

Ethics in Public Health Research

Autonomy, Paternalism, and Justice: Ethical Priorities in Public Health

David R. Buchanan, DrPH

With attention to the field of public health ethics growing, significant time has been devoted to identifying a sound ethical justification for paternalistic interventions that override individual autonomy to prevent people from adopting unhealthy behaviors.

Efforts focused on specifying the conditions that warrant paternalism, however, are largely misplaced. On empirical and ethical grounds, public health should seek instead to expand individual autonomy to improve population health. To promote autonomy, the field should redirect current efforts toward clarifying principles of justice.

Although public health's most highly visible stance is associated with an egalitarian conception of "social justice," it is imperative that public health professionals address gaping divisions in public understandings of justice. I present recommendations for initiating this process. (Am J Public Health. 2008;98:15-21. doi:10. 2105/AJPH.2007.110361)

THERE HAS BEEN A SURGE OF

interest in public health ethics in recent years. Whereas medicine focuses on individual health, public health is concerned with

the health of the entire population. Thus, in contrast to the primary fiduciary duty to the individual patient found in clinical medicine, public health ethics is founded on a societal responsibility to protect and promote the health of the population as a whole.1 On the basis of this distinction, many commentators have suggested that one major issue that distinguishes public health ethics from clinical ethics is identifying when paternalistic interventions that override individual autonomy are justified.^{2–9}

The considerable attention paid to identifying plausible justifications for restricting individual autonomy to change unhealthy behaviors is largely misguided. This focus fails to give sufficient weight to the shift from infectious to chronic diseases as the leading causes of morbidity and mortality. In light of this shift, public health would be better served by seeking to expand autonomy through promoting justice. Although the call for social justice is frequently voiced in public health, it is critically important for the field to address major differences in definitions of justice found among the general public.

The issues of promoting autonomy and clarifying principles of justice are significant for several reasons. Undue attention to justifying interventions designed to limit and control unhealthy behaviors distracts attention from potentially more fruitful strategies. Currently, excessive time and energy are devoted to questions about whether "sin" taxes are inherently regressive, debating the efficacy of advertising bans, and the like. 10 A related concern is that seeking to shore up support for paternalistic interventions may result only in undermining trust of public health authorities. 10-13 More importantly, to achieve public health goals, greater consideration must be directed toward promoting a common understanding of a just society, about which there are gaping divisions in modern American society.

UNDUE ATTENTION TO JUSTIFYING PATERNALISM

Many authors have claimed that the central moral concern of public health ethics is articulating sound reasons for overriding individual freedom for the sake of promoting public health. In the

landmark 1974 report on health promotion, Lalonde laid the foundation for this focal concern:

The ultimate philosophical issue ... is whether and to what extent the government can get into the business of modifying human behavior, even if it does so to improve health. 14(p36)

In the many efforts since that time to justify this proposition, almost everyone points to the signal contribution of the 1905 Supreme Court ruling Jacobson v Massachusetts, which many consider the cornerstone of public health ethics. There, the court found that

> The liberty secured by the Constitution of the United States to every person within its jurisdiction does not impart an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good. 15(pp207

To clarify the issue at stake, Dworkin defined paternalism as "interference with a person's liberty of action justified by reason referring exclusively to the welfare . . . of the person being coerced." 16(p121) Paternalism is the usurpation of decisionmaking power, by preventing people



from doing what they have decided, interfering in how they arrive at their decisions, or attempting to substitute one's judgment for theirs, expressly for the purpose of promoting their welfare. The moral concern is that the presumption that one is right, and therefore justified in seeking to override other people's judgment, constitutes treating them as less than moral equals. It denies people the right to choose their own ends of action, because it would not be necessary to supplant their decision if they shared the public health professionals' goals.¹⁶

In addressing this concern, Bayer has reframed questions about the propriety of paternalistic interventions as follows:

What are the appropriate limits of the state in a liberal society in regulating, restricting or prohibiting behaviors that lead to premature morbidity and mortality; [or] in shaping, molding or influencing the preferences and desires of its citizens? 10(p147)

Taking up the challenge, numerous researchers have sought to identify the conditions in which paternalistic public health interventions are justified.

