

This response was submitted to the consultation held by the Nuffield Council on Bioethics on *Public Health: ethical issues* between May and September 2006. The views expressed are solely those of the respondent(s) and not those of the Council.

The Academy of Medical Sciences

Introduction

1. The Academy of Medical Sciences welcomes the opportunity to respond to the Nuffield Council on Bioethics consultation on 'Public health: ethical issues'. This response was prepared following a half-day meeting of an Academy working group. The membership of the working group reflected the diversity of the issues covered in the consultation paper and included Academy Fellows expert in epidemiology, ethics, public health and in disciplines relating to the five case studies. The evidence presented here has been approved by the Academy's Officers.

2. This response focuses on the contribution medical science can make to the debate on the ethical issues raised by public health interventions. Rather than respond to each specific question¹, this submission highlights key issues where ethical questions interface with science in the areas of:

- ⌚ Individual and collective choice;
- ⌚ Evidence based health policy; and
- ⌚ Roles and responsibilities.

Individual and collective choice

3. The Government's 2004 Public Health White Paper, 'Choosing Health',² outlined a series of proposals designed to support the public in making informed, healthier choices as individuals. In responding to the subsequent House of Commons Health Committee inquiry, the Academy welcomed the contribution of the White Paper in highlighting the importance of public health, but expressed concern that the emphasis on individual choice was misplaced.³

4. It is the Academy's view that public health should be promoted through appropriate government policies, as well as encouraging informed individual choice. The choices individuals make – for example, regarding diet and exercise – impact on health, but it is impractical for every individual to know all the information necessary to improve their health and there is a limit to what personal decisions can achieve. This view is echoed in the conclusions of the Wanless⁴ report which recognises that public health problems can be tackled not only by decisions made by individuals, but by wide ranging action by health and care services, government, media, businesses, society at large, families and the voluntary and community sector.

5. Individual decisions are not made in a vacuum and are very much affected by the environments in which people live and work. In the case of obesity,

¹ Although each case study is not discussed in turn, the Academy would be happy to direct the Working Party to additional, specific expertise from amongst its Fellowship.

² Department of Health (2004) *Choosing Health: Making health choices easier*. HMSO. London

³ Academy of Medical Sciences (2005) *Response to House of Commons Health Committee inquiry into the Government's Public Health White Paper*. <http://www.acmedsci.ac.uk/images/publication/ppubheal.pdf>

⁴ Wanless, D. (2004) *Securing Health for the Whole Population*. HMSO: London

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although it might be easy to place responsibility with the individual, it is important to recognise that the individual is part of a community where physical activity is generally declining and convenience foods tend to have a high calorific and salt content. While it is possible to encourage individuals to prepare healthy meals and snacks from raw materials, it tends to be those individuals that are financially better off and more educated who more readily make such changes, which, in turn, only widens existing health inequalities⁵. Individuals can be encouraged to take more exercise, but transport policy and the built environment are also powerful influences on the way in which individual, or groups of individuals, can exert that choice.

6. The Academy's recognition of the role played by the environment (both built and natural) in contributing to the obesity problem was demonstrated at a recent seminar, held jointly with the Royal Academy of Engineering. Doctors, biomedical scientists, architects and engineers were brought together to address the medical background to obesity and the influence of the built and virtual environment on human energy expenditure, exemplifying the multidisciplinary approach needed to address public health questions.

7. Tackling public health problems requires central action so that facilities and services are made available. In many cases collective action can also have more impact than the sum of decisions taken at an individual level. The Academy's report 'Calling Time'⁶ provides an example in the case of alcohol. While acknowledging that alcohol is enjoyed by the majority of the UK adult population, the report cited clear evidence of an increasing burden of harm from alcohol misuse. It outlined four types of strategy to address the problem targeted at:

- i) Particular population sub-groups (e.g. homeless people, dependent drinkers)
- ii) Specific drinking situations (e.g. drink-driving, drinking in public spaces)
- iii) Risky drinking behaviours (e.g. binge-drinking)
- iv) Overall levels of national drinking (*per capita* consumption).

