

may be more willing to seek legislation regulating the industry, such as the Family Smoking Prevention and Tobacco Control Act now pending in Congress.²² Similarly, the public may be more willing to support restrictions on smoking including efforts to ban smoking in indoor public places. In this changing litigation and regulatory environment, *Engle* and *Philip Morris* can have a greater public health impact than prior litigation.

Ultimately, the tobacco industry may experience an increased cost of doing business as a result of *Engle*, *Philip Morris*, and litigation and/or regulation likely to follow. Costs of litigation and regulation are generally passed on to consumers in the form of higher prices. Research indicates that higher prices can result in less cigarette consumption, especially among more price-sensitive young people.^{23,24} Therefore, if future lawsuits are more likely to be brought and to succeed as a result of *Engle* and *Philip Morris*, some of the more than 400 000 smoking-related deaths in the United States each year might be prevented.²⁵

Financial Disclosures: None reported.

Other Disclosures: Messrs Vernick and Teret submitted, without compensation, a friend-of-the-court brief in the *Engle* case to the Florida Supreme Court on behalf of the American Public Health Association, American Medical Association, American Academy of Pediatrics, American Heart Association, American Lung Association, American Legacy Foundation, and the Roswell Park Cancer Institute.

Funding/Support: Support for this analysis was provided by a grant from the Flight Attendant Medical Research Institute to the Johns Hopkins Bloomberg School of Public Health.

Disclaimer: Stanley Rosenblatt, chairman of the board of the Flight Attendant Medical Research Institute, was lead counsel in *Engle*. The Flight Attendant Medical Research Institute played no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; and preparation, review, or approval of the manuscript.

REFERENCES

- Vernick JS, Mair JS, Teret SP, Sapsin JW. Role of litigation in preventing product-related injuries. *Epidemiol Rev.* 2003;25(1):90-98.
- Jacobson PD, Soliman S. Litigation as public health policy: theory or reality. *J Law Med Ethics.* 2002;30(2):224-238.
- LaFrance AB. Tobacco litigation: smoke, mirrors, and public policy. *Am J Law Med.* 2000;26(2-3):187-202.
- Glantz SA, Fox BJ, Lightwood JM. Tobacco litigation: issues for public health and public policy. *JAMA.* 1997;277(9):751-753.
- Cipollone v Liggett Group Inc*, 505 US 504 (1992).
- Pritchard v Liggett & Myers Tobacco Co*, 370 F2d 95 (3d Cir 1966).
- Schroeder SA. Tobacco control in the wake of the 1998 master settlement agreement. *N Engl J Med.* 2004;350(3):293-301.
- Daynard RA, Parmet W, Kelder G, Davidson P. Implications for tobacco control of the multistate tobacco settlement. *Am J Public Health.* 2001;91(12):1967-1971.
- Gross CP, Soffer B, Bach PB, Rajkumar R, Forman HP. State expenditures for tobacco-control programs and the tobacco settlement. *N Engl J Med.* 2002;347(14):1080-1086.
- Rabin RL. The third wave of tobacco litigation. In: Rabin RL, Sugarman J, eds. *Regulating Tobacco*. New York, NY: Oxford University Press; 2001:176-206.
- Court ruling favorable to tobacco pushes Dow higher. *New York Times.* July 7, 2006:C1.
- Shenon P. US judge sets new limits on marketing of cigarettes. *New York Times.* August 18, 2006:A13.
- Liggett Group Inc v Engle*, 853 So2d 434 (Fla 3d DCA 2003).
- Engle v Liggett*, 945 So2d 1246 (Fla 2006).
- United States v Philip Morris USA Inc*, 449 F Supp 2d 1 (DDC 2006).
- United States v Philip Morris USA Inc*, No. 06-5267 (DC Cir 2006), order granting stay pending appeal.
- Warner M. Big award on tobacco is rejected by court. *New York Times.* July 7, 2006:C1.
- Levin M, Selvin M. Florida court won't reinstate tobacco verdict. *Los Angeles Times.* July 7, 2006:A17.
- Krantz M. Court ruling ignites tobacco stocks. *USA Today.* July 7, 2006:B1.
- Searcy law firm Web site. Big tobacco will face thousands of individual lawsuits. <http://www.floridatobaccoattorney.com/?gclid=CLPKxuCop4sCFQMLVAodV3FtjQ>. Accessed April 30, 2007.
- Kozlowski LT, Goldberg ME, Yost BA, et al. Smokers' misperceptions of light and ultra-light cigarettes may keep them smoking. *Am J Prev Med.* 1998;15(1):9-16.
- Family Smoking Prevention and Tobacco Control Act. S 625. Introduced February 15, 2007. <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:SN00625:@@L&summ2=m&>. Accessed April 30, 2007.
- Warner KE, Jacobson PD, Kaufman NJ. Innovative approaches to youth tobacco control: introduction and overview. *Tob Control.* 2003;12(1)(suppl 1):1-15.
- Alamar B, Glantz SA. Effect of increased social unacceptability of cigarette smoking on reduction in cigarette consumption. *Am J Public Health.* 2006;96(8):1359-1363.
- Office of the Surgeon General. *The Health Consequences of Smoking: A Report of the Surgeon General*. Rockville, MD: US Dept of Health and Human Services; 2004.

