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Ethics and Social Value Judgments in Public Health

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Glossary

Aggregation A process of adding up smaller parts to make a greater whole. In health policy the issue arises of how to weight the health experience of different individuals in arriving at a statement about the health of a population.

Autonomy The general ethical principle in medicine of respecting an individual's freedom from external interference and their right to self-determination.

Communitarianism The doctrine that individuals' welfare cannot be properly understood or measured without regard to their membership of a community and the roles they play in it.

Consequentialism The doctrine that the moral worth of an action, policy, etc. is to be judged in terms of its consequences.

Externality An externality is a consequence of an action by one individual or group for others. There may be external costs and external benefits. Some are pecuniary, affecting only the value of other resources (as when a new innovation makes a previously valuable resource obsolete); some are technological, physically affecting other people (communicable disease is a classic example of this type of negative externality);

some are utility effects that impinge on the subjective values of others (as when, for example, one person feels distress at the sickness of another, or relief at their recovery).

Informed consent 'Consent' in general is usually legally grounded either on the principle that a physician has a duty of care or that a patient has a right to self-determination. In most countries the informed consent of patients to treatments is based on the idea of what information a reasonable person might expect to be told in a given situation. In the UK, however, informed consent is based upon what professionals regard as reasonable to provide and hence on what information in any given case a physician's peers would provide.

Utilitarianism The ethical doctrine, a variant of which underlies nearly all normative economics, which specifies utility (sometimes equated with 'happiness') as the principal moral good of society and the entity that humankind as a whole ought to maximize. The popular moral slogan for a society (of given population) to pursue under utilitarianism is 'the greatest happiness of the greatest number.'

Introduction

Public health, unlike medicine, is not about doctors treating individual patients. Public health is about population health. It is a collective social effort to promote health and prevent diseases – both communicable and noncommunicable – and disability that involves population surveillance, regulation of determinants of health (such as food safety and sanitation), and the provision of key health services with an emphasis on prevention. Because private actors lack sufficient incentive and ability to undertake population-wide measures, public health is a vital resource for which government is the crucial provider, enabled by its police powers and its ability to regulate, tax, and spend. The exercise of government powers for the health of its population raises ethical issues, such as public welfare, individual autonomy and freedom, privacy and confidentiality, just distribution of benefits and burdens, transparency, and public accountability. These ethical concerns sometimes conflict, pitting values against one another. How they should be balanced will vary on a case-by-case basis. This article discusses justifications for government action in public health, the tension between individual freedom and public health, issues of distributive justice in public health, and ethical guidelines for public health policymaking.

Justifications for Government Intervention

Given that the government is best placed to undertake the work of public health, what are justifications for public health policies?

Ethical Justifications

Public health has utilitarian and consequentialist aspects. In a utilitarian sense, its goal is to maximize public welfare through the protection and promotion of population health. From a consequentialist point of view, public health policies are justified and judged largely by their outcomes, achieved by means of acceptable procedures. Public health measures seek to minimize harm from communicable and noncommunicable diseases, from exposure to health-endangering substances and environments (e.g., cigarette smoke and poor sanitation), and from high-risk behaviors (e.g., substance abuse and unprotected sex). Welfare is promoted through policies aimed at encouraging and facilitating behavior conducive to health (e.g., hand washing, smoking cessation, education about the dangers of drugs, and unprotected sex), and establishing more healthful environments (e.g., smoke-free public spaces, mosquito extermination, and adequate nutrients).

In the course of protecting and promoting public health, government authorities have the responsibility to ensure that public health policies themselves do no harm, or at least that their harms are outweighed by their benefits. Public health policies are not entirely utilitarian, however, in that individuals are not considered expendable for the greater good. The rights of individuals are important considerations in the formulation and implementation of public health measures, as discussed later.

