A Journey in Public Health Ethics

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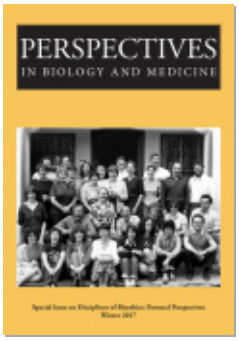

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ABSTRACT While medical ethics has a long history, and research ethics guidance emerged more formally in the 1960s and 1970s, frameworks for public health ethics began to appear in the 1990s. The author's thinking about public health ethics evolved from consideration of some of the ethics and policy questions surfacing regularly in the HIV/AIDS epidemic. This essay discusses some of the shared commitments of public health and ethics, as well as how one might apply an ethics lens to public health programs, both generally and in the contexts of public health preparedness and obesity prevention.

Like others with many interests, I found picking a major in college a bit stressful. It was a relief to discover that Stanford, where I attended, had recently developed an interdisciplinary major called Human Biology, allowing me to study many things at once. "HumBio" had four main requirements: a year of coursework in biology, integrated with a year of social science core courses; a self-designed "area of concentration"; an internship; and a public policy course on either health or the environment. In the years since I graduated, options for areas of concentration have become more structured, but we had significant flexibility. My self-designed concentration was "A Feminist Approach to Public Health,"

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something I look back on with astonishment, since I recall feeling like I was simply assembling a group of classes I wanted to take—feminist theory and human physiology and medical ethics, among others—but of course in retrospect it is fundamental to what I care about years later.

Yet it was the last two program requirements that shaped my next steps more centrally. For the internship, I volunteered at two women's health clinics: the local Planned Parenthood and the Haight-Ashbury Free Clinics' women's clinic in San Francisco, at the latter of which I continued to volunteer weekly for years beyond both the internship's requirements and graduation. These provided enough experience that I could get a job at another women's health clinic after graduation, doing whatever counseling and management someone with no actual skills might be allowed to do.

The last requirement for the major was a class in public policy. The Program in Human Biology had been started by Donald Kennedy, a Stanford professor who, when I enrolled, had just finished his term as commissioner of the Food and Drug Administration (FDA), and by the time I graduated, had become Stanford's eighth president. Kennedy's commitments to public policy ran deep, and he thought we needed policy training side by side with whatever academic and interdisciplinary science training Stanford provided us. Taking the health policy class, dramatic as it may sound, changed my life. The class was organized as a series of guest lectures from luminaries of the time in public health and health policy—Victor Fuchs, Alain Enthoven, Molly Coye, Len Syme, Hal Sox, Phil Lee, and Ted Marmor—names that, at the time, meant nothing to me, though as students we were impressed that we often read books or articles written by the people giving the lecture. In retrospect, this class might have been called an introduction to public health. I had my first lecture in epidemiology, my first lecture in social determinants of health, my first lecture in health economics, and my first lecture in decision theory. We learned about prevention, and a theme throughout was the significant role of policy in public health and American health care. I was completely energized writing my final exam, and I asked the professor to consider me, if I did well enough, to be a teaching assistant the following year. I ended up TAing that class for two years, an all-consuming, totally fun, and formative experience, as the eight TAs each led two breakout sessions per week and wrote and graded class assignments and exams. This only deepened my interest in health, prevention, and policy.

After graduation, I was hired as a counselor and then front office supervisor at another northern California women's health clinic. I loved everything about the job: our mission, the work I was doing, the nurse practitioners who really ran everything, and the clients with whom I interacted. But I also felt increasingly troubled that whatever innovations we came up with—new programs, new ways to address our operational or outreach challenges—seemed to benefit the women who attended *our* clinic, but had no broader impact. It seemed that each clinic

tried to identify its own solutions for issues that likely occurred everywhere; I assumed a lot of wheels were being reinvented across similar sites.