Why Rich Countries Should Care About the World's Least Healthy People

Lawrence O. Gostin, JD

WHY SHOULD RICH COUNTRIES CARE ABOUT THE world's least healthy people? The subject is so important that it affects the fate of millions of individuals and has international economic, political, and security ramifications. Rich countries should care because global health serves their national interests, and helping the most disadvantaged is ethically the right thing to do. If international health assistance were structured in a way that was scalable (sufficient to meet deep needs) and sustainable (to create enduring solution), it would have a dramatic influence on the life prospects of the world's poorest populations.

©2007 American Medical Association. All rights reserved.

National Interests in Global Health

It is axiomatic that infectious diseases do not respect national borders. But this simple truth does not convey the degree to which pathogens migrate great distances to pose health hazards everywhere. Human beings congregate and travel, live in close proximity to animals, pollute the environment, and rely on overtaxed health systems. This constant cycle of congregation, consumption, and movement

Author Affiliations: O'Neill Institute for National and Global Health Law, Georgetown University Law Center, Washington, DC; and Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland.

Contributing Author: Lawrence O. Gostin, JD, Georgetown University Law Center, 600 New Jersey Ave NW, Washington, DC 20001 (gostin@law.georgetown.edu).

(Reprinted) JAMA, July 4, 2007—Vol 298, No. 1 89

allows infectious diseases to mutate and spread across populations and boundaries. These human activities have profound health consequences for people in all parts of the world, and no country can insulate itself from their effects. The world's communities are interdependent and reliant on one another for health security.

Governments have no choice but to pay close attention to health hazards beyond their borders. DNA fingerprinting has provided conclusive evidence of the migration of pathogens from less to more developed countries.¹ More than 30 infectious diseases have emerged during the last 2 to 3 decades, ranging from hemorrhagic fevers, legionnaires disease, and hantavirus to West Nile virus and monkeypox. Vastly increased international trade in fruits, vegetables, meats, and eggs has resulted in major outbreaks of foodborne infections. Wealthy countries, moreover, are less able to ameliorate these harms because many resurgent diseases have developed resistance to frontline medications.

Beyond narrow self-interest, are there broader, "enlightened" interests in global health?² There is a strong case that a forward-looking foreign policy would seek to redress extremely poor health in the world's most impoverished regions. Epidemic disease dampens tourism, trade, and commerce, as the 2003 severe acute respiratory syndrome outbreaks demonstrated. Animal diseases, such as foot and mouth disease, bovine spongiform encephalopathy, and avian influenza, similarly had severe economic repercussions such as mass cullings of animals and trade bans. Massive economic disruption would ensue from a pandemic of human influenza, with a projected loss of 3% to 6% in global gross domestic product.³

In regions with extremely poor health, economic decline is almost inevitable. Human immunodeficiency virus (HIV)/AIDS in sub-Saharan Africa accounts for 72% of global AIDS deaths.⁴ Average life expectancy in this region is just 47 years, when it would have been 62 years without AIDS.⁴ Most of the excess mortality is among young adults aged 15 to 49 years, leaving the country without a skilled workforce, parents, teachers, entrepreneurs, and political leaders. The World Bank estimates that AIDS has reduced gross domestic product nearly 20% in the most affected countries.⁵ AIDS, of course, is only 1 disease in countries experiencing multiple epidemics, starvation and poverty, and regional conflicts.