For example, Childress et al. devoted the bulk of their oft-cited paper to specifying 5 "justificatory conditions" that indicate when public health interventions that infringe on individual autonomy are ethically warranted.¹⁷ The 5 criteria that they identified are (1) effectiveness, (2) proportionality, (3) necessity, (4) least infringement, and (5) public justification. Gostin et al. provided an illustrative example of the application of these criteria in discussing the

proposed Model State Emergency Health Powers Act (MSEHPA).¹⁸

In the MSEHPA, to avert a significant threat to the public's health, public health authorities should be considered justified in exercising the police power of the state over individuals for purposes including compulsory vaccinations, blood tests, physical examinations, treatment, isolation, and quarantine if the following conditions are met: (1) an occurrence or imminent threat of illness that (2) is caused by bioterrorism, infectious agent, or toxin and that (3) poses a high probability of substantial harm. Given the threat to civil liberties, Gostin et al. specified 4 principled limitations on exercising these powers. Such public health interventions must be (1) necessary to avert significant risk, first, in the judgment of health officials but, ultimately, to the satisfaction of a judge; (2) well tailored to address the risk and not going beyond what is necessary in the situation; (3) authorized in a manner allowing public oversight; and (4) correctable in the event of a mistake. Conversely, they noted that such infringements would not be justified if (1) the problem was not as serious as initially believed, (2) the measure taken was unresponsive to the problem, or (3) the measure was more restrictive than necessary to abate the threat.

Although the MSEHPA demonstrates the prototypical process for specifying the conditions in which paternalism is warranted, the justification for restricting individual autonomy in this case rests on the relatively (albeit not entirely^{11,19}) uncontroversial claim that failure to intervene would result in widespread harm to the public at large. There is, however, a critical distinction between communicable biological agents or dispersible chemical toxins and the causes of chronic diseases.

THE LIMITS OF **PATERNALISM**

Although public health proudly points to the Jacobson ruling as providing authoritative support for its right to restrict individual autonomy to protect and promote public health, there is a morally significant difference between controlling disease agents and controlling host behaviors, a difference reflected in the phrase "epidemiological transition." As countries develop economically, the field of public health has come to see a familiar shift in the leading causes of morbidity and mortality. This shift has important implications for thinking about public health interventions in both moral and scientific terms.

In their famous 1993 paper on the "actual causes of death," McGinnis and Foege explained that, although people may die from heart attacks or cancer, for example, the true "causes" of death were the lifestyle behaviors of smoking, ingesting fatty diets, lack of exercise, alcohol misuse, and so on.20 As these causes of morbidity and mortality have risen in prominence, public health professionals have grappled with providing a sound ethical justification for interventions intended to change unhealthy behaviors. Examples of these types of interventions

include seat belt and motorcycle helmet laws; policies to restrict access to certain items (e.g., blue laws); excise taxes and advertising bans on "unhealthy" products; proposed tax breaks for people who maintain low blood pressure, body mass indexes (i.e., weight in kilograms divided by height in meters squared) under 25 kg/m², etc.; prohibitions (e.g., of trans-fatty acids, marijuana); mandatory screenings; social marketing campaigns; drug testing; 2-tiered insurance premiums and long-term care plans; lower priority in treatment queues (i.e., people who have brought their health problems on themselves having lower priority in being treated than people who suffer ill health through no fault of their own); restrictive employment policies (i.e., discrimination through firing or not hiring people because of unhealthy lifestyle habits such as smoking or being overweight); and censorship.

The critical ethical concern here is that, although preventing harm to others for purposes of infectious disease control is ethically defensible, the justification for thwarting a person's choices for their own good in chronic disease prevention rests on morally tenuous grounds. The 3 most common lines of argument put forward to justify such paternalistic interventions are appeals to voluntary and informed consent, weak paternalism, and utilitarianism.

In the first line of defense, many public health professionals argue that behavioral interventions are perfectly ethically acceptable because individuals



provide their voluntary and informed consent for treatment (e.g., a smoking cessation class).21 And at the individual level, there is no significant ethical concern; individuals may seek assistance in changing behaviors with which they are dissatisfied in the same way they might see a clinical therapist. It becomes problematic, however, when an intervention is targeted toward the whole population, where the process of gaining individual informed consent is infeasible and hence obviated.22,23