So I decided I needed graduate training in public health. I knew I cared about women's health, health generally, access to health care, and sound policy to ensure these came together in reasonable and fair ways. And I recognized that I needed technical skills to read data papers and evaluate new programs to measure whether they worked. I came to Johns Hopkins with every intention of learning some research and policy skills and returning to northern California, maybe one day to run one of those women's health clinics.

I loved being in public health graduate school. I loved epidemiology—using scientific methods to map out disease patterns which, it became clear, often followed patterns of social injustice. I had always liked math, and learning statistics allowed me to see how numbers can help identify correlates of wellness or disease. But probably the two sentinel experiences of being in public health graduate school for me were taking public health ethics from Ruth Faden, and getting a part-time job with one of the first HIV/AIDS studies funded in the country.

About 20 of us took Ruth's class on public health ethics—the first or second such class in the country. We read articles on the right to health, whether individuals should be held responsible (including financially) for behavior-related health conditions, voluntary versus mandatory public health programs, and informed consent. After the term ended, I asked Ruth if she needed a research assistant. I did some background work for a chapter she was writing on genetics and ethics—not really a central area of interest for me, but the perk was working with her. I intuitively knew to invest my time in being around great people. The next year I took her newly developed advanced seminar on social justice, reading Rawls, Daniels, and Engelhardt and having even smaller group discussions around the large and demanding weekly reading assignments that were complicated, compelling, and that reinforced my interest in ethics as it applied to health. And at least as importantly, I switched to Ruth as my academic advisor. That may have been the best decision of my career.

In my first year of graduate school, I also began a part-time job as an interviewer for the SHARE study—the Study to Help the AIDS Research Effort, the Baltimore site of the Multicenter AIDS Cohort Study. The MACS was first funded in 1983 as the first large epidemiologic study of the natural history of HIV in gay and bisexual men. A few nights a week I asked men in the study—whom I called to private rooms by ID number, never knowing their names—extensive questions about sexual and drug habits as well as any signs or symptoms of illness. This study began before there was a test for the virus that causes AIDS. Five thousand gay and bisexual men, who were watching their friends and loved ones become sick and die from the mysterious illness, joined this study out of community solidarity, and every six months contributed blood and private information to help find the cause of this growing scourge.

I had moved to Baltimore from northern California when AIDS was exploding. Many of my own friends were affected, and all of us in California were overwhelmed by the fear and importance of this new outbreak. A part-time job working on HIV brought together my commitments to health and politics. The doctors and other interviewers on the staff felt similarly, giving me another community of like-minded professionals and friends. I spent the summer between my first and second years of graduate school working full time at the Los Angeles site of the MACS, getting to know staff from that site, seeing another piece of the workings of epidemiologic research, and doing more interviews with participants.

I also did my doctoral research with the MACS. I sent questionnaires to approximately 2,000 of the study participants, asking about their access to health insurance and any instances of discrimination from health care providers. I read deeply about the history of health insurance in the United States, learning when and why insurers moved from "community-rated" to "experience-rated" risk models. Such a move, while offering competitively lower prices to employers who generally had a healthy population of workers, meant that much of the principle of insurance—sharing the risks of the sicker and older with the younger and healthier—was compromised. It led ultimately to the current U.S. model, whereby insurance for sick people is virtually unaffordable since risk rating is the norm for individual policies. This struck me as fundamentally wrong: it was unfortunate enough that some, almost by fluke, had lifelong health challenges, while others seemed to go through much of life with only minor ailments, but then to further punish those with greater health challenges with more expensive coverage seemed downright unfair. My dissertation included lengthy data chapters on my methods and results, reporting on rates of health insurance coverage and problems, as well as health-care discrimination, among these gay and bisexual men (about half of whom were HIV negative). I then included two additional chapters, one on law and one on ethics, as they related to health insurance, homosexuality, and HIV. This became my first real window into how relatively easy it is to write up data in a reasonable way compared to writing a good ethics analysis. I think Ruth and I passed my ethics chapter back and forth easily 10 times before she was satisfied that I had made sufficient arguments, with sufficient clarity and justification, to submit the dissertation.

