

Healthcare Reform \neq Public Health Reform: On Pathogens, Poverty, and Prevention

Jeff Levin, PhD MPH¹

Keywords

healthcare, public health, prevention, poverty, global health, health policy

Received October 13, 2017. Accepted for publication December 6, 2017

Few would deny the contentiousness of the ongoing healthcare reform debate in the United States. Referencing the Patient Protection and Affordable Care Act (P.L. 111–148), a recent article in *Foreign Affairs* noted that “no U.S. law has been more passionately opposed by Republicans.”¹ Unsuccessful efforts to replace or repeal the Act keep coming, proposed and then voted down or withdrawn during both the Obama and Trump administrations. We all have witnessed this drama play out in Washington for nearly a decade by now. Yet a mistaken notion persists, seen in news stories and op-ed pieces from both sides of the political aisle, that this has been a national debate about public health and the reform of the institutional public health system in the United States.² As has been noted elsewhere,³ no such debate has occurred. The recent legislation, moreover, “does not take a public health approach to addressing deficiencies in the United States health system or challenge the decades-long medicalization of health with a population-based approach” (p. 341).⁴

This misunderstanding is rooted in widespread misunderstanding of what public health is, especially in an underappreciation that invoking the phrase “public health” connotes something quite distinct from “healthcare” or “medicine.” The latest edition of the authoritative *A Dictionary of Epidemiology* defines public health as the “specific policies, services, programs and other essential efforts agreed (ideally, and often, democratically), organized, structured, financed, monitored, and evaluated by society to collectively protect, promote, and restore the people’s health and its determinants” (p. 230).⁵ This includes the work of “institutions, public and private organizations,” and “scientific disciplines and professions” all of whom labor to “prevent disease and disability, prolong life, and promote health through the organized and collective efforts of society.”⁵ So while healthcare is a component

of the public health enterprise, it is only one aspect of a multifactorial effort aimed at supporting the health of individuals and the public at large. A special emphasis of such efforts, as indicated by the mission of the Commissioned Corps of the U.S. Public Health Service, is supporting efforts directed “to underserved and vulnerable populations.”⁶ These main points define the mission of the public health sector.

Public Health Distinctives

Just as some have said that it takes a village to raise a child, so too does it take an army of professions and scientific disciplines to do the work of public health. The public health sector is not a branch of medicine, but, as was noted several years ago, “a distinct profession or field with its own historical narrative and conceptual and theoretical foundations” (p. 370).⁷ The Council on Education for Public Health has identified a set of “areas of knowledge” required for the accreditation of graduate training programs in public health, including biostatistics, epidemiology, environmental health sciences, health services administration (including health planning, organization, administration, management, evaluation, and policy analysis), and the social and behavioral sciences (including community health education). Educational and scholarly programs exist as well in maternal and child health, parasitology, community mental health, nutrition, global health, and other subjects.⁸

¹Baylor University, Waco, Texas

Corresponding Author:

Jeff Levin, Baylor University, One Bear Place #97236, Waco, TX 76798, USA.

Email: jeff_levin@baylor.edu



Institutionally, myriad public-sector and corporate entities do the work of public health. This includes the U.S. Public Health Service as well as federal, regional, state, and local government agencies; domestic and globally oriented organizations from within the private, philanthropic, and academic sectors; and multinational nongovernmental organizations (NGOs), such as the World Health Organization (WHO). It also includes formal partnerships among combinations of the above. All of this together makes up “public health.”

At the heart of the public health ethos are several core distinctives. Elsewhere, these have been described as (a) a focus on primary prevention, (b) recognition of the multiple determinants of population health, (c) commitment to communitarianism and social justice, and (d) a vision defined by a distinctively global perspective.⁸ Public health is about preventing disease and distress before it happens, not solely about fixing it afterward. Public health is about identifying sources of disease and ill-health that originate in social structures, economic realities, political policies, and geoenvironmental changes, not solely about those due to discrete personal behaviors. Public health is about the health of populations—a collectively defined status that requires communally fashioned and population-directed solutions—not solely about the delivery of medical care from practitioners to patients. Finally, public health seeks “the fullest attainment of health for all,” throughout the world, as stated in the WHO’s famous Alma-Ata declaration from 40 years ago—not solely the clinical treatment of specific diseases in specific individuals.⁹