On another front, public health professionals have, in general, implicitly assumed a form of weak paternalism. Weak paternalists take the position that interventions to prevent people from harming themselves are justified when there is a defect in their decisionmaking that leads them to engage in self-harming activity (in contrast to strong paternalists, who maintain that interfering is justified even when the decision is fully voluntary and totally unimpaired).24,25 Hence, vast sums of federal research dollars are committed to developing more-effective behavioral interventions based on the tacit assumption that unhealthy behaviors must be irrational and driven by pathological factors (peer pressure, dysfunctional family dynamics, internalized oppression, etc.) because they are self-evidently so contrary to one's self-interest. In response, critics point out that this assumption is questionable; people may simply place a higher value on the pursuit of goals other than physical fitness. 10,26 If this is the case, which seems

plausible, then it is mistaken to presume that there must be a defect in people's decisionmaking, and therefore that interventions to change their behaviors have ethical justification based on weak paternalist reasoning.

Finally, public health has long been associated with the utilitarian school of moral philosophy.^{27,28} Utilitarianism is essentially consequentialist in analyzing issues, holding that the most ethically reasonable course of action is that which produces the greatest good for the greatest number. Thus, the most common criticism of utilitarianism is that the ends are used to justify the means. This school of thought frequently leads into protracted debates about the apparent costs and benefits of an intervention (e.g., does smoking cessation truly save the government money?).²⁹

Another prominent example of the resort to utilitarian arguments arises in debates about social marketing. As Bayer puts it,

Could not the manipulative capacity of advertising be mobilized for public health goals? Can the protection of individuals from the manipulative activity of commercial advertisers justify counter-manipulation in the name of public health? $^{10(p151)}\,$

Social marketing techniques are an integral part of political campaigns, seen for example, in the Swift Boat ad of the last presidential campaign and the Willie Horton ads of the 1988 Bush-Dukakis race. 30,31 Such ads are intentionally designed to provoke base emotional reactions such as fear and anger and bypass rational thought processes. Public health has supported similar

campaigns, such as the Partnership for a Drug-Free America (PDFA), borrowing on utilitarian thinking to justify these efforts. In evaluations of the PDFA campaign, reviewers discount questions about whether any meaningful information is communicated and focus strictly on whether the desired ends are achieved by employing such marketing techniques.32

Whether or not these criticisms are valid and a satisfactory justification to support paternalistic interventions can eventually be worked out, my first point is that the interest in restricting individual autonomy to promote population health is largely misguided, both ethically and empirically. On empirical grounds, there can be no question that people who exercise the greatest degree of individual autonomy also enjoy the best health.33,34 Conversely, people with the least amount of autonomy-the least amount of control over their work conditions or other major life circumstances-have the poorest health. 33,34 The clear inference is that, to promote health, public health should focus on finding ways to expand individual autonomy, not restrict it.

On ethical grounds, many different philosophical accounts identify autonomy as a defining constituent element in human well-being and, further, the fundamental precondition for moral agency. 16,35-37 Importantly for our purposes here, in the works of both Immanuel Kant and John Rawls, the state of autonomy provides the critical link between principles of justice

and the idea of free and equal human beings. Autonomy is the sine qua non that enables moral agents to give free and rational assent to any proposed public principles of justice.

Given the drift in American culture today, it is important to distinguish autonomy from liberty.38 Most Americans view autonomy as synonymous with liberty, consciously or unconsciously reflecting the views of John Stuart Mill's influential work On Liberty, in which liberty is construed as negative freedom, freedom from restraint, to do whatever one wants as long as it does not harm others. By contrast, the definition of autonomy of interest here, following Kant, is based on the integration of freedom and responsibility. Autonomous agents can adopt moral constraints, willingly submitting to norms to which they have given their consent.

Autonomy here is equated with positive freedom, self-mastery, with being in charge of oneself. One can be restricted (e.g., celibate) yet still be autonomous. The critical point is being in the position of deciding, not being decided for, being able to choose to accept reasonable constraints on one's behaviors. As defined by Dworkin, autonomy is thus the capacity of a person to critically reflect upon and then attempt to accept or change one's desires, values, and ideals. 16 This is the concept of autonomy that affords health benefits and needs to be promoted. Moreover, it is essential for securing agreement on those public principles of justice that should govern American society.