Countries with extremely poor health become unreliable trading partners without the capacity to develop and export products and natural resources, pay for essential vaccines and medicines, and repay debt. Countries with unhealthy populations require increased financial aid and humanitarian assistance. In short, a foreign policy that seeks to ameliorate health threats in poor countries can benefit the public and private sectors in developed as well as developing countries.

Extremely poor health in other parts of the world can also affect the security of the United States and its allies. Research shows a correlation between health and the effective functioning of government and civil society. In a 1998 report, the

Central Intelligence Agency noted that high infant mortality was a leading predictor of state failure,⁶ and in 2000, the US State Department suggested that AIDS was a national security threat.⁷ States with exceptionally unhealthy populations are often in crisis, fragmented, and governed poorly. In its most extreme form, poor health can contribute to political instability, civil unrest, mass migrations, and human rights abuses. In these states, there is greater opportunity to harbor terrorists or recruit disaffected individuals or groups to join armed struggles. Politically unstable states require heightened diplomacy, create political entanglements, and sometimes provoke military responses.

Diseases of poverty overwhelmingly are concentrated in sub-Saharan Africa, and it is no surprise that many of these social and political problems occur in that region. But much of Africa has weak political, military, and economic power, so it can too easily be ignored. The same cannot be said about the burgeoning health crises emerging in pivotal countries in Eurasia, such as China, India, and Russia.

Eurasia has more than 60% of the world's inhabitants; one of the highest combined gross national products; and at least 4 massive armed forces with nuclear capabilities.⁸ These countries are in the midst of a "second wave" of HIV/AIDS, with prevalence rates increasing 20-fold in less than a decade. Russia's reported infant mortality rate, which is a prime predictor of state instability,⁶ is 3 to 4 times higher than in North America and western Europe. Nearly two thirds of children born in Russia will be unhealthy, and many will have lifelong illness and disability.⁹ Due to extreme health hazards, Eurasia most likely will experience economic, political, and military decline. Political instability in a region with such geostrategic importance will have major international ramifications.

Governments, therefore, have powerful reasons based on narrow, as well as enlightened, self-interest to ameliorate extreme health hazards beyond their borders. To their credit, rich countries, philanthropists, and celebrities have announced breathtaking gifts to poor countries. Developed countries have increased annual global health assistance, from \$2 billion in 1990 to \$12 billion in 2004.¹⁰ The Gates Foundation alone will donate up to \$3 billion per year.¹¹ This development assistance may appear substantial but is modest compared with the annual \$1 trillion spent globally on military expenditures and \$300 billion on agricultural subsidies.¹²

The increase in development assistance, moreover, is largely attributable to extensive resources devoted to a few high-profile problems, such as AIDS, pandemic influenza, and the Asian tsunami. Even factoring in these new investments, most Organisation for Economic Cooperation and Development countries have not come close to fulfilling their pledges to donate 0.7% of gross national income per year.¹³ Developed countries would have to invest an additional \$100 billion by 2015 to close the vast investment gap. The World Health Organization projects that these additional expenditures would save millions of lives every year.¹⁴

Profound Health Inequalities Are Unethical

Perhaps it does not, or should not, matter if global health serves the interests of the richest countries. After all, there are powerful humanitarian reasons to help the world's least healthy people. But ethical arguments have failed to capture the full attention of political leaders and the public.

It is well known that the poor experience extreme hardship, certainly much more than the rich. Unfortunately, this is also true with respect to global health. What is less often known is the degree to which the poor unnecessarily have increased morbidity and mortality. The global burden of disease is shouldered by the poor disproportionately, such that health disparities across continents render a person's likelihood of survival drastically different based on where he or she is born. These inequalities have become so extreme and the resultant effects on the poor so dire that health disparities have become a defining issue of modern society.¹⁵

The current global distribution of disease has led to radically different health outcomes across the globe. Disparities in life expectancy among rich and poor countries are vast. Average life expectancy in Africa is nearly 30 years shorter than in the Americas or Europe. Life expectancy in Zimbabwe or Swaziland is less than half that in Japan,¹⁶ a child born in Angola is 73 times more likely to die in the first few years of life than a child born in Norway,¹⁷ and a woman giving birth in sub-Saharan Africa is 100 times more likely to die in labor than a woman in a rich country. Although life expectancy in the developed world increased throughout the 20th century, it actually decreased in the least developed countries and in transitional states such as Russia. One somber example offers a sense of perspective on the global health gap. In 1 year alone, an estimated 14 million of the poorest people in the world died, although only an estimated 4 million would have died if this population had the same death rate as the global rich.¹⁸

