberty.

A useful framework of principles to guide legislators through this minefield has been provided by the Nuffield Council on Bioethics.[5] The framework describes different kinds of interventions for promoting public health on an "intervention ladder," from the least to the most coercive or intrusive, and argues that the further up the ladder an intervention appears, the stronger the need for its justification. The council sees the proper role of government as a form of libertarian paternalism it calls stewardship. This concept, further elaborated by Baldwin and colleagues,[6] sees the state as acting on behalf of the public in applying policies (including legislation) that enable or facilitate desired social goals while minimizing restrictions on individual freedom.

But this approach still begs the question, how and where do you draw the line? If the state has a legitimate role in helping to protect us from our worst excesses, how far should it be permitted to go? How can lawmakers avoid such unintended consequences as the illicit stills and speakeasies of the Prohibition years in the United States or today's massive global expansion of the contraband cigarette market?

Alan Maryon-Davis is with the Department of Primary Care and Public Health Sciences, King's College London School of Medicine, London, UK

CMAJ 2010. DOI:10.1503/cmaj.100289

DOI:10.1503/cmaj.100289

The way in which the misuse of alcohol has been tackled in certain countries is a case in point. It is a massive public health issue in many places around the globe and is at the top of the public health agenda in the UK, particularly in Scotland, which has one of the highest burdens of disease linked to alcohol misuse in the world.[7] Emboldened by the evident success of its ban on smoking, the Scottish Parliament has debated a raft of measures to curb marketing of, and restrict easy access to, alcohol. These include a government proposal to introduce a mandatory minimum price per unit of alcohol sold to the public — the main aim of which is to ban the very cheap deals being offered in supermarkets.

This proposal has triggered a huge public debate, with accusations that the measures punish the many for the sins of the few, increase inequity by unfairly hitting the less well-off, threaten the livelihoods of those who work in the alcohol industry and allow the nanny state to reach into people's homes.

A balance has to be struck for each threat to public health. Ideally, we should have comprehensive and sophisticated modelling and cost-benefit analyses that assess a wide range of impacts (beyond those concerned with health), so that the public, professionals and policy-makers can see the whole picture before decisions are made. But such intelligence is rarely available. For instance, although the debate about minimum pricing per unit of alcohol has been informed partly by cost-modelling,[8] the ultimate decision about whether to adopt this approach is likely to be determined more by a melee of libertarian principles and vested interests.

Back to smoking. The next battle in countries that already have mandatory restrictions on smoking in workplaces and public spaces is often the issue of smoking in cars with a child on board. The evidence of potential harm is strong,[9] but so too are concerns about invasion of privacy or questions about enforceability. Yet, despite these objections, the list of jurisdictions adopting legislation to ban smoking in cars carrying children continues to grow.

Our role as health professionals is not only to deal with the consequences of unhealthy behaviours such as smoking and alcohol misuse, but also to advocate for evidence-based approaches to prevention and control, including, when appropriate and justified, legislation. Some of us also have a role in providing whole-system cost-benefit appraisals to inform intelligent and unbiased debate.

Competing interests: None declared.

REFERENCES

1. Naiman A, Glazier RH, Moineddin R. Association of anti-smoking legislation with rates of hospital admission for cardiovascular and respiratory conditions. *CMAJ* 2010 Apr. 12 [Epub ahead of print].
2. Board on Population Health and Public Health Practice, Institute of Medicine. *Secondhand smoke exposure and cardiovascular effects: making sense of the evidence.* Washington (DC): National Academies Press; 2009.
3. *News release: Widespread support for smoking ban.* Newport (UK): Office for National Statistics; 2008. Available: www.statistics.gov.uk/pdfdir/smoke0608.pdf (accessed 2010 Feb. 20).
4. Pell JP, Haw S, Cobbe S, et al. Smoke-free legislation and hospitalizations for acute coronary syndrome. *N Engl J Med* 2008;359:482-91.
5. Nuffield Council on Bioethics. *Public health: ethical issues.* London (UK): The Council; 2007.
6. Baldwin T, Brownsword R, Schmidt H. Stewardship, paternalism and public health: further thoughts. *Public Health Ethics* 2009;2:113-6.
7. York Health Economics Consortium. *The societal cost of alcohol misuse in Scotland for 2007*. Edinburgh (UK): The Scottish Government; 2010. Available: www.scotland.gov.uk/Publications/2009/12/29122804/0 (accessed 2010 Feb. 20).
8. Meier P, Brennan A, Purhouse R, et al. *Modelling the potential impact of pricing and promotion policies for alcohol in England. Results from the Sheffield Alcohol Policy Model.* Sheffield (UK): University of Sheffield: ScHARR; 2009.
9. Sendzik T, Fong GT, Travers MJ, et al. *An experimental investigation of tobacco smoke pollution in cars*. Toronto (ON): Ontario Tobacco Research Unit; 2008.

Correspondence to: *Prof. Alan Maryon-Davis, Department of Primary Care and Public Health Sciences, King's College London School of Medicine, Capital House, 42 Weston St., London SE1 3QD, UK; alan.maryon-davis@kcl.ac.uk*