CLARIFYING PRINCIPLES OF JUSTICE

Criticizing public health's focus on changing individual health behaviors may seem to many readers like beating a dead horse. Burgeoning attention to the "social determinants of health" in the field today leads many to conclude that such interventions merely blame the victim.39 Thus, rather than seeking a warrant for paternalism, many instead invoke a call for social justice, to furnish the moral justification for efforts aimed at eliminating health disparities. 40,41 Advocates' consistent recourse to qualifying "justice" with the modifier "social," however, points to an important public debate. As Wikler notes, "the locus of blame is key."26(p115) Significant controversies swirl around the degree to which it is appropriate to assign personal or social responsibility for the prevalence of unhealthy behaviors. My second major point is that efforts aimed at justifying paternalism should largely be redirected toward clarifying principles of justice.

On one side, a wide swath of the American public believes that individuals should do what they can to stay healthy and should be held accountable for the decisions they make.²⁶ For many Americans, it seems unfair to burden those who make healthy choices with paying the costs of care in higher taxes or insurance premiums for those who make imprudent choices. 26,42 In this view, the phrase "social determinants" is too strong a term. It implies that people are compelled to start smoking,

overeat, or take drugs by latent forces rooted in their social conditions. It denies people the ability to make choices, which flies in the face of personal experience, commonsense intuitions, and bedrock notions of moral responsibility. If the majority of people who grow up in poverty do not, for example, turn to drugs, then a large cross-section of the lay public believes that those who do should bear personal responsibility for their decision. They want to preserve the notion of individual moral accountability, and they are troubled by rationalizations that appear to denigrate this core value.

Opposed to this view, many public health professionals take the position that society as a whole bears responsibility for the pattern of distribution of unhealthy behaviors. Here, the field is deeply indebted to the work of Marmot and Wilkinson, who have repeatedly demonstrated the powerful association between social position and health status. 43-46 As these data indicate, unhealthy living habits are strongly predicted by growing up and living in poverty. Significantly, Marmot et al. note that explaining the mechanisms underlying these associations is the major unsolved public health problem of the era.47

On the basis of such findings, a prominent position in public health is founded on an egalitarian conception of justice, a stance signified by appending "social" to the term justice. Given that one goal of Healthy People 2010 is to eliminate health disparities, 48 this position holds that, because there

is sufficiently plausible evidence linking health inequalities to social inequalities, to achieve equality in health, social inequalities must be eliminated. To paraphrase Hofrichter, social justice is defined by an opposition to inequality and thus demands an equitable distribution of collective goods, institutional resources, and life opportunities. 49(p12) As he continues.

Achieving equality requires not merely redressing or ameliorating inequitable outcomes but creating a society that does not produce material inequality. 49(p13)

The problem with such statements is that they fail to acknowledge the lack of agreement about a unified theory of justice. 25,50,51 The social justice position, for example, runs directly counter to principles of justice based on the concept of moral desert. 52,53 More broadly, principles of justice have been characterized as "patterned conceptions of distribution" with respect to rights and resources, in which different patterns (e.g., to each person an equal share, to each according to need, to each according to effort, etc.) have been derived from various social theories, including libertarian, communitarian, feminist, Marxist, and others. 54,55 Thus, adopting the social justice position uncritically begs questions about the merits of alternative views; in particular, about whether any social inequalities could be considered fair and morally acceptable and about the degree to which individuals should be held accountable for making ill-advised choices, regardless of social

circumstances. The field urgently needs to address these questions by shifting attention to clarifying principles of justice.

THE JUSTICE PROJECT

Public health is in a unique position to open up space in civil society for public deliberations about the extent to which justice prevails in modern American society. Nascent efforts along these lines are under way; they should be greatly expanded. 56,57 To protect and promote the population's health, public health professionals need to engage the public in discussions and actions aimed at clarifying the role and character of justice in America today, an effort I call the "justice project."

To advance the discussion, one promising line of analysis regarding justice today, which holds high potential for finding common ground across the fault lines of America's culture wars, stems from the work of Sen, Nussbaum, and recently, Powers and Faden.^{58–62} The starting point in this framework is the concept of capabilities, which Sen defines as "a person's ability to do valuable acts and reach valuable states of being."58(p30) The first topic for public deliberation is accordingly to identify a set of capabilities that citizens consider valuable. Community discussions might begin with questions like, "Do community members feel fulfilled? Can they pursue their life plans, dreams, and ambitions?" drawing directly on the proposition that how well people are must be a matter of what they are succeeding in