By the time I finished my doctorate, my interests in ethics were only growing, and I knew I needed more training. I wrote an individual NRSA (National Research Service Award) federal grant proposal, which ultimately gave me funding to do a two-year postdoctoral fellowship at the Kennedy Institute of Ethics, with LeRoy Walters as my mentor. I took philosophy and bioethics classes while also designing and conducting another empirical research study on HIV discrimination in health care, with Ruth as my primary research mentor. This project involved sending a mailed survey to 10,000 physicians across the United States. The survey included two short cases, one about a patient with chest pain, the

other a patient with leg pain. Physician respondents answered a multiple choice question about what treatment they would recommend for each patient, with treatment options varying in invasiveness. What respondents did not know was that scenarios were randomly altered to describe the patient as being either black or white, HIV+ or HIV-, and an injection drug user or not. Results suggested that physicians were systematically less likely to recommend invasive procedures for HIV-infected patients, even when most physicians thought that was the best medical option (Kass et al. 1994). This project also was my first collaboration with Jeremy Sugarman, who had just arrived at Johns Hopkins for a fellowship and was looking to get involved in a project on ethics. He ended up joining me in my project, adding a question he took the lead on analyzing about advance directives for the patients in the scenarios (Sugarman et al. 1994). We have now collaborated for 30 years.

I was hired by Ruth to be the second full-time bioethics faculty member at the Johns Hopkins School of Public Health. I continued work with the MACS, studying health-care access for gay and bisexual men, and also started a project with Ruth and a large working group of physicians, lawyers, and ethicists on the reproductive choices of HIV-infected women. This project, too, combined conducting empirical work—several of us traveled to four cities around the United States to interview HIV-infected women about their thoughts regarding childbearing—with ethics and policy work, culminating in policy papers and a book Ruth and I edited on HIV, reproduction, and ethics (Faden and Kass 1996). As a new faculty member, I developed a course on AIDS, ethics, and public policy with my JHU colleague Liza Solomon, who went on to become Maryland's state AIDS commissioner. Liza and I were both actively involved with a grassroots, volunteer advocacy organization in Maryland called the AIDS Legislative Committee, the mission of which was to ensure that appropriate public policy surrounding HIV existed in Maryland. The 10 to 15 members of the ALC met every Thursday night for seven years, poring over every HIV-related bill submitted to the state assembly and examining it for what in retrospect I think were its evidence base, public health benefit, and fairness, and then brainstorming who among our network of clinicians, lawyers, economists, or patients could testify, activating our mailing list to make phone calls to legislators. We also drafted legislation proactively. We wrote testimony for others when needed, and sometimes we testified ourselves. It was an era where fear was rampant, and bills were put forward with no public health basis. Mounting our response underscored the importance of arguing from fact and asking that bills have future data collection and evaluations written into them. It also enforced our belief that ethics arguments have a place in public policy advocacy. The legislative agenda each year certainly contributed to topics we also covered in our class.

Studying, teaching, and advocating related to HIV only further focused my thinking on questions of what public health ethics demands. HIV raised questions

that had been less apparent for decades on civil liberties and public health: when, if ever, should the state be able to demand that someone learn his or her HIV status; when, if ever, should a clinician be able to refuse care to a patient in need; when, if ever, should a clinician break confidence with a patient feared to be putting the patient's unassuming partner at risk. HIV also raised recurring questions of justice: how can we ensure that patients have access to respectful health care and to life-saving but expensive drugs?

Work on HIV launched me into deeper reading on the history of screening programs, how little we know about medicines for pregnant women, and FDA approval policies, but most centrally it propelled me to read about civil liberties and public health, and further about fair access and justice. While essentially all of my work during the first several years on the faculty involved ethics and policy questions related to HIV, I couldn't help but think about what these questions meant for public health more generally.

