



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



e-Supplement

Beyond the 'nanny state': Stewardship and public health

K. Calman

University of Glasgow, University Avenue, Glasgow G12 8QQ, UK

ARTICLE INFO

Article history:
Available online 9 January 2009

Keywords:
Public health
Stewardship
Nuffield
Obesity
Infectious disease
Alcohol
Smoking
Fluoridation

SUMMARY

Background: Some public health measures restrict personal freedom more than others, and deciding what type of measure will be appropriate and effective has long been a problem for policy makers. Existing bioethical frameworks are often not well suited to address the problems of public health.

Methods: The Nuffield Council on Bioethics set up an expert working party to examine the ethical issues surrounding public health in January 2006. Following evidence gathering and a public consultation exercise, the Council published its conclusions and recommendations in the report 'Public health: ethical issues' in November 2007.

Results: A spectrum of views exists on the relationship between the state's authority and the individual. The Council set out a proposal to capture the best of the libertarian and paternalistic approaches, in what it calls the 'stewardship model'. This model suggests guiding principles for making decisions about public health policies, and highlights some key principles including Mill's harm principle, caring for the vulnerable, autonomy and consent. An 'intervention ladder' is also proposed, which provides a way of thinking about the acceptability of different public health measures. The report then applies these principles to a number of case studies: infectious diseases, obesity, alcohol and tobacco, and fluoridation of water supplies.

Conclusions: The idea of a 'nanny state' is often rejected, but the state has a duty to look after the health of everyone, and sometimes that means guiding or restricting people's choices. On the other hand, the state must consider a number of principles when designing public health programmes, and justification is required if any of these principles are to be infringed.

© 2008 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

Introduction

The Nuffield Council on Bioethics is an independent body that identifies, examines and reports on ethical questions raised by advances in biological and medical research. The Council seeks to contribute to policy-making and stimulate debate in bioethics. It has published major reports on a range of topics, including genetic screening, healthcare research in developing countries, research involving animals, and the forensic use of DNA.

In January 2006, the Council set up a working party to examine the ethical issues surrounding public health. This was chaired by Lord Krebs, and included members with expertise in health economics, law, philosophy, public health policy, health promotion and social science. This article summarizes some of the conclusions and recommendations that were published in the report 'Public health: ethical issues'¹ in November 2007, and presented to the UK Public Health Association Annual Public Health Forum in April 2008.

Public health dilemmas

Public health has been defined as 'The science and art of preventing disease, prolonging life and promoting health through the organised efforts of society'.² But whose job specifically is it to ensure that we lead a healthy life? Is it entirely up to us as individuals to choose how to lead our lives, or does the state also have a role to play? Also, if the state does decide it should intervene, what type of intervention would be most appropriate and effective? The Nuffield report presents an ethical framework that aims to help answer the question of when and how the state should act.

Ethical theories and Mill's harm principle

A question that was fundamental to the Council's inquiry was the relationship between the state's authority and the individual. A spectrum of views exists on this matter, from those who give priority to the individual, to those who believe that the collective interests of the population as a whole are the most important.

The libertarian perspective finds that the authority of the state is limited to ensuring that members of the population are able to enjoy the 'natural' rights of man, such as life, liberty and property rights,

E-mail address: chancellor@gl.ac.uk

without interference from others. The libertarian state does not see the promotion of the welfare of its population as its proper role.

At the other end of the spectrum is what can be called the 'collectivist' point of view. There are several forms, such as utilitarian and social contract approaches.

The primary aim of the utilitarian approach is to maximize utility by focusing on achieving the greatest possible collective benefit. This means that actions or rules are generally measured by the degree to which they reduce pain and suffering, and promote overall happiness and wellbeing. In principle, they may allow the welfare or interests of some people to be 'sacrificed' if this were to lead to an increase in overall welfare.

The social contract approach finds that the state's authority is based on the collective will of a community (e.g. as expressed in a democratic vote) to live together as an enduring nation state. This position will typically favour measures to promote the welfare of its citizens, including public goods and services of all kinds.

There are, of course, a range of intermediate positions between these two ends of the spectrum. Essentially, they would recognize that the state should uphold certain fundamental individual rights, but also that it has a responsibility to care for the welfare of all citizens. These welfare considerations may include ensuring that all have a fair opportunity to make a decent life for themselves, and that efforts are made to level out unfair inequalities. Positions of this type are generally thought of as liberal.