Examples of Sets of Capabilities That Citizens Consider Valuable

From Sen^{58,59}

- 1. Adequate nourishment
- 2. Ability to achieve self-respect
- 3. Social integration
- 4. Adequate shelter
- 5. Ability to escape avoidable morbidity and premature mortality
- 6. Mobility, vacationing, and traveling
- 7. Happiness and enjoyment of life
- 8. A part in the life of the community
- 9. Ability to appear in public without shame
- 10. Ability to entertain friends and be close to people one would like to see
- 11. Ability to live life without being ashamed of one's clothing

From Nussbaum⁶¹

- 1. Ability to live to the end of a complete human life, as far as possible; not dying prematurely, or before one's life is so reduced as to be not worth living
- 2. Ability to have good health, to be adequately nourished, to have adequate shelter, to have opportunities for sexual satisfaction, to move about from place to place
- 3. Ability to avoid unnecessary and nonuseful pain and to have pleasurable experiences
- 4. Ability to use the 5 senses, to imagine, to think and reason
- 5. Ability to have attachments to things and persons outside ourselves, to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to feel longing and gratitude
- 6. Ability to form a conception of the good and to engage in critical reflection about the planning of our own lives
- 7. Ability to live for and to others, to recognize and show concern for other human beings, to engage in various forms of familial and social interaction
- 8. Ability to live with concern for and in relation to animals, plants, and the world of nature
- 9. Ability to laugh, to play, to enjoy recreational activities
- 10. Ability to live one's own life and nobody else's
- 10a. Ability to live one's own life in one's very own surroundings and context

From Powers and Faden⁶²

- 1. Health
- 2. Reasoning
- 3. Self-determination
- 4. Attachment
- 5. Personal security
- 6. Respect

doing or being. These questions lead naturally to discussions about those capabilities that community members consider most valuable. To stimulate the conversation, examples of capabilities identified by Sen,58,59 Nussbaum,61 and Powers and Faden⁶⁵ are shown in the box on this page.

After the identification of capabilities that community members consider valuable, the next step is to assess the degree to which existing social inequalities impair or deprive people of the opportunity to achieve them. Daniels has advanced a strong case that social inequalities are unacceptable to the extent that

they produce health impairments that impede people's capacity to pursue the life plans that it would be reasonable for them to pursue if they were not so impaired. 63,64 In this framework, the most serious injustice is thus the lack of opportunity to achieve one's full capabilities because of (corrigible) social conditions, the

extent to which the current practices of various social institutions inflict unnecessary and intolerable disadvantages on fellow citizens.

Following Daniels's lead, it is critical to raise the level of public discourse to look beyond brute physical impairments to examine possible psychological and social impairments, such as the loss of hope for the future, or the sense of failure and belittlement that derives from exclusion from material prosperity. A critical part of this effort is to continue conducting research aimed at explaining causal relationships between social inequalities and health impairments. Important work on chronic stress and stress hormones has already made valuable contributions toward building the case and needs to continue to illuminate the underlying social, psychological, and physiological processes. 65-68 Although solid scientific research is essential for calling attention to significant underlying influences, I suspect that age-old questions about free will and the dialectics of agency and structure will not ultimately be resolved empirically. The majority of the public might find certain social inequalities to be either fair, because they are consistent with other socially desirable goals (e.g., rewarding those who make outstanding contributions to the common good), or irredeemable acts of fate beyond human control (e.g., genetic differences in susceptibilities).

Identifying socially important capabilities is an inescapably evaluative exercise, and people



will attach different values to different items.⁵⁹ The public health community may have their preferred set, but one measure of the validity of moral norms is the degree to which reasoned public consensus can be achieved.⁶⁹ Thus, the project recommended here is a "public reasons" approach. 70 It is based on the cooperative search for moral agreement, established on the basis of good reasons, in which nothing but the force of better argument should prevail. To aid in these discussions, Brock has identified a set of criteria that may serve as checks for avoiding potential distortions in public moral discourse.⁷¹ The goal of this project is to identify those capabilities that people consider essential for living a decent life. If consensus cannot be reached and seemingly irresolvable value judgments persist, modern democracies must often look to fair procedures to resolve their disagreements.