I had the good fortune to take a four-month sabbatical in 1999, seven years into my being on the JHU faculty. Johns Hopkins public health faculty positions are "soft money" funded—I was hired with a startup package of needing to bring in 95% of my salary through grants and contracts—and simply taking a year away was untenable. But the School of Public Health recognized that even short sabbaticals of a few months away could be valuable for faculty, and could be workable even with grant-funded positions. My husband and I and our then two young daughters went to Berkeley, California, for four months. My in-laws were in Oakland, so they and we loved being closer by, and I marveled at my almost unfair good fortune to receive a salary while going to coffee shops to read about the history of public health, public health and the law, and early bioethics, as I tried to further focus my thinking on what an ethics of public health might mean.

My first reaction to what I was reading was how remarkable public health is as a field. The history of public health was replete with individuals demonstrating that to improve the public's health, one needed data to know who was well and who was sick, map that to their social conditions such as water, sewage, and garbage, and also physically separate those with contagious illness from those who were well. Whether it was the infamous removal of the handle pumping cholera-contaminated water, quarantining ships, vaccinating children, or documenting differences in life expectancy due to social conditions, public health was breathtaking in its vision and outcomes. Public health pioneers laid the groundwork that social policy and social conditions are relevant to health outcomes, that prevention and sanitation are at least as relevant to good health as treatment, that rigorous data are required to understand health problems and justify recommendations, and that inequalities are bad for everyone's health. I was completely inspired. I also took note, since I was reading about public health history through the lens of ethics, that public health was *most* successful when it removed moral judgment from discussions of disease. In the 1920s, when syphilis was raging, Thomas Parran,

then surgeon general, wrote of the importance of, and strategies for, identifying, treating, and limiting the spread of the disease with little attention to morality, and in defiance of the "social hygienists" who sought to combat disease through attempts to limit what they saw as immoral behavior (Brandt 1988). In graduate school in the 1980s, I had witnessed C. Everett Koop, then U.S. Surgeon General, both write a report on AIDS described as "explicit, nonjudgmental, controversial, and popular" (HHS 2007), and then send to *every* American household a brochure "Understanding AIDS," underscoring that the path to tackling a frightening health problem was through traditional public health tools and giving accurate information rather than being moralistic.

So I sat in coffee shops, and sometimes at the office kindly provided to me by Bernie Lo at UCSF or in Jeff Burack's UC Berkeley office, and I read and thought and wrote. It seemed increasingly clear that public health ethics must consider both what, in the name of ethics, public health *must* do, because certain ways of acting can so dramatically improve the public's health, and health so clearly affects the ability to pursue other life goals; but public health ethics also must consider what public health should *not* do, not simply because certain interventions won't be effective (that's the easy part), but because certain public health approaches can threaten other centrally held values, and balancing is required.

Simultaneously, I read about the history of bioethics. And as I read more about public health and bioethics, I noted both affecting me on an emotional level. Both, at least through a particular read, cared about rightness and goodness, aimed to make the world better, paid attention to the underdog, declared the importance of being respectful to those often shunned or scorned, and sought to correct previous wrongs and existing unfairness.

Bioethics grew out of questions of fairness in resource allocation, moral issues raised by new technologies, and a lack of oversight in human research. It was undergirded by a centuries-long history of medical ethics, which focused on providing good care to patients, protecting their confidences, and being honest in billing. In the late 1960s, the Institute of Society, Ethics, and the Life Sciences (now the Hastings Center) was created to address ethical questions in society (Callahan 1973), including how to allocate scarce kidney dialysis and whether to keep persons in persistent vegetative states or on artificial life support alive. The first national bioethics commission was convened in the 1970s, after reports of unethical human research. The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research published the *Belmont Report* in 1979, which outlined ethics principles to guide human research, and these principles of beneficence, respect for persons, and justice quickly were adopted for many other moral challenges in medicine and health care (Beauchamp and Childress 1979).

The *Belmont Report* in no way suggested that one principle should have prima facie superiority over another. And yet the cases that animated bioethics in the early years—the need to tell patients and research participants the truth, the right

to refuse care or research participation—were ones where the principle of respect for autonomy, perhaps given too little moral attention previously, was now given preeminent moral status (Callahan 1984; Pellegrino and Thomasma 1988; Steinbock 1996). Informed consent, a practical application of the autonomy principle, became a hallmark of the new bioethics, and codes of ethics for clinical practice, while still emphasizing the need not to harm the patient, added clauses requiring physicians to "best protect the dignity of man in patients or research subjects" (Ramsey 1973, 21).