Most modern Western states are, according to this analysis, liberal. An important question is how far it is proper for the state to introduce programmes that interfere, to different degrees, in the lives of its population in order to reduce the risks to the health of all or some of them. One way to start thinking about resolving this tension is provided by the 'harm principle', established by the philosopher John Stuart Mill. This suggests that state intervention is primarily warranted where an individual's actions affect others, i.e. coercion is legitimate where it acts to avoid harm to third parties.

Mill's harm principle was not limited to preventing harm to others. He also said: 'Those who are still in a state to require being taken care of by others, must be protected against their own actions as well as against external injury.' So, Mill recognized that the state can rightfully intervene to protect children, and other similar vulnerable people who require protection from, for example, damaging their own health.

Mill also saw the importance of educating and informing people so that they can make up their own minds about how to lead their life. Hence, although Mill's discussion of the harm principle shows that he would strongly oppose public health programmes which simply aim to coerce people to lead healthy lives, he is likely to support programmes which seek to 'advise, instruct and persuade' them so that they can make informed decisions about, for example, what to eat, how to exercise and so on.

Beyond Mill

Building on the harm principle, the Council identified several further issues that are important to public health: individual consent, health inequalities, changing behaviour and community.

The concept of consent is rightly at the centre of the practice of clinical medicine. Consent for public health measures, however, is more complex. The practicalities of requiring each individual to consent to population-based interventions is extremely difficult, and may be impossible when rapid action is required. Other mechanisms need to be identified.

Particular groups of people may differ in their health status, have varying health needs and respond differently to particular programmes. The uneven burden of ill health among different groups raises not only practical issues, but also the question of whether public health programmes should seek to reduce health

inequalities. The Council viewed the reduction of health inequalities as central to any public health programme.

Public education and information have a key role in the liberal framework, since they are non-coercive ways of bringing about improvements in health. However, long-term behaviour change is a major challenge. For example, information campaigns were not very effective in getting people to wear seatbelts; legislation was much more effective.

The Council used the term 'community' to describe the value of belonging to a society in which each person's welfare, and that of the whole community, matters to everyone. A shared commitment to collective ends is a key ingredient in public support for programmes aimed at securing goods that are essentially collective.

The initial liberal framework therefore needs to be revised to make it less individualistic, and to better accommodate the value of the community. Does this mean that we need to advocate paternalism, usually understood as the 'interference of a state or an individual with another person, against their will, and justified by a claim that the person interfered with will be better off or protected from harm'? The Council suggests that it does not. In its report, the Council set out a proposal that it considers appropriate to capture the best of the libertarian and paternalistic approaches, in what it calls the 'stewardship model'.

The stewardship model

The concept of stewardship means that liberal states have responsibilities to look after important needs of people, both individually and collectively. Therefore, they are stewards to individual people, taking account of different needs arising from factors such as age, gender, ethnic background or socio-economic status, and to the population as a whole.^{3,4} In the author's view, the notion of stewardship gives expression to the obligation on states to seek to provide conditions that allow people to be healthy, especially in relation to reducing health inequalities.

The lists below summarize the core characteristics that should be included in public health programmes carried out by a stewardship-guided state.

Concerning goals, public health programmes should:

- aim to reduce the risks of ill health that people might impose on each other;
- aim to reduce causes of ill health by regulations that ensure environmental conditions that sustain good health, such as the provision of clean air and water, safe food and decent housing;
- pay particular attention to the health of children and other vulnerable people;
- promote health not only by providing information and advice, but also with programmes to help people to overcome addictions and other unhealthy behaviours;
- aim to ensure that it is easy for people to lead a healthy life, for example by providing convenient and safe opportunities for exercise;
- ensure that people have appropriate access to medical services; and
- aim to reduce unfair health inequalities.

In terms of constraints, such programmes should:

- not attempt to coerce adults to lead healthy lives;
- minimize interventions that are introduced without the individual consent of those affected, or without procedural justice arrangements (such as democratic decision-making procedures) which provide adequate mandate; and
- seek to minimize interventions that are perceived as unduly intrusive and in conflict with important personal values.

These positive goals and negative constraints are not listed in any hierarchical order. The implementation of these principles may, of course, lead to conflicting policies. However, in each particular case, it should be possible to resolve these conflicts by applying those policies or strategies that achieve the desired social goals while minimizing significant limitations on individual freedom.