In the end, the field of public health needs to engage the public directly in building consensus on what we owe each other in creating a society in which all citizens feel supported in living decent lives characterized by dignity, integrity, and mutual responsibility. For public health professionals, the goal is to ensure that people have adequate opportunities to achieve good health, but not to insist that they must take up the offer (recognizing, for example, the difference between childhood lead poisoning and a personal decision not to worry about health). As Sen notes, "The good life is a life of genuine choice, and not one in

which the person is forced into a particular life."59(p45)

Other things being equal, a society in which people choose to behave responsibly, rather than being forced against their will-a maxim that applies as well to paying taxes as to smoking-is inherently more desirable. The goal of the justice project is to reach broader agreement about those institutional practices ("what we as a society do collectively"⁷²) that foster responsible individuals who choose to take care of themselves and those around them. To improve quality of life and eliminate health disparities, public health would therefore be well served by recommending that community members devote 30 to 45 minutes a day 4 to 5 times a week to building consensus on the just society.

About the Author

The author is with the School of Public Health and Health Sciences, University of Massachusetts, Amherst.

Requests for reprints should be sent to David Buchanan, DrPH, Professor of Community Health Education, 306 Arnold House, School of Public Health and Health Sciences, University of Massachusetts, Amherst, MA 01003 (e-mail: buchanan@schoolph.umass.edu).

This essay was accepted May 7, 2007.

References

- 1. Buchanan D, Miller FG. A public health perspective on research ethics. J Med Ethics. 2006;32:729-733.
- Bayer R, Fairchild AL. The genesis of public health ethics. Bioethics. 2004; 18:473-492.
- Harris A, Martin R. The exercise of public health powers in an era of human rights: the particular problems of tuberculosis. Public Health. 2004; 118:313-322.
- Gostin LO. Jacobson v Massachusetts at 100 years: police power and

- civil liberties in tension. Am I Public Health. 2005;95:576-581.
- Mariner W, Annas GJ, Glantz LH. Jacobson v Massachusetts: it's not your great-great-grandfather's public health law. Am J Public Health. 2005;95: 581-590.
- 6. Colgrove J, Bayer R. Manifold restraints: liberty, public health, and the legacy of Jacobson v Massachusetts. Am J Public Health. 2005;95:571-576.
- 7. Gostin LO, Javitt GH. Health promotion and the First Amendment: government control of the informational environment. Milbank Q. 2001;79(4): 547-578, iv.
- Jones MM, Bayer R. Paternalism and its discontents: motorcycle helmet laws, libertarian values, and public health. Am J Public Health. 2007;97: 208-217.
- Gostin LO. "Police" powers and 9. public health paternalism: HIV and diabetes surveillance. Hastings Cent Rep. 2007;37:9-10.
- 10. Bayer R. Ethics of health promotion and disease prevention. In: Jennings B, Kahn J, Mastroianni A, Parker LS, eds. Ethics and Public Health: Model Curriculum. Washington, DC: Association of Schools of Public Health; 2003. Available at: http://www.asph.org/document. cfm?page=723. Accessed September
- 11. Annas GJ. Bioterrorism, public health, and civil liberties. N Engl J Med. 2002;346:1337-1342.
- 12. Buchanan D. An Ethic for Health Promotion: Rethinking the Sources of Human Well Being. New York, NY: Oxford University Press; 2000.
- 13. Kass N. An ethics framework for public health. Am J Public Health. 2001; 91:1776-1782.
- 14. Lalonde M. A New Perspective on the Health of Canadians, Ottawa, Ontario: Minister of Supply and Services Canada; 1974.
- 15. Supreme Court of the United States, Jacobson v Massachusetts, decided February 20, 1905. Cited by: Gostin L, ed. Public Health Law and Ethics: A Reader. Berkeley: University of California Press; 2000.
- 16. Dworkin G. The Theory and Practice of Autonomy. Cambridge, England: Cambridge University Press; 1988.
- 17. Childress JR, Faden R, Gaare RD, et al. Public health ethics: mapping the