An especially significant presumption of public health is that all life is interconnected. This includes not just human life, but the life of all beings and all organisms on the planet. Such a perspective underlies One Health, a worldwide initiative that acknowledges the mutual connections linking humans, animals, and ecosystems and that advocates for strategic collaboration among public health professionals, veterinarians, and environmental scientists.¹⁰ Accordingly, all public health is global health, whether or not particular programs or interventions undertaken at, say, the level of a U.S. county health department consciously intend for this to be so.

Also accordingly—and this cannot be underscored too strongly—from a public health perspective, national borders are not biologically significant entities. Whether or not the United States eventually builds a wall or walls, figuratively or literally, separating it from other nations, this is a matter to be debated and adjudicated by Congress and the courts. To paraphrase President Obama, such issues are above the present author’s paygrade. But should the United States do so it cannot expect pathogens or disease vectors or health-impacting changes to the physical environment to care one iota about whether such would-be barriers exist.

They would be close to useless in protecting the United States from any potential public health threat, which can enter American airspace through many other means, from the wind and waters to rodents, birds, and airport terminals.

All of us saw this play out most recently during the Ebola crisis of 2014. In response to the catastrophe unfolding in West Africa, the media-fueled overreaction in the U.S. led to unjustified calls to close the borders and withhold care from those hoping to come to the U.S. for medical treatment. Impediments also were placed before aid workers and medical missionaries, such as excessive quarantines upon their return.¹¹ Had there been an authentic threat of widespread exposure among the population of the U.S., which there was not, none of this would have worked anyway; the virus would have gotten in despite those measures. This just reinforces the point being made here: political borders mean nothing to a pathogen on the move.

All public health, as noted, is thus global health. Implicit in this affirmation is not just a recognition of the interconnectedness of all life, of all biological organisms. It also implies something of a covenant, a set of mutually binding obligations, connecting all nations on earth in a circle of trust. As the wealthiest and most powerful nation on earth, the U.S. has special obligations, which for the most part, up to now, it has at least partly fulfilled, although this point might be debated. Together, the agencies of the United States government and its citizens in partnership with or alongside volunteer-sector organizations—NGOs, faith-based organizations, corporate philanthropies, medical societies—have been instrumental in shepherding global disease-prevention efforts.

Several examples come to mind: the Bill and Melinda Gates Foundation’s work on malaria eradication in the developing world,¹² the Congressionally underwritten President’s Emergency Plan for AIDS Relief,¹³ collaboration between the Centers for Disease Control and Prevention’s Influenza Division and the WHO for purposes of year-round surveillance of seasonal influenza viruses,¹⁴ the Global Medicine Network whose affiliated members and organizations participate in active programs of consultation on global health research and development,¹⁵ and global initiatives by civil society sector and faith-based organizations whose mission involves delivering primary care and providing environmental stewardship overseas.¹⁶ A very visible hallmark of these national efforts in the United States has been the continuing financial support of WHO.

With this in mind, it is not surprising to find it widely stated that public health—as a profession, as an academic field, as a sector of government—is an expression of social justice.¹⁷ That is, support of national efforts to contribute to the promotion and maintenance of global

population health is a fulfillment of global obligations to the other sentient beings who share this planet. Public health is thus not just a medically oriented scientific enterprise (although it is indeed that), not just a subject for political discourse and debate (although it is that, too), but also a moral issue. Where one stands on the importance of insuring the health, well-being, and flourishing of all of our fellow brothers and sisters who share this globe says a lot about where one stands on the value of human life.