Third parties

Various third parties also have a role in the delivery of public health. These may be medical institutions, charities, businesses, local authorities, schools and so on. Corporate agents whose activities affect public health include businesses such as food, drink, tobacco, water and pharmaceutical companies, owners of pubs and restaurants, and others whose products and services can either contribute to public health problems or help to alleviate them.

In the same way that one would not judge the ethical acceptability of actions of individuals by merely assessing whether or not they have broken the law, it is reasonable to argue that commercial companies have responsibilities beyond merely complying with legal and regulatory requirements. Genuine corporate social responsibility clearly has a role to play in public health. However, if there is a lack of corporate responsibility, or a 'market failure', it is acceptable for the state to intervene where the health of the population is at significant risk.

Evidence

There are two main types of evidence relevant to public health: evidence about causes of ill health, and evidence about the efficacy and effectiveness of interventions. Achieving an ethical public health policy may seem straightforward: data on a particular public health problem need to be assessed, and an evidence-based strategy that can be justified in ethical terms needs to be adopted. However, even where every reasonable step has been taken to ensure that evidence is robust, in practice it is often incomplete or ambiguous, and will usually be contested. Thus, scientific evidence does not necessarily lead to a clear policy that is likely to be the most effective.

There are several other factors that are important for successfully planning and implementing public health policies, such as the perception of risk, the notion of a precautionary approach, individual choice, preservation of autonomy, and targeting of at-risk groups. The challenge for public health measures at the population level is to achieve the right balance when several of these goals have to be met simultaneously.

The intervention ladder

Personal behaviours can have a significant effect on health, and a range of different interventions can be used to attempt to change the behaviour of individuals or communities, such as regulation, taxes, subsidies and incentives, and provision of services and information.

To assist in thinking about the acceptability and justification of different policy interventions to improve public health, the Council devised what it calls the 'intervention ladder'. In general, the higher the rung on the ladder at which the policy maker intervenes, the stronger the justification has to be.

- Eliminate choice; for example, through compulsory isolation of patients with infectious diseases.
- Restrict choice; for example, removing unhealthy ingredients from foods, or unhealthy foods from shops or restaurants.
- Guide choice through disincentives; for example, through taxes on cigarettes, or by discouraging the use of cars in inner cities through charging schemes or limitations of parking spaces.

- Guide choices through incentives; for example, offering tax breaks for the purchase of bicycles that are used as a means of travelling to work.
- Guide choices through changing the default policy; for example, in a restaurant, instead of providing chips as a standard side dish (with healthier options available), menus could be changed to provide a more healthy option as standard (with chips as an option available).
- Enable choice; for example, by offering participation in a National Health Service (NHS) stop smoking programme, building cycle lanes or providing free fruit in schools.
- Provide information; for example, campaigns to encourage people to walk more or eat five portions of fruit and vegetables per day.
- Do nothing or simply monitor the current situation.

There are a number of factors influencing the effectiveness of a public health intervention. These might include, for example, an unwillingness among individuals to change; whether there has been democratic engagement; the existence of commercial interests; the influence of the media; the views of ethnic, religious, voluntary and single issue groups; social movements; and economic issues, both personal and national.

To illustrate how the factors discussed so far are born out in practice, the Council considered a number of case studies and presented recommendations for policy makers within each.

Infectious diseases

In Europe and other Western countries, death rates from infectious diseases have decreased over the past century. However, such diseases still account for over 10% of deaths and around one in three general practitioner visits in the UK.⁵

Surveillance and control of infectious diseases

Information about rates of infection and the emergence of new diseases is crucial for planning public health interventions. Collecting anonymized data is not seen as very intrusive, but non-anonymized data interferes more with a person's privacy. When a serious outbreak emerges, it may be necessary for governments to introduce quite stringent, liberty-infringing policies to control its spread, for example by isolating those who are infected.

The Council concluded that to assess and predict trends in infectious diseases, it is acceptable for anonymized data to be collected and used without consent, as long as any invasion of privacy is reduced as far as possible. It may be ethically justified to collect non-anonymized data about individuals without consent if this means that significant harm to others will be avoided. Highly intrusive measures to control infectious diseases, such as quarantine and isolation, would only be justified where there is a real risk of harm to others that could be reduced significantly.