- terrain. J Law Med Ethics. 2002;30: 170-178.
- 18. Gostin LO, Sapsin JW, Teret SP, et al. The Model State Emergency Health Powers Act: planning for and response to bioterrorism and naturally occurring infectious diseases. JAMA. 2002;288: 622 - 628.
- 19. Annas GJ. Bioterrorism, public health, and human rights. Health Aff. 2002:21:94-97.
- 20. McGinnis JM, Foege WH. Actual causes of death in the United States. JAMA. 1993;270:2207-2212.
- 21. Green L, Kreuter M. Health Promotion Planning: An Educational and Ecological Approach. 4th ed. New York, NY: McGraw-Hill; 2005
- 22. Buchanan D, Miller FG, Wallerstein N. Ethical issues in community based participatory research: balancing rigorous research with community participation. Prog Community Health Partnerships. 2007;2(1):153-160.
- 23. Buchanan D. A new ethic for health promotion: reflections on a philosophy of health education for a new millennium. Health Educ Behav. 2006; 33:290-304
- 24. Dworkin G. Paternalism. In: Beauchamp D. Steinbock B. eds. New Ethics for the Public's Health. New York, NY: Oxford University Press; 1999: 115 - 130.
- 25. Beauchamp T, Childress J. Principles of Biomedical Ethics. 5th ed. New York, NY: Oxford University Press;
- 26. Wikler D. Personal and social responsibility for health. In: Anand S. Peter F. Sen A. eds. Public Health. Ethics. and Equity. Oxford, England: Oxford University Press; 2004:109-134.
- 27. Cole P. The moral bases for public health interventions. Epidemiology. 1995; 6:78 - 83.
- 28. Gostin LO. Public health ethics: tradition, profession, values. Acta Bioethica. 2003:9:177-188.
- 29. Elixhauser A. The costs of smoking and the cost effectiveness of smokingcessation programs. J Public Health Policy. 1990;11:218-237.
- 30. Farhi P. Two political ads share more than fame and controversy. Washington Post. September 7, 2004:A02.
- 31. Milbank D. Bush campaign drops Swift Boat ad figure; Democrat's team



- savs veteran's role in drive to discredit Kerry shows a link. Washington Post. August 22, 2004:A13.
- 32. US Government Accountability Office. ONDCP media campaign: contractor's national evaluation did not find that the youth anti-drug media campaign was effective in reducing youth drug use. August 25, 2006. GAO report GAO-06-818. Available at: http:// www.gao.gov/new.items/d06818.pdf. Accessed January 5, 2007.
- 33. Macintyre S. The effects of family position and status on health. Soc Sci Med. 1992;35(4):453-464.
- 34. Wilkinson R, Marmot M. Social Determinants of Health: The Solid Facts. 2nd ed. Copenhagen, Denmark: World Health Organization Publications; 2003. Available at: http://www.euro.who.int/ document/e81384.pdf. Accessed September 25, 2007.
- 35. Griffin J. Well-Being: Its Meaning, Measurement and Moral Importance, Oxford, England: Clarendon Press; 1986.
- 36. Crisp R, Hooker B, eds. Well-Being and Morality. Oxford, England: Clarendon Press; 2000.
- 37. Brock D. Quality of life measures in health care and medical ethics. In: Nussbaum M, Sen A, eds. The Quality of Life. Oxford, England: Clarendon Press; 1993:95-132.
- 38. Gaylin W, Jennings B. The Perversion of Autonomy: Coercion and Constraint in a Liberal Society. Washington, DC: Georgetown University Press;
- 39. Crawford R. You are dangerous to your health: the ideology and politics of victim blaming. Int J Health Serv. 1977; 7:633-680.
- 40. Krieger N, Birn AE. A vision of social justice as the foundation of public health: commemorating 150 years of the spirit of 1848. Am J Public Health. 1998;88:1603-1606.
- 41. Gostin L, Powers M. What does social justice require for the public's health? Public health ethics and policy imperatives. Health Aff. 2006;25: 1053-1060.
- 42. Scheffler S. Responsibility, reactive attitudes and liberalism in philosophy and politics. Philos Public Aff. 1992;21: 299-323.
- 43. Marmot M. Understanding social inequalities in health. Perspect Biol Med. 2003:46(3):S9-S23.