Poverty and Population Health

Among the most significant and widespread determinants of global population health, perhaps *the* most significant, is poverty status. The inverse gradient between social class or socioeconomic status and ill-health and disease, at a population-wide level, is probably the most pervasive and enduring empirical finding in public health.¹⁸ Lack of material resources has been identified as a significant risk for decreased longevity, greater symptomatology and pain, increased disability, higher rates of depression, more lost work days, lower access to preventive health services, poorer quality of medical care, and elevated morbidity and/or mortality overall and due to chronic degenerative and acute and chronic infectious diseases.¹⁹ This general finding was first validated quantitatively nearly 200 years ago by William Farr in his observation of an occupational gradient in mortality statistics in Great Britain,²⁰ and it has persisted ever since, observed throughout the world in every geographic unit which maintains vital statistics.²¹

Poverty thus lies at the foundation of most of the health-related suffering experienced on earth. The “wealth gap” identified across and within nations, notably in the United States, has been described as “a tyranny” that has served to compromise the healthcare system and to promote population-health disparities. More than anything else, therefore, ameliorating and preventing such suffering requires a collective commitment to address poverty and concomitant gaps in material resources and human services.²² The issue here is not just all about raising money; it means building infrastructure and political consensus, as well. This is not a novel idea. The same observations were made by Paul Farmer in his impassioned *Pathologies of Power*,²³ and have been affirmed in numerous commentaries throughout the medical literature, including in the *New England Journal of Medicine*²⁴ and in the present journal.²⁵

Yet, when one takes a look at what passes for a U.S. public health agenda in recent years, this idea is largely absent.²⁶ Operationally, the national public health priorities are conceptually narrow. The emphasis of programming and funding is considerably “downstream” from more structural, and politically treacherous, issues

such as poverty. Thus, we see respective Surgeons General of the United States who use their famous bully pulpit to turn the national attention to, for example, opioid abuse, gun violence, childhood obesity, and cigarette smoking. To be clear, these are all serious national problems with multidimensional antecedents, correlates, and health consequences, and it should not be misconstrued that any public health person, the present author included, would be opposed to efforts to address these problems. But note how each of these has been defined at the level of the individual, presumes origination in the behavior of individual people, and implies a national prevention strategy that defines its mission and scope as the difficult if not intractable task of completely altering the behavior of said individuals, by sanction, coercion, force of law, or, more benignly, a federally mandated educational program or intervention. It is paradoxical that this default approach to reducing population-health disparities in the United States is supported by so many well-meaning people espousing otherwise progressive political stances on non-health-related issues.

Is this approach so bad? Not necessarily. But what is lost here is that through a myopic focus on targeting downstream aftereffects for change, we lose sight of the underlying social, economic, and political forces that serve to create such problems. A focus on individual behaviors perhaps blinds us to search for what public health people often call the “fundamental causes” of population-health disparities,²⁷ such as poverty and injustice. Former U.S. Surgeon General David Satcher recognized this and sought to broaden the scope of his office’s bully pulpit—an effort to substitute a floodlight for a spotlight. He wisely prioritized population-health disparities as his focal issue, rather than a single discrete behavior, and advocated a national public health effort that did not neglect the “upstream” determinants of population health while still laboring to deal with the downstream effects.²⁸ A compassionate and effective approach requires both.

Toward Public Health Reform

This observation brings us back to the matter broached at the start of this article: the idea of public health reform. What would true public health reform look like, in a global context? In a recent commentary in *Public Health Reports*, the official journal of the U.S. Public Health Service, it was suggested that this would consist of 2 features: (a) a focus on “determinants of population-health disparities, especially those that are rooted in inequities and injustices resulting from social structure and policy” (p. 431) and (b) priority given to “factors responsible for the greatest morbidity, mortality, and underutilization of preventive care” (p. 431).¹⁹

Each of these imperatives points directly at poverty, and suggests an antipoverty agenda as a fundamental and defining feature of any national strategy for global public health outreach and development. Moreover, these imperatives suggest that a truly integrative vision of the determinants of health ought to extend its scope to the political and socioeconomic factors that enhance and impede the health of populations. Organized antipoverty efforts and a more compassionate and socially conscious approach to health policy should thus be at the heart of public health reform.