Outbreaks of infectious diseases can have global implications. All cases of certain serious diseases such as severe acute respiratory syndrome and new strains of influenza must be reported to the World Health Organization. However, different countries have different capacities for monitoring and reporting infectious diseases. The Council concluded that countries such as the UK should provide assistance to developing countries to enable effective surveillance of infectious diseases.

Vaccination

Vaccination programmes protect individuals against infection and, in many cases, also bring about 'population immunity'. More directive policies, such as penalties for those who do not comply, may achieve higher levels of vaccine uptake.

The Council concluded that vaccination policies that go further than simply providing information and encouragement to take up the

vaccine may be justified if they help reduce harm to others, and/or protect children and other vulnerable people. This would need to take account of the risks associated with the vaccination and the disease itself, the seriousness of the threat of disease to others, and whether a directive measure would be more effective than a voluntary measure.

After weighing up the evidence and ethical considerations, the Council concluded that there is not sufficient justification in the UK for moving beyond the current voluntary system for routine childhood vaccinations.

Obesity

Being overweight or obese is a risk factor for several health conditions, including diabetes, stroke, some cancers, and lung and liver problems. The number of people who are obese has increased substantially over the past few decades in the UK and in many other countries. The UK currently has the highest rate of obesity in Europe, and a recent report estimated that 60% of adult men, 50% of adult women and approximately 25% of all children under 16 years of age could be obese by 2050.⁶ The causes of obesity are complex and there are no simple solutions.

To help people to lead an active life, the Council concluded that town planners and architects should be trained to encourage people to be physically active through the design of buildings, towns and public spaces.

Several different ways of providing front-of-pack information on food packaging have been introduced, and in 2007, a major study on whether food labelling contributes to healthier choices was commissioned by the Food Standards Agency. The results of the study are expected in the spring of 2009. The Council concluded that the scheme that is found to be most effective should be taken up. Where industry fails to do this, there is an ethical justification for introducing legislation.

Increasing levels of childhood obesity are a particular concern. Children require special protection from harm, and are particularly vulnerable due to their limited ability to make genuine choices, and their susceptibility to influences such as food marketing. The Council concluded that there is an ethical justification for the state to intervene in schools to achieve a more positive attitude towards healthy eating, cooking and physical activity. Stronger regulation of advertising food to children should be considered.

It has been argued that if a person's behaviour has contributed to their need for NHS treatment, they should not have the same access to treatment as other people. Obesity, however, is often related to factors outside the individual's control, such as living in an environment that makes it difficult to exercise or eat healthily. The Council concluded that it would generally be inappropriate to deny NHS treatment to people simply on the basis of their obesity. However, persuading them to change their behaviour could be justified, provided that this would make the medical intervention more effective and that they were offered assistance.

Alcohol and tobacco

Excessive drinking is associated with major health problems and also affects third parties, for example through drink driving and violence. The number of deaths from medical conditions caused by alcohol consumption doubled between 1991 and 2005 in the UK.⁷ For tobacco, regular smoking of even a small number of cigarettes is harmful to the health of the smoker and people around them. In the UK, smoking was associated with one in six of all deaths between 1998 and 2002.⁸ Therefore, the banning of smoking in enclosed public places in the UK was a welcome development.

Increasing tax on alcohol and restricting the hours of sale have been shown to be effective in reducing alcohol consumption. However, the UK Government's policies on alcohol have focused on

public information campaigns and voluntary labelling schemes; measures that have been shown to be ineffective. The Council concluded that measures that have been found to be effective in reducing alcohol consumption should be implemented by the UK Government. These include increasing taxes on alcoholic beverages and restricting hours of sale.⁹

The arguments in favour of banning smoking in public spaces can also be used to support banning it in homes where children are exposed to smoke. However, this would be extremely difficult to enforce without compromising privacy. The Council concluded that there may be exceptional cases where children would be at such a high risk of harm from passive smoking, such as if they had a serious respiratory condition, that intervention in the home may be ethically acceptable, although any such case would usually need to be decided in court.

Corporate social responsibility is especially problematic in the case of the tobacco industry; the best strategy would simply be not to market the product. Nevertheless, the Council believes that the industry does have a role to play in harm reduction, particularly in an international context. It concluded that policies on selling and advertising tobacco and alcohol that provide the greatest protection to consumers should be adopted worldwide. The members of the UK Tobacco Manufacturers' Association and other companies involved with tobacco products should implement a voluntary code of practice to achieve this.