It was clear that the main health ethics codes focused on medicine or research. And, as I discovered, those codes discussed public health functions, such as allowing breaching patient confidentiality to report diseases to the state. And yet in such instances, I wrote:

> the physician's behavior is presented as an allowable exception to usual ethics rules, in the name of public health. At best, this leaves public health professionals needing to muddle through most other situations on their own; at worst, it could lead them, or even the public, to assume that public health is the branch of health care sanctioned by bioethics to make exceptions to existing ethics rules at will, in the name of public health and safety. Indeed, it is in great part *because* such power is vested in public health by law to safeguard health that a code or framework of ethics, designed specifically for public health, is so very important. (Kass 2001, 1777)

The framework that resulted, published in the *American Journal of Public Health* (Kass 2001), included six steps to determine whether a proposed public health program or policy furthered the goals of improving the public's health, respecting individual liberties, and furthering social justice. The framework suggested that programs be analyzed to ensure that: (1) they have the goal of reducing morbidity or mortality; (2) there are data to reasonably support the claim that the intervention will reduce morbidity or mortality; (3) the burdens of the program are identified and (4) minimized; (5) the program will be implemented fairly and, preexisting social injustices are minimized; and (6) fair procedures will be used to determine how a given community wants ultimately to trade off relative benefits and burdens.

Framing the goal of a public health program in terms of how it will reduce morbidity and mortality creates a more direct path to examining program effectiveness. A door-to-door program to check smoke alarms, for example, should be framed as having the public health goal of reducing deaths by house fire, requiring examination, in step 2 of the framework, of data on the degree to which this type of program decreases mortality, rather than of data on the number of programs now equipped with working alarms. Starting an ethics analysis by stating what type of benefit, and with what level of confidence, a proposed program might provide that benefit, is a reminder that burdens or infringements are *only* accept-

able when public health benefit is likely to ensue. The more speculative the public health benefit, particularly when coupled with any significant level of burden or infringement, the more questionable it is for public health to intervene. Moreover, by starting a public health ethics analysis with a statement of the public health goal, an opportunity is created to consider alternative options for achieving that goal. One might consider, for example, different options for reducing house fires (rather than, for example, alternative ways to increase access to working smoke alarms). This approach, at least ideally, should steer program design toward public health effectiveness as well as toward finding the least burdensome option among alternatives. Step 3 examines a proposed program's burdens. Public health programs often raise potential threats to privacy and confidentiality (through the collection of public health data), to liberty and self-determination (through restrictions on choice or requirements for action, prevention, or treatment), or to justice (generally by targeting certain groups disproportionately for public health intervention). Closely related is step 4, requiring reduction of burdens and then selection of the least burdensome among comparably effective programs. Program burdens can be reduced by imposing strict confidentiality requirements (for example, in contact tracing programs), providing disincentives (such as taxation) rather than prohibitions for unhealthy products such as tobacco, and requiring significant justification for targeting only one population for a public health outreach program. Step 5 focuses on justice and carries negative and positive obligations. As stated previously, public health professionals should not target programs exclusively to those at highest risk (such as inner-city populations), without significant justification, given both that other subgroups may also be at risk and the threat of increasing harmful social stereotypes. But step 5 also demands using data to see where differences exist and, like Edwin Chadwick of the 1800s, mapping those to social determinants. Public health has an affirmative duty to reduce inequities, both for their own sake, and because inequity is bad for everyone's health. Step 6 acknowledges that differences will remain in the degree of burden a given community is willing to accept in relation to predicted benefits; disagreements that are significant should be resolved transparently and with public input and justification.