- 44. Marmot M. Social causes of social inequalities in health. In: Anand S, Peter F, Sen A, eds. Public Health, Ethics, and Equity. Oxford, England: Oxford University Press; 2004:37-62.
- 45. Marmot M, Wilkinson RG. Social Determinants of Health. New York, NY: Oxford University Press; 1999.
- 46. Wilkinson RG. The Impact of Inequality: How to Make Sick Societies Healthier. New York, NY: W.W. Norton;
- 47. Marmot M, Ryff CD, Bumpass LL, Shipley M. Marks N. Social inequalities in health: next questions and converging evidence. Soc Sci Med. 1997;44(6): 901-910. Cited in: Wikler D. Personal and social responsibility for health. In: Anand S, Peter F, Sen A, eds. Public Health, Ethics, and Equity. Oxford, England: Oxford University Press; 2004: 109 - 134
- 48. Healthy People 2010: Understanding and Improving Health. Washington, DC: US Dept of Health and Human Services; 2000. Also available at: http://web.health. gov/healthypeople/document. Accessed September 12, 2007.
- 49. Hofrichter R. The politics of health inequities: contested terrain. In: Hofrichter R. ed. Health and Social Justice: Politics. Ideology and Inequity in the Distribution of Disease. San Francisco, Calif: Jossey-Bass: 2003:1-56.
- 50. Barry B. Theories of Justice. Berkeley: University of California Press; 1989.
- 51. Buchanan A. Justice: a philosophical review. In: Shelp E, ed. Justice and Health Care. Boston, Mass: D. Reidel Publishing Co; 1981:3-22.
- 52. Taylor C. Justice after virtue. In: Horton J, Mendus S, eds. After MacIntyre: Critical Perspectives on the Work of Alisdair MacIntyre. Notre Dame, Ind: University of Notre Dame Press; 1994:
- 53. Kekes J. Moral Wisdom and Good Lives. Ithaca, NY: Cornell University Press: 1995.
- 54. Powers M. Theories of justice in the context of research. In: Kahn I. Mastroianni A, Sugarman J, eds. Beyond Consent: Seeking Justice in Research. New York, NY: Oxford University Press; 1998:
- 55. Buchanan D, Miller FG. Justice in research on human subjects. In: Rhodes R, Francis L, Silvers A, eds. The Blackwell Guide to Medical Ethics. New York, NY: Blackwell; 2006:373-392.

- 56. Bloss D. Initiating social justice action through dialogue in a local health department: the Ingham County experience. In: Richard Hofrichter, ed. Tackling Health Inequalities Through Public Health Practice: A Handbook for Action. National Association of City and County Health Officers, 2006. Available at: http://www.naccho.org/topics/justice/ documents/NACCHO_Handbook_ hyperlinks_000.pdf. Accessed January 5, 2007.
- 57. Hofrichter R. Creating health equity though social justice. Washington DC: National Association of City and County Health Officers; 2002. Draft working paper. Available at: http:// archive.naccho.org/Documents/ HealthSocialJusticePaper5.pdf. Accessed September 24, 2007.
- 58. Sen A. Inequality Reexamined. Cambridge, Mass: Harvard University Press; 1992.
- 59. Sen A. Capabilities and Commodities. New York, NY: Oxford University Press: 1999
- 60. Nussbaum M. Non-relative virtues: an Aristotelian approach. In: Nussbaum M, Sen A, eds. The Quality of Life. Oxford, England: Clarendon Press; 1993: 242-269.
- 61. Nussbaum M. Aristotelian social democracy. In: Douglass RB, Mara G, Richardson H, eds. Liberalism and the Good. New York, NY: Routledge; 1990: 203-252
- 62. Powers M, Faden R. Social Justice: The Moral Foundations of Public Health and Health Policy. New York, NY: Oxford University Press; 2006.
- 63. Daniels N. Just Health Care. New York, NY: Cambridge University Press; 1985.
- 64. Daniels N. Justice, health, and health care. Am J Bioethics. 2001;1:2-16.
- 65. Geronimus AT, Hicken M, Keene D, Bound J. "Weathering" and age patterns of allostatic load scores among Blacks and Whites in the United States. Am J Public Health. 2006;96:826-833.
- 66. McEwen BS, Protection and damage from acute and chronic stress: allostasis and allostatic overload and relevance to the pathophysiology of psychiatric disorders. Ann NY Acad Sci. 2004:1032:1-7.
- 67. McEwen BS. Early life influences on life-long patterns of behavior and health. Ment Retard Dev Disabil Res Rev. 2003;9:149-154.

- 68. Lynch JW, Smith GD, Kaplan GA, House JS. Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions. BMJ. 2000;320: 1200-1204.
- 69. Daniels N. Justice and Justification. Cambridge, England: Cambridge University Press; 1996.
- 70. Rawls J. A Theory of Justice. Cambridge, Mass: Harvard University Press;
- 71. Brock D. Public moral discourse. In: Sumner L, Boyle J, eds. Philosophical Perspectives on Bioethics, Toronto, Ontario: University of Toronto Press; 1996:196-214.
- 72. Institute of Medicine. The Future of Public Health. Washington, DC: National Academy Press; 1988.