The diseases of poverty are endemic in the world's poorest regions but are barely noticed among the wealthy. Diseases such as elephantiasis, guinea worm, malaria, river blindness, schistosomiasis, and trachoma are common in poor countries but are largely unheard of in rich countries. Beyond morbidity and premature mortality, the diseases of poverty cause physical and mental anguish, such as when a 2-foot-long guinea worm parasite emerges from the genitals, extremities, or torso with excruciating pain; or filarial worms cause disfiguring enlargement of the arms, legs, breasts, and genitals; or river blindness leads to unbearable itching and loss of eyesight.

Human instinct suggests it is unjust for large populations to have such poor prospects for good health and long life simply by happenstance of where they live. Although almost everyone believes it is unfair that the poor live miserable and short lives, there is little consensus about whether there is an ethical, let alone legal, obligation to help the down-trodden. What do wealthier societies owe as a matter of justice to the poor in other parts of the world?¹⁹

Perhaps the strongest claim that health disparities are unethical is based on what can be called a theory of human functioning. Health, among all other forms of disadvantage, is special and foundational, in that its effects on human capacities profoundly impact an individual's opportunities in the world. Health is necessary for much of the joy, creativity, and productivity that a person derives from life. Individuals with physical and mental health recreate, socialize, work, and engage in family and social activities that bring meaning and happiness to their lives. Perhaps not as obvious, health also is essential for the functioning of civil societies. Without minimum levels of health, people cannot fully engage in social interactions, participate in the political process, exercise rights of citizenship, generate wealth, create art, and provide for the common security.

The capability to avoid starvation, preventable morbidity, and early mortality is a quality that enriches human life. Depriving individuals of this capability strips them of their freedom to pursue their lives as they wish.²⁰ Under a theory of human functioning, health deprivations are unethical because they unnecessarily reduce a person's ability to function and the capacity for human agency.

But a theory of human functioning does not answer the more difficult question about who has the corresponding obligation to do something about global inequalities. Even scholars who believe in just distribution of resources frame their claims narrowly and rarely extend them to international obligations of justice.²¹ Their theories of justice are "relational" and apply to a fundamental social structure that people share. States may owe their citizens basic health protection by reason of a social compact. However, positing such a relationship among different countries and regions is much more complex.

Increasingly, the global community is sharing a common social, political, and economic structure. International law has established norms in areas ranging from infectious diseases and tobacco use to access to essential vaccines and medicines.²² This body of law has similarly created a network of international organizations, ranging from the World Health Assembly, World Trade Organization, and World Bank to the Group of Eight (G8) and North Atlantic Treaty Organisation (NATO).²³ Perhaps the international community is moving toward a "global compact on health" in which wealthier countries have an ethical responsibility to serve other countries according to their resources, and poorer countries have expectations to receive help according to their needs.

Political leaders have recognized the world's interconnectedness in matters of disease and health. Consequently, they have made numerous pledges of international development assistance, including substantial commitments to the Millennium Development Goals and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. As mentioned above, many governments also have agreed to spend a certain proportion of their gross national product on foreign assistance. These pledges

appear sincere and very specific. For example, in addition to citing national security, trade, and humanitarian justifications for the President's Emergency Plan for AIDS Relief (PEPFAR), the United States noted that it "has the capacity" to lead an international response to global AIDS, and that "in an age of miraculous medicines," no person should go without treatment.²⁴ In the Gleneagles Agreement to double international aid to Africa by 2010, the G8 expressed a sense of obligation to further African development and achieve the Millennium Development Goals.²⁵

These promises to help others have moral force. Political leaders ought to follow through on their commitments. They appear to be made in good faith, and poor countries rely on the promised assistance for the health and well-being of their populations.

A Tipping Point

Politically and economically powerful countries should care about the world's least healthy people. It may be a matter of national interest, so helping the poor makes everyone safer and more secure. Or, global health assistance simply may be ethically the right thing to do to avert an unfolding humanitarian catastrophe. Although no single argument may be definitive in itself, the cumulative weight of the evidence is now overwhelmingly persuasive. Whatever the reasons, perhaps global society is coming to a tipping point where the status quo is no longer acceptable and it is time to take bold action. Global health, like global climate change, may soon become a matter so important to the world's future that it demands international attention, and no state can escape the responsibility to act.