The protection of vulnerable groups is another ethical motive for public health action. Vaccination and nutrition supplements, for example, protect children from disease and malnutrition, and smoking bans in bars and restaurants safeguard the health of workers who may not otherwise have the leverage to demand a smoke-free environment. Publicly funded health services can in principle help address the health needs of those who cannot afford private medical care or insurance. Such measures also may contribute to reducing health inequalities, by bringing the health of vulnerable groups more in line with the general population. Reduction of inequalities can itself be considered an ethical justification, as people with equal status (e.g., citizenship) should not suffer from those types of health inequalities that are due to morally arbitrary reasons (e.g., birth into a poor family and other bad luck).

Economic and Other Justifications

Poor health has collateral effects. On an individual basis, illness, disability, and their associated expenses can lead to absenteeism and decreased productivity that diminish income, inability to pursue education, reductions in essential consumption such as food and shelter, bankruptcy, and poverty. High infant and child mortality may lead to the compensatory decision to have more children, which decreases resources available for investment in health and education for each child. High adult mortality leaves orphans with bleak prospects. On a societal level, employers and the health system also suffer economic losses from lower worker productivity and greater healthcare burdens. Poor population health can even be economically and politically destabilizing. A particularly grim example is the Human immunodeficiency virus (HIV)/Acquired immune deficiency syndrome (AIDS) crisis in Africa, which lowered life expectancy by decades in some countries, killing adult men and women in their prime productive years. This is economically devastating for individual families and can potentially have larger implications. If deaths cause an overall decrease in economic output, the tax base funding health, education, police, and the military would also shrink, thus diminishing the perceived legitimacy of government. Lower life expectancy discourages long-term investment in education; it also means fewer and less experienced civil servants, reducing government administrative capacity. Low income and low government capacity create incentive for crime, violence, and radicalism, which in turn may trigger more state repression. Foreign investment may be deterred by lack of productive workers and instability. Weak states are also more vulnerable to armed conflicts and terrorism, increasing regional and international security risks. Public health

problems can stand as obstacles to economic, political, and human development. What can be achieved with a population debilitated and dying *en masse*?

Good population health, however, can be part of a virtuous cycle of development. Higher life expectancy provides higher returns to education and human capital investment; lower infant and child mortality helps lower fertility, which results in greater health and educational resources available per child. A healthier, more educated work force is more economically productive, and more capable to generate the tax revenue for crucial infrastructure and services that would further development and attract investments. The connection between public health and development is less pronounced in developed countries that have long attained a high standard of population health; in impoverished countries, however, public health is a key component of the fight against poverty. Generally speaking, the justification for government public health action is ample; it is the justifications for specific public health measures that tend to be more contentious.

Individual Freedom versus Public Health

Public health policies are population oriented. Because individual health – for example, whether one is vaccinated, infected, a smoker – affects the health of others, public health measures regulate individual behavior in order to achieve population health goals. Such policies apply broadly and are not tailored to specific individual circumstances. They typically mandate certain behaviors (e.g., vaccination) and prohibit others (e.g., congregating with others while infected with quarantinable diseases), and sometimes take individual choice largely out of the picture (e.g., water fluoridation). All raise questions about how individual autonomy and freedom should be balanced against public health interests.

Public health ethicists often invoke the ‘harm principle,’ which respects individuals’ sovereignty over their bodies and actions as long as their actions do not harm others. Ethicists generally agree that the greater the intrusion on individual autonomy and freedom, the greater the public health benefit must be to justify the policy. The public health situation that most starkly pits individual freedom against population health is infectious disease control. The liberty of individuals and their right to associate with others are curbed by protocols to separate infected patients from the population to prevent exposing others (isolation), and to separate or restrict the activities of people who are not diagnosed as infected but who may have been exposed to infection or who may be ill without symptoms (quarantine).