After this work was published, I heard from people—mostly in state health departments—who were using it, which was gratifying, and I joined a terrific collaboration spearheaded by Jim Childress designed to "map the terrain" of public health ethics (Childress et al. 2002). I also was asked to write an article imagining the future of public health ethics, predicting even greater attention to justice, environmental ethics, and global health (Kass 2004).

While the primary focus of my scholarship in the years since the public health ethics work just described has transitioned significantly to questions of research ethics, two additional projects significantly pushed my own thinking about public health ethics, in different applied areas.

In the mid-2000s I was asked to be part of a small working group with the state of Maryland's Department of Health and Mental Hygiene (DHMH), thinking about preparedness for pandemic influenza. I met monthly with Matt Minson, the director of the Office of Preparedness and Response, Jean Otto, another infectious disease physician in that office, and Dan O'Brien, principal legal counsel for DHMH. We discussed various outbreak scenarios, the nuts and bolts of a response, what the aftermath can look like, and the ethics of alternative response options. In listening, I began to envision the type of chaos that can result in an emergency, particularly if ordinary people cannot get to work, normal supplies on which we all depend become less available, and people panic about shortages. My questions and contributions in this process, I'm confident, emerged at least as much from me as a person, a local resident, and a parent, as from me as the ethicist. While articles were starting to be published suggesting that first responders (health-care providers and emergency personnel) should be first in line for preventive or therapeutic interventions, I began to wonder what would happen if truck drivers were too scared to deliver food to supermarkets, janitors were too scared to clean out hospital waste, or if we turned on our computer screens, wanting to stay informed with pandemic-related communications (or to watch movies or do other things that normal people do if they can't go to work), and the screens went blank because infrastructure experts weren't willing to go to work. Our small group eventually morphed into what became the Continuity of Operations committee for the state, convened by Minson, with additional representation from utilities, police, banking, grocery, trucking, and, of course, public health and health-care delivery. Our smaller group of four published an article based on our year's discussions together (Kass et al. 2008). And while we recommended that many (but certainly not all) health-care responders be high on a priority list, we also gave top priority to those who maintain essential functions. We suggested thinking not about *who* should be given priority, but about *what needs and functions* are essential, and how to make it a priority that their essential personnel will be identified, prepared, trained, and ultimately given priority in an outbreak. The article emphasized the need for community engagement and for attention to those least well off. A first from this work for me was a media interview request from trucker XM radio, in which I discussed how essential truck drivers are in a response: needed to deliver food and medicines and to reduce harms and prevent panic, and underscoring that secondary losses from panic, unrest, or inadequate access to food or water could cause more death than from influenza itself.

Several years later, somewhat by fluke, I was part of two different panels on obesity and public health. While there had been little ethical controversy on the need for public health to intervene to prevent the spread of infectious disease, obesity was different. It caused huge public health (and economic) costs, but which interventions, and on what grounds, would be ethically justified? Initially, attempts to reduce obesity primarily targeted individuals, based on a view that

people needed either more education about nutrition or more willpower. This resulted in policies such as nutritional labeling of foods and the USDA food pyramid (now the food plate), accompanied by a more than $60 billion annual diet industry (*PRWeb* 2011).

And yet given the speed with which obesity rates changed—from no state in 1990 having an obesity prevalence higher than 15% to, in 2010, all 50 states having an obesity prevalence higher than 20% (CDC 2010)—it seemed unlikely that a plummeting of national nutrition awareness, or individual discipline, could really be to blame. Applying a public health lens, the mantra for more than a hundred years had been that one's environment, including the social conditions and policies where one lives, works, goes to school, shops, and eats, can greatly influence one's health. It was from this public health perspective that I wanted to think about obesity's causes and the ethics of potential interventions.

Our collaborative team, including the director of a nutrition policy nonprofit and a spectacular graduate student, examined the ethics of three policy proposals then being debated. All were designed to reduce consumption of sugar-sweetened beverages (SSBs), which turn out to be the single largest source of Americans' daily caloric intake. Our article, published in the *American Journal of Public Health* (Kass et al. 2014), examined the ethics of forbidding the sale of SSBs in public schools, imposing a higher tax on SSBs, and not allowing Supplemental Nutrition Assistance Program (SNAP) benefits (food stamps) to be used for SSBs.