Financial Disclosures: None reported.

REFERENCES

1. McNabb SJ, Braden CR, Navin TR. DNA fingerprinting of *Mycobacterium tuberculosis*: lessons learned and implications for the future. *Emerg Infect Dis*. 2002; 8(11):1314-1319.
2. Fox DM, Kassalow S. Making health a priority of US foreign policy. *Am J Public Health*. 2001;91(10):1554-1556.
3. Congressional Budget Office. A potential influenza pandemic: possible macroeconomic effects and policy issues. <http://www.cbo.gov/ftpdocs/69xx/doc6946/12-08-BirdFlu.pdf>. Published December 8, 2005. Updated July 27, 2006. Accessed June 11, 2007.
4. World Health Organization. Sub-Saharan Africa: 2006 AIDS epidemic update. http://www.who.int/hiv/mediacentre/04-Sub_Saharan_Africa_2006_EpiUpdate_eng.pdf. Published December 2006. Accessed June 11, 2007.
5. Bloom DE, Canning D. The health and wealth of nations. *Science*. 2000; 287(5456):1207-1209.
6. Esty D, Goldstone J, Gurr T, et al. *State Failure Task Force Report: Phase II Findings*. Washington, DC: Central Intelligence Agency; 1998.
7. News Online BBC. US: AIDS is security threat. <http://news.bbc.co.uk/2/hi/americas/731706.stm>. Published May 1, 2000. Accessed June 11, 2007.
8. Eberstadt N. The future of AIDS. *Foreign Aff*. November/December 2002;81: 2245-2264.
9. Massey SM. Russia's maternal and child health crisis: socio-economic implications and the path forward. http://www.iews.org/pdf/volume1_issue9.pdf. Published December 2002. Accessed June 11, 2007.
10. Schieber G, Fleisher L, Gottret P. Getting real on health financing. *Finance and Development: IMF Quarterly Magazine*. December 2006;43(4). <http://www.imf.org/external/pubs/ft/fandd/2006/12/schieber.htm>. Accessed June 11, 2007.
11. Okie S. Global health: the Gates-Bufferet effect. *N Engl J Med*. 2006;355(11): 1084-1088.
12. Lee K, Walt G, Haines A. The challenge to improve global health: financing the Millennium Development Goals. *JAMA*. 2004;291(21):2636-2638.
13. UN Millennium Project. The costs and benefits of achieving the Millennium Development Goals. *The Overview Report: A Practical Plan to Achieve the Millennium Development Goals*. New York, NY: United Nations Development Programme; 2005. <http://www.unmillenniumproject.org/documents/overviewEng55-65LowRes.pdf>. Accessed June 11, 2007.
14. Labonte R, Schrecker T. Foreign policy matters: a normative view of the G8 and population health. *Bull World Health Organ*. 2007;85(3):185-191.
15. Ruger JP, Kim H-J. Global health inequalities: an international comparison. *J Epidemiol Community Health*. 2006;60(11):928-936.
16. World Health Organization. *World Health Statistics*. Geneva, Switzerland: World Health Organization; 2006.
17. United Nations International Children's Emergency Fund. The state of the world's children. <http://www.unicef.org/sowc00>. Accessed June 11, 2007.
18. Gwatkin DR, Guillot M. *The Burden of Disease Among the Global Poor: Current Situation, Future Trends, and Implications for Strategy*. Washington, DC: World Bank; 2000.
19. Daniels N. Equity and population health: toward a broader bioethics agenda. *Hastings Cent Rep*. 2006;36(4):22-35.
20. Sen A. *Development as Freedom*. New York, NY: Knopf; 1999.
21. Nagel T. The problem of global justice. *Philos Public Aff*. 2005;33(2):113-147.
22. Fidler DP. A globalized theory of public health law. *J Law Med Ethics*. 2002; 30(2):150-161.
23. Taylor AL. Governing the globalization of public health. *J Law Med Ethics*. 2004;32(3):500-508.
24. United States Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003, 22 USC §7601 (2003).
25. G8 Gleneagles Agreement for Africa 2005. Foreign & Commonwealth Office Web site. http://www.fco.gov.uk/Files/kfile/PostG8_Gleneagles_Africa.0.pdf. Accessed June 11, 2007.