Fluoridation of water supplies

Fluoridation involves adding fluoride to the water supply with the aim of improving dental health. At present, approximately 10% of the UK population receives a water supply that has been fluoridated to a certain level or has a similar amount of fluoride present naturally.¹⁰ There has long been debate over whether fluoridation schemes should be rolled out in other areas of the UK.

Fluoridation programmes have been controversial because, although fluoridation has been implemented in some areas for several decades, there is little high-quality evidence available on the benefits and harms, making it difficult to quantify them. In addition, fluoridated water is either supplied or not supplied to a whole area; it is not possible to provide each individual with a choice or obtain their consent.

The principle of avoiding coercive interventions could be used to argue against adding anything to the water supply. However, the Council does not accept that this should always be ruled out, especially if the substance being added may bring health benefits. The acceptability of any public health policy involving the water supply should be considered in relation to: (i) the balance of risks and benefits; (ii) the potential for alternatives that rank lower on the intervention ladder to achieve the same outcome; and (iii) the role of consent where there are potential harms.

The Council concluded that the most appropriate way of deciding whether to fluoridate the water supply is to rely on democratic decision-making procedures. These should be implemented at the local and regional, rather than national, level because the need for, and perception of, water fluoridation varies between areas.

Conclusions

The idea of a 'nanny state' is often rejected, but the state has a duty to look after the health of everyone, and sometimes that means guiding or restricting people's choices. On the other hand, the state must consider a number of key principles when designing public health programmes, including Mill's harm principle, caring for the vulnerable, autonomy and consent (although the latter two may be of lesser importance in public health than in clinical medicine). Justification is required if any of these principles are to be infringed.

Evidence of the causes of ill health and the effectiveness of interventions should also be an integral part of policy-making in public health.

Existing bioethical frameworks are often not well suited to address the problems of public health. The Nuffield Council on Bioethics tried to address this and its report provides a framework for thinking about, planning and implementing public health measures.

Ethical approval

None declared

Funding

Nuffield council on Bioethics

Competing interests

None declared

Acknowledgements

The Nuffield Council on Bioethics has given permission for the findings of the report, 'Public health: ethical issues' to be published in this article.

References

1. Nuffield Council on Bioethics. *Public health: ethical issues*. London: Nuffield Council on Bioethics. Available from: www.nuffieldbioethics.org/go/ourwork/publichealth/introduction; 2007 [accessed 5 December 2008].
2. Royal College of Physicians of the United Kingdom. What is public health?. Available from: www.fphm.org.uk/about_faculty/what_public_health/default.asp [accessed 5 December 2008].
3. World Health Organization. *World health report 2000*. Geneva: WHO; 2000.
4. Jochelson K. *Nanny or steward? The role of government in public health*. London: King's Fund; 2005.
5. Health Protection Agency. Health protection in the 21st Century – understanding the burden of disease; preparing for the future. Part 4 Infectious diseases. London: Health Protection Agency. Available from: www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1203064747564; 2005 [accessed 5 December 2008].
6. Foresight. *Tackling obesities: future choices*. London: Department of Innovation Universities and Skills. Available from: www.foresight.gov.uk/Obesity/17.pdf; 2007 [accessed 5 December 2008].
7. The definition of alcohol-related deaths used by National Statistics includes those causes regarded as most directly due to alcohol consumption National Statistics. Alcohol-related death rates almost double since 1991. Press Release. Available from: www.statistics.gov.uk/pdffdir/aldeaths1106.pdf; 7 November 2006 [accessed 5 December 2008].
8. Twigg L, Moon G, Walker S. *The smoking epidemic in England*. London: Health Development Agency; 2004. p. 2.
9. Since the report was published, the UK Government has imposed a 6% increase in all alcohol duty rates, and these will increase by 2% above the rate of inflation in future years. HM Treasury. *Budget 2008 Stability and opportunity: building a strong sustainable future*. London: HM Treasury. Available from: www.hm-treasury.gov.uk/bud_bud08_repindex.htm; 2008 [accessed 5 December 2008].
10. Jones S, Lennon K. *One in a million: the facts about water fluoridation*. 2nd edn. London: British Fluoridation Society, UK Public Health Association, British Dental Association and Faculty of Public Health; 2004.