The Limits of Public Health: A Response

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In his article in this issue, Daniel Goldberg advocates a broad definition of public health and expressly rejects the narrow definition of public health I proposed in a 2002 article. Goldberg asserts that public health should include all of the root causes of ill health in populations. Such a definition, however, would include within public health war, famine, crime, illiteracy and numerous other conditions on which public health professionals and agencies lack the resources, expertise and public support to act. The appropriate definition explicitly recognizes that public health is a legal term of art referring to specifically authorized activities by public officials to protect, promote and improve population health.

In an article published in 2002, *Rethinking the Meaning of Public Health* (Rothstein, 2002), I criticized the growing trend in the public health literature and professional discourse of considering human rights violations, economic inequalities, health disparities and numerous other social problems as public health issues. Although recognizing the importance of addressing these issues aggressively and immediately, I asserted that the remediation of a wide range of political, economic and social conditions was beyond the jurisdiction, expertise and mandate of public health officials and public health professionals. I wrote about my concern that by claiming such a vast social agenda public health scholars and officials risked undermining their scientific credibility and popular support to perform in their traditional public health roles, such as sanitation, immunization and controlling infectious disease. I advocated a narrow definition of public health based on the legal authority granted to public health agencies.

In the nearly seven years since publication of the article the world has been jolted by a series of significant and challenging public health crises, including the epidemic of SARS, the emerging threat of avian influenza, the aftermath of the Asian tsunami, the effects of Hurricane Katrina and the ongoing scourge of HIV/AIDS in Africa and elsewhere. Therefore, it is an appropriate time to reconsider the definition of public health, the mission of public health and the role of public health in preventing and eliminating a range of unhealthy conditions. In his essay in this issue, Daniel Goldberg argues in favor of a broad view of public health (Goldberg, 2009). In this response, I maintain that events of the last seven years further underscore the need for a narrow, more precise definition of public health instead of the open-ended and impractically broad one suggested by Goldberg.

Public Health in the United States

Although the narrow definition of public health I advocate was not developed exclusively for the United States, I believe it is especially appropriate for the United States. Unlike many other countries that have a ministry of health with broad powers, public health in the United States is extremely decentralized. The federal Centers for Disease Control and Prevention (CDC) is the closest thing to a federal public health agency, but it was not intended to be a comprehensive public health agency. It is charged with research, education, coordination, data collection and control of international and interstate threats to the health of the nation. Primary responsibility for public health policy, funding, staffing and enforcement is vested in the states (Gostin, 2008: chapters 1, 2). Each state has its own health department, and the states vary with regard to how many public health functions are delegated to county and local officials. Thus, with a 'vertical' separation of functions and responsibilities it is essential for each level of government to have a clear indication of its jurisdiction, authority and capacity.

Public health responsibilities also are distributed 'horizontally' across numerous governmental agencies and departments. At the federal level, many of the sister agencies of the CDC within the Department of Health and Human Services, such as the Food and Drug Administration, also play an important part in public health. The responsibility is spread much more widely in the federal government, however, to such agencies as the Environmental Protection Agency, Occupational Safety and Health Administration (part of the Department of Labor), Department of Agriculture, Department of Housing and Urban Development and Federal Emergency Management Agency (part of the Department of

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Homeland Security). At the state and local levels, public health responsibilities are similarly distributed among numerous governmental agencies (Goodman *et al.*, 2007).

One of the recurring problems in public health planning and response is coordinating the activities of diverse governmental and private entities. With an even broader range of public health activities, as Goldberg and others advocate, the number of actors would reach truly unmanageable proportions, as agencies tasked with economic development, civil rights, education, law enforcement and other duties would be included at the operational level. A broad, open-ended definition of public health would likely exacerbate jurisdictional conflicts in both vertical and horizontal configurations.

Public Health Mission Creep and Contamination

One of the main reasons that I support a narrow definition of public health is that public health laws give public health officials a range of coercive powers to protect the population (Gostin, 2008: chapter 4). Unless the scope of permissible governmental action is carefully circumscribed, there is a threat to civil liberties by governmental confiscation of property, restraint on the movement of individuals, mandating of medical examinations and similar measures. Accordingly, placing limits on public health activities narrows the government's coercive powers, sets bounds on when such measures may be used, allocates responsibilities, sets priorities and steers government away from inappropriate undertakings (Rothstein, 2002: 147).

An example of the intermingling of governmental functions involves bioterrorism. After the anthrax events of 2001, the Department of Homeland Security (established in 2003), the Department of Defense, various law enforcement agencies and public health officials have been jointly planning detection and response to bioterrorism. Obviously, the threat of bioterrorism demands vigilance and a range of preventive measures. In addition, many of the public health responses to a bioterrorism event would be the same as for a natural disaster, pandemic, or other public health emergency. Nevertheless, in my view, it is undesirable to link national security with public health. Bioterrorism preparedness may be seen by many members of the public as closely related to national security policy and therefore matters about which the public has partisan and philosophical differences of opinion. Emergency public health measures, such as quarantine, depend greatly on voluntary compliance and public cooperation could be threatened by excessive entanglement of public health and national security agencies. As I have previously written: 'Public health, theoretically science-based and politically neutral, could become overly politicized by becoming an adjunct of national security policy' (Rothstein, 2004: 192).