8. While the report highlighted the need for policy responses incorporating both targeted and more general approaches, it cited evidence that the balance between harm and benefit to society is influenced by the *total* amount of alcohol consumed, indicating that *per capita* consumption should form the basis of a comprehensive strategy to address the problem. Importantly, measures suggested in the report, including tax increases, reducing personal allowances to import alcohol and reviewing advertising to young people, were underpinned by a call to engage the public more effectively about the realities of alcohol related harm.

9. Government interventions of this type can lead to 'nanny state' criticisms, but such opposition obscures the need for population level policy measures: we believe it is possible to implement a public health programme that reflects a 'caring' state, while preserving legitimate individual choices and freedoms. In many instances there is, in fact, little tension between the interests of the community and those of the individual. Where tensions do exist, an evidence-based assessment of the

⁵ McCarthy, M. (2004) The economics of obesity. *The Lancet*, 349, 2169-2170

⁶ Academy of Medical Sciences (2004) *Calling Time: the Nation's drinking as a major health issue*. AMS. London <http://www.acmedsci.ac.uk/images/project/CallingT.pdf>

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absolute and relative risks and harms of a public health intervention is needed.

Evidence based health policy

10. Public health measures of government and others should be effective, efficient and sustainable and based upon robust scientific evidence, used in a transparent and consistent manner. Due to pressure for 'quick fix' solutions, there is a danger that public health interventions could be introduced without adequate scientific underpinning or evaluation in place. We emphasise the importance of public health policy being based upon rigorous – and ongoing – research.

11. Public health is complex and influenced by policy across a range of sectors. Gathering evidence on different public health measures requires a range of methods informed by a wide evidence base, including that of the social sciences. This depends, in part, on the availability of appropriately trained researchers. In 2002, the Academy expressed concern about the weakness of academic public health medicine,

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particularly the public health aspects of infection⁷. A recent survey of UK clinical academic medicine found that the number of full time equivalent clinical academics specialising in public health had dropped by 32% since 2000.⁸

12. We stress that no public health intervention will be entirely harm-free and most measures that bring benefit may also carry risks. However, while the nature and magnitude of some risks may be acceptable, others may not. For example, any vaccine given to healthy infants will only be acceptable if the rate of associated serious adverse events is extremely small. For this reason, prior to implementation, public health policies must be subject to a robust assessment of the strength of evidence, both of the problem itself and the chance that the proposed intervention will be successful and safe. Such assessment should always consider the cost, according to evidence, of not proceeding with an intervention. Where possible, assessments should also include systematic reviews.

13. We stress that even evidence-based policies will include areas of uncertainty and gaps in knowledge. The evidence base changes with more research and assessments of risk will be refined over time. Hence we emphasise the need for ongoing evaluation of public health policies and strengthened surveillance to identify changes in key health indicators.⁹

Roles and responsibilities

14. Modern issues of public health involve a range of different stakeholders and it is crucial that all stakeholders are transparent and consistent in their use of evidence. With regard to tobacco, food and drink, commercial interests play a large and expanding role and industry should be encouraged to make their interests explicit. Scientists should also be open about their own interests and the limitations of the existing evidence: scientists are responsible for maintaining the integrity of the science base and must therefore openly discuss, rather than avoid, areas of uncertainty.

⁷ Academy of Medical Sciences (2002) Response to House of Lords Science and Technology Select Committee, Subcommittee I 'Fighting Infection'

⁸ Silke, A (2004) Clinical Academic Staffing Levels in UK Medical and Dental Schools. London: CHMS.

⁹ Academy of Medical Sciences (2005) Response to the House of Commons Health Committee inquiry into the Government's Public Health White Paper <http://www.acmedsci.ac.uk/images/publication/ppubheal.pdf>

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15. Government and scientists are responsible for explaining and justifying the use of science in policy-making. Past Academy reports have highlighted the importance of public engagement and discussion. For example, the Academy's FORUM Report 'Safer Medicines'¹⁰ called for greater transparency and communication about the risks and benefits associated with drugs to promote sustained public confidence in the safety of medicines. Risk is inherent in any therapeutic intervention and the Academy's report called for all stakeholders to collaborate in developing an agreed, standardised system of communicating absolute and relative risks to the public. Enhancing the potential role of the general practitioner, whose clinic is the front line in drug safety, was particularly emphasised.