Disease control in the age of globalization has global health implications. The conflict is no longer between individual freedom and domestic population health, but between individual freedom and global population health, as demonstrated by the rapid spread of HIV, Severe acute respiratory syndrome (SARS), and pandemic flu via air travel. The economic toll of outbreaks is also potentially significant; losses from the 2003 SARS outbreak have been estimated to run in the billions. Domestic efforts are an integral part of global outbreak prevention. Given the high health and economic stakes in disease containment, the isolation of infected

individuals to prevent spread of disease is fairly uncontroversial. Quarantine, which applies to those who are not evidently ill, is a more disputed practice, sparking debates on its necessity and effectiveness: Only a small number of quarantined individuals are likely to be actually sick, although rights and freedom are infringed for all individuals placed under quarantine. A 2006 study by Day *et al.* suggests that quarantine is likely to be more useful and justifiable when isolation is ineffective, or if disease can be transmitted asymptotically, when the consequences of exposure to others are severe, fatal, and/or irreversible, or if there is an intermediate asymptomatic period that is not too short or too long.

Isolation and quarantine can be voluntarily observed or coercively imposed. To the extent feasible, public health measures should secure the voluntary compliance or participation of affected individuals, allowing individuals the autonomy of informed consent. The public health, legal, and ethical reasons for observing isolation or quarantine – and potential consequences for violating it – should be clearly communicated to affected individuals, such that they have the relevant information to assess individual and societal benefits, costs and risks, and to make the decision to comply. Should an individual refuse to comply, authorities should have a system in place to impose isolation or quarantine to protect public health. There may be circumstances in which the urgency and gravity of a public health crisis may make a complete informed consent procedure less practicable. For example, an outbreak in progress of a virulent, highly fatal disease like Ebola may require swifter separation of the infected and the exposed from the general population.

One person's infection has clear and direct negative health impact on others, but public health policies also concern activities like smoking, obesity, and the wearing of motorcycle helmets that are arguably 'lifestyle choices,' with more indirect (or minimal) negative externalities. Smoking is an individual activity that may cause lung cancer, emphysema, and other diseases for the smoker, but there is also substantial evidence for its harm to others through secondhand smoke. Illness from smoking and secondhand smoke can result in losses from lower economic productivity, and greater burdens on the health system. How should public health authorities weigh a smoker's right to smoke versus other people's right to a smoke-free environment? Do smokers really have full autonomous choice over smoking, given that nicotine is an addictive substance? Should smokers be refused tax-funded health services for smoking-related illness? To what degree should smoking be discouraged (e.g., through sin tax) or prohibited to protect especially vulnerable groups like restaurant workers, who are exposed to secondhand smoke, and the poor, among whom smoking is more common and difficult to stop?

Different people have different answers for those questions, reflected in the large variation in smoking regulations among the 50 US states and among countries worldwide. Such variation is also seen in laws governing the wearing of seat belts and vehicle helmets, the consequences of which are confined overwhelmingly to the individual making that choice. The fewer the negative public health externalities associated with particular behaviors, the more paternalistic the government regulation of these behaviors. Policies are

paternalistic when they seek to protect or benefit individuals against their expressed preferences – for example, by legally requiring people to wear motorcycle helmets when they otherwise would not.

Paternalism comes in 'hard' and 'soft' versions. Hard paternalism interferes with choices of individuals who, according to Childress *et al.*, are 'competent, adequately informed, and free of controlling influences' and is therefore hard to justify. Soft paternalism, however, deals with behaviors of individuals who are considered not competent, not adequately informed, or not free from external control to make that choice. For example, smokers may decide to smoke because they were insufficiently aware of the health consequences, and they may continue to smoke because they have become addicted to nicotine. Obesity may be exacerbated by food marketing and the pricing and availability of healthy versus unhealthy foods, among other factors. Such situations provide more valid grounds for government intervention, which may take the form of education, incentives (e.g., taxes or subsidies to influence price and therefore consumption), marketing restrictions, and even outright bans, if the benefits of strong regulation are deemed to outweigh the infringement of individual freedom. A 'libertarian' version of paternalism has been proposed by Thaler and Sunstein that would structure the choice environment such that people could more easily choose to act in their own best interest (e.g., placing healthy foods at eye level in the store), as a way to preserve greater individual freedom.