Goldberg's Misunderstandings

In his essay, Daniel Goldberg provides a thoughtful and respectful review of the basic themes of my 2002 article. Unfortunately, his essay reflects a fundamental misunderstanding of critical aspects of my article, especially with regard to the following three issues.

First, Goldberg writes that the narrow versus broad definition of public health represents a conflict between pragmatic and aspirational conceptions of public health. He describes the differing views of public health as a 'paradox of the ethics of health policy: what policies we ought to pursue may be pragmatically untenable, yet what is pragmatically tenable may fall short of what policies we ought to pursue' (p. 1). He ascribes the pragmatic view of public health to me, and he characterizes it as 'impoverished,' further suggesting that 'a narrower model of public health may render achieving the most worthwhile goals impossible' (p. 1).

Although pragmatism plays an important part in my definition of public health, Goldberg misunderstands the nature of my concern about pragmatism. My definition of public health in no way diminishes my support for efforts to eliminate the root causes of ill health in populations, to prevent and treat outbreaks of disease, or to enhance the quality of life for populations. As further described below, my pragmatism is based on the fact that poor health conditions in populations are caused by myriad, large-scale and systemic factors. The resolution of these challenges requires the expertise, experience and commitment from numerous parts of society. It would be convenient if public health officials, agencies and scholars could end war, famine and poverty in their spare time, but it will take more than expanding the jurisdiction of public health to eradicate these sources of ill health.

Second, Goldberg argues that the narrow definition of public health I advocate in my 2002 article is flawed because it fails to address the root causes of poor health. In his view, my failure to do so 'leaves the narrow model of public health open to the charge that, if socioeconomic disparities are truly productive of public health, policies consistent with the narrow model, which by definition do nothing to ameliorate social conditions, will do little to actually improve health in the aggregate' (p. 15). Goldberg spends several pages reviewing the literature

about the causes of poor health but, because he misunderstands my argument, his entire discussion of this point is irrelevant.

To reiterate my position, it is extremely important for researchers to identify the root causes of ill health. In addition, concerns about social justice should play a part in priority setting for public health. My point is simply that resolution of underlying socioeconomic and political problems is beyond the domain of public health. This proposition is self-evident if one merely considers the root causes of poor health on a population-wide basis. The list is long, but it certainly includes at least the following: war, famine, crime, poverty, unemployment, income inequality, environmental degradation, lack of economic development, human rights violations, poor education, inadequate housing, lack of natural resources and unresponsive governments. Calling these societal problems 'public health' issues does nothing to bring about their remediation and, as I argued in 2002 and note again below, may actually impede their amelioration. If Goldberg thinks that adding these issues to the public health agenda will be productive, then it is incumbent upon him to indicate how he thinks public health could end the planet's various wars, acts of genocide, acute poverty and various other issues on the list.

Public health is not a self-defining enterprise of combating poor health and evil wherever it lurks. Public health is not 'individual health,' 'population health' or even the 'health of the public.' Public health is a term of art, and it refers to specifically delineated legal powers of federal, state and local public health officials who act in legally authorized ways and in designated subject areas. As Goldberg correctly observes, one of my concerns is that governmental powers over public health matters must be constrained so that the coercive authority of public health officials is not abused.

Besides referring to public health institutions, public health also refers to a cadre of trained professionals, including public health physicians, nurses, veterinarians, epidemiologists, biostatisticians, environmental scientists, biologists and lawyers. Their professional training and expertise does not extend to tackling many of the intractable societal problems that contribute to poor health. Undoubtedly, public health experts should study the root causes of poor health in populations, educate the public and public officials about these causal relationships and assist in formulating strategies to address a range of issues. Engaging in these limited measures, however, does not convert vast societal issues into matters of 'public health.'

Third, Goldberg comes close to addressing my concerns about limiting the reach of public health, but he does so in a fleeting and cursory manner. He writes that 'the notion that social determinants of health are best viewed as the responsibility of other stakeholders is, I suspect, a factor in the dangerously weak U.S. public health infrastructure' (p. 7). He then asserts that there is a causal relationship between the narrow view of public health that traditionally has been practiced in the United States and the woefully inadequate funding of public health. He adds: 'My argument is precisely that a broad model of public health is much more likely to facilitate expenditures on population-based prevention than a narrow model' (p. 7).

Goldberg's last quote confuses 'prevention' with 'root causes,' the former being undisputedly a matter for public health, whereas the latter is the focus of our disagreement. I concur with Goldberg's assessment of the 'dangerously weak U.S. public health infrastructure' (p. 16). I seriously question, however, whether the public health infrastructure would be improved by claims that public health officials should lead efforts to eliminate such disparate root causes of ill health as crime, poor housing and illiteracy.

