Public health: ethical issues
a guide to the report

NUFFIELD
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BIOETHICS

The Nuffield Council on Bioethics has published a report, *Public health: ethical issues*. The report considers what the government, industry, other organisations and individuals should do to enable people to lead a healthy life. It uses four case studies to illustrate the ethical issues:

• infectious disease

• obesity

• alcohol and smoking

• fluoridation of water.

This guide introduces the main themes of the report and sets out some of its conclusions and recommendations.

Notes in square brackets throughout refer to the chapter and paragraph numbers in the report.
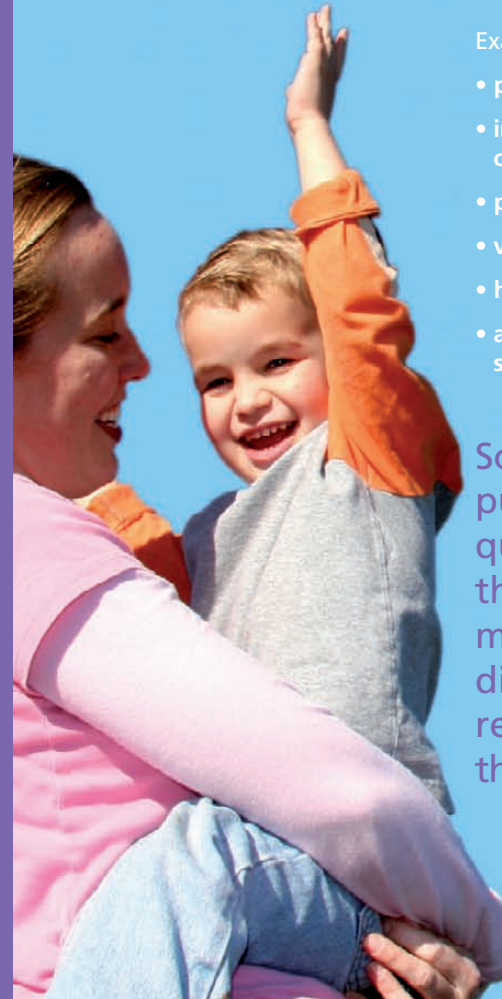
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What is public health?

The environment in which we live affects whether or not we are able to lead healthy lives. 'Public health' is about understanding the factors that influence people's health, and finding ways of improving it [paras 1.6–1.7]. The emphasis of public health policies is prevention rather than treatment of ill health.

Examples of public health measures include:

• providing services to help people stop smoking;

• improving the safety and nutritional content of foods;

• providing a clean water supply;

• vaccination schemes to prevent infectious diseases;

• health-and-safety schemes in the work-place;

• advertising campaigns to promote healthy eating, such as the '5-a-day' campaign.

Sometimes, options for improving public health could be seen as quite intrusive. Policy makers therefore have to decide which measures are acceptable in different circumstances, and this report considers the ethical issues that arise in making these decisions.

Ethical and policy issues

The report starts from the position that the state has a duty to enable people to lead healthy lives. Everyone should have a fair opportunity to lead a healthy life, and therefore governments should try to remove inequalities that affect disadvantaged groups or individuals [paras 2.8, 2.27–2.32]. We propose a 'stewardship model' that outlines the ethical principles that should be considered by public health policy makers [para 2.44].

The stewardship model
Acceptable public health goals include:

- reducing the risks of ill health that result from other people's actions, such as drink-driving and smoking in public places;

- reducing causes of ill health relating to environmental conditions, for instance provision of clean drinking water and setting housing standards;

- protecting and promoting the health of children and other vulnerable people;

- helping people to overcome addictions that are harmful to health or helping them to avoid unhealthy behaviours;

- ensuring that it is easy for people to lead a healthy life, for example by providing convenient and safe opportunities for exercise;

- ensuring that people have appropriate access to medical services; and

- reducing unfair health inequalities.

At the same time, public health programmes should:

- not attempt to coerce adults to lead healthy lives;

- minimise the use of measures that are implemented without consulting people (either individually or using democratic procedures); and

- minimise measures that are very intrusive or conflict with important aspects of personal life, such as privacy.

Consent
Individual consent is not always relevant or appropriate when considering public health measures. For example, individual consent might be unnecessary if the measure is not very intrusive or if it prevents significant harm to others. Furthermore, in some situations it may be more appropriate to obtain approval from the population as a whole (through democratic decision-making procedures), in particular where there is only a limited degree of interference with individuals' liberty and no substantial health risks [paras 2.22–2.26].

Applying the stewardship model
The components of the stewardship model are not listed in an order of priority, and the different elements could come into conflict, for example the elements of protecting children and minimising intrusion into private life. There is no set rule for resolving these conflicts. However, the overall aim should be to achieve the desired health outcomes while minimising restrictions on people's freedom [para 2.44].