The privacy and confidentiality of individuals are also important factors to consider in public health policymaking. Certain conditions and diagnoses – such as HIV/AIDS or mental illness – may carry social stigma, or impede one's ability to gain employment or acquire health insurance if publicized. The right to privacy and confidentiality must be balanced against the need to collect and disseminate information to achieve valid public health goals, such as infectious disease contact tracing, providing patients with treatment, and screening to prevent transmission of diseases through blood or organ donation, or from mother to child.

Distributive Justice in Public Health

In the context of limited resources – which is always and everywhere – the question is how should resources be allocated? The distribution of benefits and burdens is another ethical consideration in public health policy. Resource allocation and policy application should be fair. Extermination of mosquitoes, for example, should not be implemented in some communities while excluding others; minority groups – such as homosexuals – should not be singled out for disease screening. Targeting programs and interventions could be justified if supported by empirical evidence, but the costs of targeting should be weighed against the benefits. Targeted intervention may be a more efficient way to reach particularly affected groups and may help reduce health inequalities, but it may also come with negative effects. Stigma may become attached to groups singled out for disease programs, and the health of the nontargeted groups and individuals may be compromised if they do not receive the relevant health

education and do not receive screening because they are not considered at sufficient risk. Where possible, a universal, voluntary screening policy should be implemented.

The use of sin taxes to discourage consumption of unhealthful products like cigarettes is another instance of a targeted public health policy. The sin tax affects smokers, and redistributes that revenue to the rest of the population. This unequal burden aims to discourage cigarette consumption, which benefits the health of smokers and those subject to their secondhand smoke. However, cigarette taxes may also disproportionately affect lower income and minority individuals, who are more likely to be smokers (at least in the US), which makes the tax regressive in practice. Just how regressive may depend on how the revenues would be spent (e.g., funding other tobacco control efforts? or folded into general revenues?). Again, public health authorities must balance the benefits against the costs.

The distribution of benefits and the allocation of scarce resources are important issues in designing publicly funded healthcare packages. What kind of services should state-funded healthcare packages include? How much emphasis should prevention receive relative to treatment? Should resources go toward improving average health, which can be done without special attention to people with special health needs, or should resources be devoted to reducing health inequalities, which implies greater resources to the least healthy to bring them closer to the general population? What should be done about people who have exorbitantly expensive health conditions with little prospect of big improvement?

The consequentialist orientation of public health and limits in resources make the balancing of costs and benefits a major concern in public health policymaking. Costs are weighed against benefits using methods such as cost-benefit, cost-effectiveness, and cost-utility analyses. Cost-benefit analysis translates all benefits into monetary units that account for direct (e.g., medical) and indirect (e.g., productivity) effects; cost-effectiveness analysis shows the cost of each unit of gain in health, as indicated by measures such as years of life gained or deaths averted. Cost-utility analysis presents costs associated with a subjective measurement unit that combines preferences for length of life with preferences for quality of life. These kinds of analyses are used in the hopes of maximizing health benefits while minimizing cost. The National Institute for Health and Clinical Excellence in the UK, for example, draws on cost-effectiveness analyses to help direct coverage of medicines and treatments under the National Health Service.

The use of such welfare economic assessments in public health policymaking is not without controversy. For instance, the US, despite extremely high healthcare costs, has so far rejected using such measures in health policy. Although welfare economic methods offer a way to maximize health value for money in an evidence-based fashion, they have other implications that can be politically and morally difficult to accept. These methods account only for aggregate welfare, without considering the distribution of benefits and burdens. They tolerate significant health inequalities. Inequalities may even be exacerbated for the disabled, old, and very sick, the health benefits for whom cost-utility analysis assigns less weight due to their reduced capacity to benefit from health

resources. This goes against people's intuition, found in research, to prioritize resources for the sicker and the more disabled even though they are less able to benefit.

Aggregation problems can result when weighing a small benefit for many against a large – perhaps vital – benefit for a few, yielding counterintuitive assignments of priority to minor procedures such as tooth-capping ahead of a life-saving surgery for ectopic pregnancy, which Hadorn reported from the Oregon Medicaid experiment in which policymakers attempted to determine a Medicaid (state-funded healthcare for the poor) health package using cost-utility analysis. Welfare economic methods also treat all health conditions as directly comparable, but blindness and loss of limb, for instance, are arguably not comparable to cardiovascular disease or high blood pressure, which further suggests that those methods alone may not be sufficient to direct resource allocation. Efforts to include weights (e.g. age or distribution) and other modifications have not satisfactorily solved these problems.