An antipoverty strategy is central to any realistic effort to improve the health of the public and ought to be at the forefront of a national prevention agenda as well as inform global efforts to improve the health of populations throughout the world. This vision statement is understandably broad and nonspecific, but it implies that concrete actions can be taken with the requisite legislative and executive resolve as well as requisite attention to “bridging the quality chasm” between healthcare and public health.²⁹ If the United States is to transition from healthcare reform to public health reform, then it will need to engineer a long overdue “shift in focus towards addressing non-medical determinants of health” (p. 328) emphasizing the social and environmental causes of preventable deaths both domestically and globally.³ This may not be easily achieved, however, as such a shift will entail “[c]hanging the way the public conceptualizes preventive health issues” (p. 337) away from the default “individualist/biomedical paradigm” (p. 329)³ toward “public health’s communitarian tradition” (p. 316).³⁰ Yet, without readjusting the national focus, the United States will be ill-equipped to identify the most effective ways to resolve enduringly intractable sources of physical challenge and suffering, especially among the disadvantaged and oppressed.

Global population health should not just be of concern to readers who are interested in public health. Historians, dating to William McNeill in *Plagues and Peoples*,³¹ have made the case that outbreaks of epidemic and pandemic disease may be the most significant force in the rise and fall of nations and civilizations in all of human history. If that is an overstatement—and it probably is not far of the mark—it can at least be said that sudden downward change in the health status of populations is the most unheralded such force from the vantage point of politicians and policymakers. All of their important efforts come to naught in the face of pandemics or other population-thinning events, as history shows. From the plague of Justinian, which helped to hasten the fall of the Roman Empire; to Cortés’ conquest of Mexico, enabled by the spread of smallpox to a population with no acquired immunity; to the 1918 influenza pandemic, which killed more people—and more soldiers—than the fighting in World War I, all of our

collective efforts to navigate the complex and ongoing disputes that divide nations are reduced to the fluttering of gnats in the face of the kind of public health hurricanes that have shaken the world.³²

None of this is to dismiss or disparage the focus of the ongoing healthcare reform debate in the United States. This is a conversation that needed to happen, regardless of its dispiriting contentiousness. But perhaps it would be valuable to recognize this legislative battle for what it truly is: what has been referred to as a “medical care expenditure reimbursement reform” debate (p. 431).¹⁹ Improved delivery and funding of medical care are of course essential for improving well-being and quality of life among patients in need. But enhanced awareness of, attention to, and implementation of effective public health policies, programs, and services are even more fundamental for sustaining and improving the health of populations.³³ A national discussion on public health reform—not just on healthcare reform—would thus be most welcome.³⁴ Up to now, however, the issues broached in this article, first among them the germinal role of poverty in creating health disparities—and healthcare disparities—seem to be flying beneath the radar of the decisors and opinion leaders in Washington. This needs to change.

Acknowledgment

The author would like to thank Lea Steele, PhD, for helpful comments on an earlier version of this manuscript.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

1. Hathi S, Kocher B. The right way to reform health care: to cut costs, empower patients. *Foreign Aff.* 2017;96(4):17–25.
2. Frostenson S. Health shouldn’t be contentious. But it’s incredibly polarizing. *Vox.* March 23, 2017. <https://www.vox.com/policy-and-politics/2017/2/6/14229276/public-health-contentious-polarizing-opioids-aca-obesity>. Accessed December 6, 2017.
3. Berman ML. From health care reform to public health reform. *J Law Med Ethics.* 2011;39(3):328–339.
4. Gable L. The Patient Protection and Affordable Care Act, public health, and the elusive target of human rights. *J Law Med Ethics.* 2011;39(3):340–354.
5. Porta M, ed. *A dictionary of epidemiology, sixth ed.* Oxford, England: Oxford University Press; 2014.