In my 2002 article, I described three different conceptions of public health. The broadest, 'human rights as public health', is the one implicitly endorsed by Goldberg, although his article does not contain any definition or examples of his broad view of public health. The 'human rights as public health' approach considers as public health issues all the societal factors that affect health. A less expansive, but still broad definition is the more traditional definition of public health. According to the Institute of Medicine report, *The Future of Public Health*: 'Public health is what we, as a society, do collectively to assure the conditions for people to be healthy' (Institute of Medicine, 1988: 19). I have three criticisms of this definition, discussed more fully in my original article: (1) it confuses the responsibilities of the public and private sectors; (2) it fails to establish any meaningful lines of demarcation between individual health and public health and (3) it includes matters that do not place the health of the population in jeopardy.

The third conception of public health I proposed in 2002 and continue to support is more limited in scope, and it focuses on the role of the government. Public health 'involves public officials taking appropriate measures pursuant to specific legal authority, after balancing private rights and public interests, to protect the health of the public' (Rothstein, 2002: 146). The narrow definition of public health is consistent with public and private efforts to improve population health as well as a societal commitment to human rights.

Undoubtedly, one source of confusion is that public health departments, public health officials, public health professionals and public health schools are involved in more than 'just' public health. Public agencies are often responsible for elements of individual health care through government-run health care programs. Public entities, along with their private sector counterparts, are also engaged in a wide range of health promotion, prevention, education, assessment, research, quality enhancement, regulation, licensing and other matters. I wholeheartedly support public involvement and leadership in these matters. My point is simply that within the broad landscape of health activities, only legally designated public health agencies and public health officials have the statutory authority to order the seizure of property, the closing of certain businesses, the quarantine of persons with possible exposure to infectious diseases and a range of other coercive activities in the interest of the public. Clearly designating a precise subset of governmental health activities as 'public health' enables the powers, procedures and priorities for this most intrusive form of health regulation to be transparent and subject to legal constraints.

Conclusion: A Dose of Reality

The conception of public health advocated by Daniel Goldberg is two orders of magnitude too broad. First, it deems as 'public health' a seemingly unlimited range of health-related activities of the public and private sectors. Yet, a health clinic for low-income people run by a governmental or nongovernmental entity is not public health. It is simply the provision of individual health services outside of the commercial health system. Similarly, public and private organizations engaged in health education, health promotion and health care on a population-wide basis are engaged in population health rather than public health. I do not seek to minimize or marginalize these activities or to promote confusion in health departments. I merely want to underscore that only public officials can engage in public health activities because only they are authorized by law to require certain actions of the public to promote collective health.

The second dimension, and perhaps the most glaring problem with Goldberg's approach, is his argument that even beyond the domain of health, interventions to address all the far-flung factors affecting human health are the province of 'public health.' Because numerous diverse causes, including war, famine and poverty, affect individual and population health, Goldberg's definition is so broad as to be meaningless. Furthermore, there may be unintended consequences from implementing or even advocating this approach.

Goldberg's proposal is, at best, quixotic and unrealistic and, at worst, counterproductive and guaranteed to undermine the scientific and political credibility necessary for public health officials to perform their core functions. It is even possible that the staffs of public health agencies could become demoralized by unrealistic expectations and responsibilities.

In my experience, the broad model of public health is largely a creation of academics. Unquestionably, public health officials would love to see the root causes of ill health addressed, but they know they lack the resources, expertise, legal authority and political and public support to do so. They also know that any attempt to expand their jurisdiction is likely to be seen as an inappropriate 'power grab' that could jeopardize their standing and their ability to achieve their core mission.

I think it is fair to say that all who teach, study, research and practice in the field of public health, however defined, are dedicated to the eradication of ill health in populations, in providing effective health services to prevent and treat disease and in undertaking a range of activities to improve the quality of life for all humanity. It is disheartening to observe the lack of progress on such fundamental matters, to witness the preventable suffering at home and abroad, and to see the lack of urgency and priority given to remedying these conditions by many public officials. Nevertheless, I believe it is an unproductive act of hubris to arrogate to 'public health' the role of alleviating all conditions that adversely affect the health of populations.

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References

Committee for the Study of the Future of Public Health, Institute of Medicine. (1988). *The Future of Public Health.* Washington, DC: National Academies Press.

Goldberg, D. (2009). In Support of a Broad Model of Public Health: Disparities, Social Epidemiology, and Public Health Causation. *Public Health Ethics*, **1**, 1–14.

Goodman, R. A., Kocher, P. L., O'Brien, D. J. and Alexander, F. S. (2007). The Structure of Law in Public Health Systems and Practice. In Goodman, R.,

Hoffman, R. E., Lopez, W., Matthews, G. W., Rothstein, M. A. and Foster, K. L. (eds), *Law in Public Health Practice*, 2nd edn. Oxford: Oxford University Press, pp. 45–68.

Gostin, L. O. (2008). *Public Health Law: Power, Duty, Restraint*. Berkeley: University of California Press.

Rothstein, M. A. (2002). Rethinking the Meaning of Public Health. *Journal of Law, Medicine & Ethics* **30**, 144–149.

Rothstein, M. A. (2004). Are Traditional Public Health Strategies Consistent with Contemporary American Values? *Temple Law Review* **77**, 175–192.