16. The need for public engagement around the risks and effects of an infectious disease pandemic such as influenza is also crucial. Quarantine measures and policies such as school closures will only operate effectively if there is good public understanding of the issues involved. Effective communication will be especially important in instances where measures appear counter-intuitive to the media and wider public. For instance, preventing incoming flights from affected countries might provide public reassurance, but there is little evidence that such social controls of movement are effective in preventing the spread of infection.¹¹

17. We note that, in certain cases, sufficient political will is required to implement public health measures. This is exemplified by the fortification of flour with folic acid to prevent the serious birth defect spina bifida. Although the value and safety of this has approach has been demonstrated, the challenge of implementing this has not been taken up in the UK as it has in the USA, Canada and in over 30 other countries.¹²

18. The Government has an important role in providing access to prevention and treatment interventions and in supporting vulnerable groups whose ability to make

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healthy lifestyle choices may be much restricted. With regard to whether individuals should be entitled to treatment, regardless of their lifestyle choices, we again stress that interactions between the environment, social and economic factors, lifestyle, genetic background, and access to preventative and curative health services all affect public health: it is not possible to separate public health issues into those that an individual can and can not control.

19. Finally, we emphasise the role of patients and the public in facilitating good public health research. A useful example is the common interest shared between the public, patients, government and researchers in ensuring that research using personal data is conducted efficiently and to the highest standards. This is explored in the Academy's 2006 report *'Personal data for public good: using health information in medical research'*.¹³

20. Policies that emphasise choice within health care, as within other aspects of modern life, focus on the value of individual autonomy. However, an

¹⁰ Academy of Medical Sciences FORUM (2005) 'Safer medicines' AMS. London.

<http://www.acmedsci.ac.uk/images/page/1132655880.pdf>

¹¹ Academy of Medical Sciences (2005) Response to House of Lords Science and Technology Select Committee inquiry into 'pandemic influenza' <http://www.acmedsci.ac.uk/images/project/1141211546.pdf>

¹² Oakley GP & Johnston RB (2004) Balancing benefits and harms in public health prevention programmes mandated by governments. *BMJ* 329: 41-43

¹³ Academy of Medical Sciences (2006) Personal data for public good: using health information in medical research. <http://www.acmedsci.ac.uk/images/project/Personal.pdf>

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emphasis on autonomy presents difficulties for activities such as medical research, which are performed for public, rather than individual, benefit. It could be maintained that a patient has the right to say 'use my data to treat me, but not to improve care for others'. Or, more starkly, 'use evidence from other people's data to treat me, but don't use my data to help them'. Many commentators have challenged this view, with some ethicists going further in arguing that, given the importance of biomedical research, there is a positive moral obligation for individuals to participate in certain contexts.¹⁴

21. The Academy's report emphasised that research using personal health data has benefited the health of the public and greatly reduced the burden of disease. It also acknowledged that opportunities to use patient data to inform the design and evaluation of public health interventions are accompanied by important challenges concerning the individual's right to privacy, the sensitive nature of some health data and the importance of patients' trust in the confidentiality of their care. However, the report noted the absence of evidence about public and patient attitudes towards the use of health information in research, forcing regulatory and advisory bodies to make assumptions about what the public might and might not find acceptable. We strongly believe that, in this and other areas, policies should be informed by better research and empirical evidence on public attitudes and awareness.

22. The Academy's report argued that an undue emphasis on privacy and autonomy has created a conservative culture of research governance, in which regulatory bodies promote a policy of 'consent or anonymise' with regard to health data. The report explains that measures conducted under this policy have real and substantial costs for research in terms of financial and time resources and may compromise the reliability and generalisability of research results, so delaying or preventing the acquisition of knowledge necessary to understand, prevent and treat disease. It called for a proportional approach in which individual interests are balanced against the risks involved and the importance of the research in question. Several recommendations were made, including the development of good practice guidance for research using personal data and greater public engagement around the purpose and value of such research.

We hope the evidence presented here is useful to you and we would be pleased to assist the Nuffield Council on Bioethics further if required

¹⁴ Harris J (2005) Scientific research is a moral duty. *J Med Ethics* 31: 242-248

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