The intervention ladder

Whether a public health measure is acceptable depends on whether or not it is 'proportionate'. For example, will the benefits of the measure be enough to justify the interference in people's lives and the financial cost? And how likely is it that the measure will achieve its aim? [paras 3.17–3.18]

We propose an 'intervention ladder' as a useful way of thinking about the different ways that public health policies can affect people's choices. Interventions that are higher up the ladder are more intrusive and therefore require a stronger justification:

Eliminate choice. Introduce laws that entirely eliminate choice, for example compulsory isolation of people with infectious diseases.

Restrict choice. Introduce laws that restrict the options available to people, for example, removing unhealthy ingredients from foods, or unhealthy foods from shops or restaurants.

Guide choice through disincentives. Introduce financial or other disincentives to influence people's behaviour, for example, increasing taxes on cigarettes, or bringing in charging schemes to discourage car use in inner cities.

Guide choices through incentives. Introduce financial or other incentives to influence people's behaviours, for example, offering tax-breaks on buying bicycles for travelling to work.

Guide choices through changing the default policy. For example, changing the standard side dish restaurant from chips to a healthier alternative, with chips remaining as an option available.

Enable choice. Help individuals to change their behaviours, for example, providing free 'stop smoking' programmes, building cycle lanes or providing free fruit in schools.

Provide information. Inform and educate the public, for example, campaigns to encourage people to walk more or eat five portions of fruit and vegetables a day.

Do nothing or simply monitor the current situation.

Evidence in public health policy

Evidence on the benefits and risks of a public health policy is often incomplete, ambiguous and contested. It may not always reveal which policy would be the most effective. Poor evidence should not, however, be used automatically as a reason for doing nothing, because this too can have negative consequences for people's health [paras 3.3–3.12].

We conclude…

Policies should be based on the best available scientific evidence [para 3.14]. Doing nothing is also an active policy decision, and so both action and inaction require justification [paras 3.3–3.12]. Monitoring of public health interventions is crucial, especially where the evidence is weak [paras 8.29, 7.40–7.42].

The role of industry, the media and other parties

Many industries produce and market products and services that can affect health. For example, the advertising, pricing, composition and availability of different foods in shops and restaurants all influence people's diets and food habits.
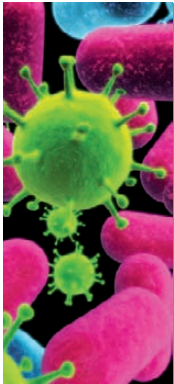
We conclude…

In addition to the state, other organisations, especially businesses, have obligations towards society. Many businesses already have social responsibility policies. Where industries fail to meet reasonable standards in these responsibilities, it is acceptable for the state to intervene through regulations [paras 2.47–2.50, 3.41]. The media, along with other organisations that publish information or claims about health and health policies, can also influence public health. These groups should present evidence and information accurately, clearly and fairly [paras 3.44, 4.33–4.35, 7.43–7.47].

Infectious disease

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 per cent of deaths and around one in three general practitioner (GP) visits in the UK [para 4.3].

Surveillance and control of infectious disease

Information about rates of infection and the emergence of new diseases is crucial for planning public health interventions. Collecting information that does not reveal the identity of the person (anonymised data) is not seen as very intrusive. Non-anonymised 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.

We conclude…

To assess and predict trends in infectious disease it is acceptable for anonymised 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-anonymised data about individuals without consent if this means that significant harm to others will be avoided [paras 4.39 and 4.43].

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 significantly reduced [para 4.62].

Outbreaks of infectious disease can have global implications. All cases of certain serious diseases such as SARS and new strains of influenza must be reported to the World Health Organization (WHO). However, different countries have different capacities for monitoring and reporting infectious disease [para 4.47–4.50].

We conclude…

Countries such as the UK should provide assistance to developing countries to enable effective surveillance of infectious diseases [para 4.50].
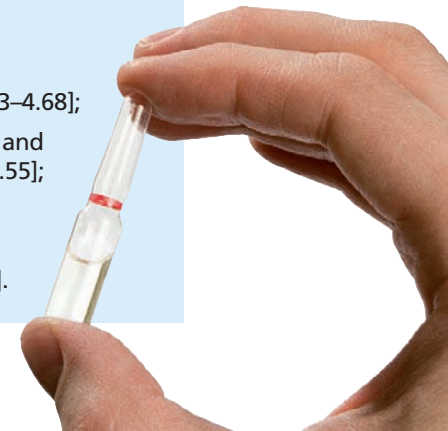
Vaccination

Vaccination programmes protect individuals against infection and, in many cases, also bring about 'population immunity'. If the number of people refusing vaccination rises, 'population immunity' may not be achieved, and this can increase the risk of outbreaks occurring. More directive policies, such as penalties for those who do not comply, may achieve higher levels of vaccine uptake [paras 4.7–4.29].