6. Commissioned Corps of the U.S. Public Health Service: America's health responders. Washington, DC: U.S. Department of Health and Human Services. <https://www.usphs.gov/questionsanswers/overview.aspx>. Accessed December 6, 2017.
7. Levin J. Engaging the faith community for public health advocacy: an agenda for the Surgeon General. *J Relig Health*. 2013;52(5):368–385.
8. Council on Education for Public Health. Accreditation criteria for schools of public health, amended June 2011. Silver Spring, MD: Council on Education for Public Health, 2011. <https://ceph.org/assets/SPH-Criteria-2011.pdf>. Accessed December 6, 2017.
9. International Conference on Primary Health Care. Declaration of Alma-Ata. *WHO Chron*. 1978; 32(11):428–430.
10. Evans BR, Leighton FA. A history of One Health. *Rev Sci Tech*. 2014;33(2):413–420.
11. Levin J. Ebola: epidemiology's challenge to theology. *Syndicate*. 2015;2(1):3–8.
12. Greenwood B, Bhasin A, Targett G. The Gates Malaria Partnership: a consortium approach to malaria research and capacity development. *Trop Med Int Health*. 2012; 17(5):558–563.
13. Goosby E, Dybul M, Fauci AS, et al. The United States President's Emergency Plan for AIDS Relief: a story of partnerships and smart investments to turn the tide of the global AIDS pandemic. *J Acquir Immune Defic Syndr*. 2012;60(Suppl. 3):S51–S56.
14. CDC's World Health Organization (WHO) Collaborating Center for Surveillance, Epidemiology and Control of Influenza. Atlanta: Centers for Disease Control and Prevention. <https://www.cdc.gov/flu/weekly/who-collaboration.htm>. Accessed December 6, 2017.
15. Global Medicine Network. Waltham, MA: Massachusetts Medical Society. <https://www.globalmedicine.org/>. Accessed December 6, 2017.
16. Dickerson C, Grills N, Henwood N, Jeffreys S, Lankester T. The World Health Organization engaging with civil society networks to promote primary health care: a case study. *Glob Health Gov*. 2012;6(1):1–13.
17. Beauchamp DE. Public health as social justice. *Inquiry*. 1976;13(1):3–14.
18. Marmot M. *The Health Gap: The Challenge of an Unequal World*. London, UK: Bloomsbury, 2015.
19. Levin J. An antipoverty agenda for public health: background and recommendations. *Public Health Rep*. 2017; 132(4):431–435.
20. Whitehead M. William Farr's legacy to the study of inequalities in health. *Bull World Health Organ*. 2000; 78(1):86–87.
21. Mackenbach JP, Stirbu I, Roskam AJ, et al. Socioeconomic inequalities in health in 22 European countries. *N Engl J Med*. 2008;358(23):2468–2481.
22. Schroeder C. The tyranny of profit: concentration of wealth, corporate globalization, and the failed US health care system. *ANS Adv Nurs Sci*. 2003;26(3):173–184.
23. Farmer P. *Pathologies of power: health, human rights, and the new war on the poor*. Berkeley, CA: University of California Press, 2003.
24. Steinbrook R. Disparities in health care—from politics to policy. *N Engl J Med*. 2004;350(15):1486–1488.
25. Saper R. Integrative medicine and health disparities. *Glob Adv Health Med*. 2016;5(1):5–8.
26. National Prevention Council. *National Prevention Strategy: America's plan for better health and wellness*. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011. <https://www.surgeongeneral.gov/priorities/prevention/strategy/report.pdf>. Accessed December 6, 2017.
27. Link BG, Phelan J. Understanding sociodemographic differences in health—the role of fundamental social causes. *Am J Public Health*. 1996;86(4):471–473.
28. Satcher D. The prevention challenge and opportunity. *Health Aff*. 2006;25(4):1009–1011.
29. Honoré PA, Wright D, Koh HK. Bridging the quality chasm between health care and public health. *J Public Health Manag Pract*. 2012;18(1):1–3.
30. Leonard EW. The prospects for public health reform. *J Law Med Ethics*. 2011;39(3):312–316.
31. McNeill WH. *Plagues and peoples*. New York, NY: Anchor Books, 1976.
32. Byrne JP, ed. *Encyclopedia of pestilence, pandemics, and plagues*. Westport, CT: Greenwood Press; 2008.
33. Fielding JE, Tilson HH, Richland JH. *Medical care reform requires public health reform: expanded role for public health agencies in improving health*. Washington, DC: Partnership for Prevention; 2008. <http://www.prevent.org/data/files/initiatives/medicalcarereformrequirespublichealthreform.pdf>. Accessed December 6, 2017.
34. Gostin LO, Jacobson PD, Record KL, Hardcastle LE. Restoring health to health reform: integrating medicine and public health to advance the population's well-being. *Univ Pa Law Rev*. 2011;159(6):1777–1823.