Notions of a "nanny state," shorthand for government overreach on individual choice, are often invoked in food policy debates. We wanted to think deeply about what the notion of "choice" means in the context of food and beverage consumption. We read numerous published papers showing that the size of our plates, the size of the serving bowl from which we take food, the cost of our snack options, the location of foods, the people with whom we eat, and many other seemingly benign factors all influence what and how much we eat (Epstein et al. 2012; French et al. 2010; Levy et al. 2012; Maas et al. 2012; Mori, Chaiken, and Pliner 1987; Salvy et al. 2007; Story et al. 2008; Van Ittersum and Wansink 2012; Van Kleef, Shimizu, and Wansink 2012; Wansink 2004). Thus, influences on what we buy and how much we eat are ubiquitous. And at the same time, it also surely is true that many of us attach value to the decisions we make about what or how much we eat, that we do have some amount of control over these decisions, and that they deserve some degree of protection. But to suggest that, if government were to intervene in our food environments, "choice" would be diminished or freedoms would be compromised seemed, given the data, hard to accept. Rather, one set of resistible, but highly influential external influences on our behavior would be replaced with another. Changing the influences, rather than limiting choice, seems to be a very different conversation.

Our article explored two additional questions related to choice: whether social justice considerations are also relevant to choice; and whether all choices

are morally equivalent. Data show that, absent government involvement in the food marketplace, the landscape is far from equal. There has been considerable attention to food deserts, where access to affordable healthy food is extremely limited, and rates of obesity are far higher in food insecure areas of the country (NRC 2009). As we wrote: "disparities in access to healthy food and in rates of obesity not only challenge the meaning of 'individual choice' in this context but also may underscore a responsibility founded in justice for government intervention. Indeed, it is precisely when important inequities exist, or when important public goals—such as ensuring an environment that is health-promoting rather than health-damaging—are not being met, that governments have a duty to act" (Kass et al. 2014, 792). This argument is a central thesis of Madison Powers and Ruth Faden's (2008) important work on social justice: "The role of public health, grounded in social justice, is to draw attention to any aspect of the social structure that exerts a pervasive and profound effect on the development and preservation of health" (83).

Whether all choices are morally equivalent is one of the most important questions for public health ethics. An essential role of government in the United States is to protect individuals from unwarranted infringements on their liberties, particularly by their government. The question is whether being able to access SSBs in public schools, or at low prices, or as part of a government-provided nutrition program, constitute the kind of liberties that our government has a duty to protect. And while arguments against public health action are often framed—perhaps due to their rhetorical power—as limitations of choice, it is incumbent on public health and ethics to clarify that "choice" is not a monolithic concept. Some choices are undergirded by fundamental rights, such as those to speech, religion, whom to marry, and where to live or associate; choices of this sort are profoundly important to uphold as they are centrally relevant to our self-determination. Other choices, about what we buy and how much those products cost, are certainly valued, but they represent a very different category of choice and deserve to be balanced against competing values. And it is not irrelevant that having a reasonable health status plays a significant role in one being able to exercise the liberty of achieving the kinds of self-determining life goals that matter.

As the drafting of this essay was being completed, a special issue of the *Lancet* was published, focusing on equity and equality in health in America. One of the articles again documents the relationship between population health and rising income inequality (Bor, Cohen, and Galea 2017). This is yet another reminder that public health and ethics are inextricably linked, and that we have a ways to go in meeting their intertwined goals.

Going forward, new challenges will emerge for public health. Ethics, one hopes, will be its partner in navigating an effective and appropriate policy agenda. Public health will and should continue to wrestle with questions of when and how to alter social environments to be health promoting; how to better engage commu-

nities in order to demonstrate respect to them, to hear their proposed solutions, and to hear what counts as a burden versus a benefit; and how to reduce inequities through a variety of policies—many ostensibly quite separate from health—in order to improve the chances of good public health benefits for all.

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