We conclude…

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 one [paras 4.26 and 4.32]. After weighing up the evidence and ethical considerations, we conclude that there is not sufficient justification in the UK for moving beyond the current voluntary system for routine childhood vaccinations [para 4.32].

Also considered in this section of the report:
- notifiable diseases [paras 4.41–4.46];
- use of vaccines in the case of pandemic flu [paras 4.63–4.68];
- pandemic preparedness, international collaborations and the role of the pharmaceutical industry [paras 4.47–4.55];
- public information about an outbreak or incident [paras 4.69–4.72]; and
- media reporting of such topics [paras 4.33–4.35, 4.70].

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. The causes of obesity are complex, and there are no simple solutions [paras 5.3–5.10].

'Obesogenic' environments

In today's environment, it is more difficult for people to lead an active life, and foods are increasingly accessible, affordable and energy-dense. Modifying the design of urban environments and buildings is one way of making it easier for people to increase their activity levels. This could include segregating walking and cycling routes from heavy traffic, and maintaining more public parks and children's playgrounds [paras 5.8, 5.32–5.33].

We conclude…
Town planners and architects should be trained to encourage people to be physically active through the design of buildings, towns and public spaces [paras 5.32–5.33].

Food labelling

Businesses such as the food industry have an ethical duty to help individuals make healthier choices. 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. The results of the study are expected in 2008.

We conclude…
When the results of the study on the effectiveness of labelling schemes are published, 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 [para 5.25].

Protecting children

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 [5.22].

We conclude…
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 [para 5.36].

Stronger regulation of advertising food to children should be considered [para 5.23].

Personal responsibility and NHS treatment

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 [para 5.40-5.42].

We conclude…
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 [para 5.42].

Also considered in this section of the report:
- the roles of the food and drink industries [paras 5.15–5.25], and the government and public services [paras 5.26–5.42];
- collecting data about childhood obesity [paras 5.37–5.38]; and
- intervention in the home for childhood obesity [para 5.39].

Alcohol and smoking

Alcohol and tobacco are enjoyed legally by many people in the UK and other countries, despite their serious health risks.

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. The Government has calculated that the cost of alcohol-related harms in England is £20 billion per year.

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. Therefore, the banning of smoking in enclosed public places in the UK was a welcome development [paras 6.4–6.7, 6.13].

More coercive public health measures?

Increasing tax on alcohol and restricting the hours of sale have been shown to be effective in reducing alcohol consumption. Yet the Government's alcohol strategy has focused on public information campaigns and voluntary labelling schemes – measures that have been shown not to be effective.

We conclude…

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 [paras 6.29–6.31].

Intervening in the home to protect children

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 generally be extremely difficult to enforce without compromising privacy [para 6.14–6.15].

We conclude…

There may be exceptional cases where children would be at such a high risk of harm from passive smoking, for example if they had a serious respiratory condition, that intervention in the home may be ethically acceptable, though any such case would usually need to be decided in court [para 6.15].

The role of industry

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, we believe that the industry does have a role to play in harm reduction, particularly in an international context [paras 2.47–2.50, 6.18–6.27].

We conclude…

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 [para 6.27].

Also considered in this section of the report:

• personal responsibility and NHS treatment [paras 6.16–6.17];

• the role of the industry and harm reduction strategies [paras 6.23–6.25];

• the role of the industry in protecting the vulnerable [paras 6.32–6.33].

Fluoridation of water

Fluoridation involves adding fluoride to the water supply with the aim of improving dental health. At present around 10 per cent of the UK population receives a water supply that either has been fluoridated to a certain level or has a similar amount of fluoride present naturally. There has long been debate over whether fluoridation schemes should be rolled out in other areas of the UK [paras 7.4–7.5, 7.10].

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, whole areas either receive fluoridated water or they do not, so it is not possible to provide each individual with a choice or obtain their consent [paras 7.6–7.8, 7.29–7.33].

We conclude…

The principle of avoiding coercive interventions could be used to argue against adding anything to the water supply. However, we do not accept that this should always be ruled out, especially if the substance being added may bring health benefits [para 7.25].

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 [para 7.26].

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 [para 7.40].

Also considered in this section of the report:

- alternative fluoride-based measures for dental health [paras 7.13, 7.34–7.37];

- further discussions of the harms and benefits of the fluoridation [paras 7.6–7.8, 7.29–7.33]; and

- presentation of evidence, and information materials relating to fluoridation [paras 7.42–7.47].

Summary

The state has a duty to help everyone lead a healthy life and to reduce health inequalities.

The 'stewardship model' sets out guiding principles for making decisions about public health policies. The 'intervention ladder' helps consider the acceptability of different public health measures.

In addition to the state, other parties including the commercial sector and the media have obligations to promote health.

Case studies in four areas of public health (infectious diseases, obesity, alcohol and smoking, and fluoridation of water) are used to illustrate the ethical issues. A number of recommendations for policy makers are made in each area.

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