Resource allocation issues go beyond healthcare. Because poverty and social class are strong predictors of health, some ethicists also argue that public health has a role in poverty reduction and improvement of social conditions – such as housing, education, sanitation, and female empowerment – in order to address the structural causes of ill health and to increase people's ability to protect health for themselves and others (e.g., more educated and empowered women are better able to secure nutrition for and prevent diseases in their children).

Public health-related distributive justice can take on a global dimension. Poor countries often have more acute resource allocation problems in that they have little resources to begin with, and what resources they have they must devote significant portions to servicing foreign debts. Because poor countries must often reduce social spending in health and sectors with impact on health in order to pay debts or to comply with loan conditions, wealthy creditor countries and international financial institutions such as the World Bank and the International Monetary Fund have been urged on moral grounds to forgive loans and reverse structural adjustment policies that hinder vital public spending, in addition to providing more assistance.

Conclusion

Broad questions of how resources should be allocated involve conceptions of what justice and equity entail, and what obligations a state has in ensuring the health of its populations – whether it should aim for a basic minimum standard or something higher, within the constraints set by resource availability and the needs of legitimate state duties besides health. On a global level, there are additional questions about the existence and extent of duties to redistribute resources between rich and poor countries. Different moral perspectives (e.g., humanitarianism, human rights, communitarianism, and realism) will have different answers for those questions.

For specific public health measures, conflicts in ethical concerns will vary on a case-by-case basis, but scholars have presented guidelines to help assess ethicality. One example of such guidelines is the 5 'justificatory conditions' formulated

by 10 ethicists in 2002. The satisfaction of these conditions would justify the pursuit of a given public health measure over competing ethical values. These five conditions are effectiveness, proportionality, necessity, least infringement, and public justification. The effectiveness condition requires the public health measure to have a good chance of protecting public health; proportionality demands that the probable health benefits exceed adverse effects. The necessity condition directs policymakers to show 'good faith belief' and plausible reasons for using their proposed approach over a less coercive alternative, that is, to show that a given degree of coercion is indeed necessary. Out of all effective, proportional, and necessary options, the option that least infringes other ethical values should be chosen. And policymakers should publicly offer justification for their public health measure as well as explanation and justification for infringement, in a transparent process that truthfully and fully discloses the risks, scientific uncertainty, and moral values to relevant parties and those who will be affected by the policy, whose input should also be solicited.

These five criteria are representative of basic elements of public health ethical guidelines, which also tend to advocate respect for individual privacy and confidentiality. A transparent, participatory public process to justify policy proposals and to deliberate the weighing of benefits, costs, and risks is appropriate for developing and evaluating both narrower public health interventions and more general public resource allocation. Allowing people to take part in the public health policymaking process can build and maintain trust in public health authorities; it also strengthens agency and autonomy, and gives fuller meaning to informed consent.

See also: Addiction. Advertising as a Determinant of Health in the USA. Alcohol. Cost-Value Analysis. Education and Health in Developing Economies. Fertility and Population in Developing Countries. HIV/AIDS, Macroeconomic Effect of. HIV/AIDS: Transmission, Treatment, and Prevention, Economics of. Illegal Drug Use, Health Effects of. Incorporating Health Inequality Impacts into Cost-Effectiveness Analysis. Incorporation of Concerns for Fairness in Economic Evaluation of Health Programs: Overview. Infectious Disease Externalities. Macroeconomic Causes and Effects of Noncommunicable Disease: The Case of Diet and Obesity. Macroeconomic Effect of Infectious Disease Outbreaks. Noncommunicable Disease: The Case of Mental Health, Macroeconomic Effect of. Nutrition, Economics of. Nutrition, Health,

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