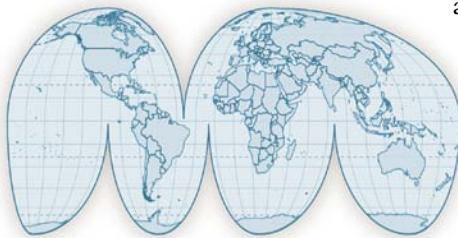


## GLOBAL HEALTH

# An International Service Corps for Health — An Unconventional Prescription for Diplomacy

Vanessa Bradford Kerry, M.D., Sara Auld, M.D., and Paul Farmer, M.D., Ph.D.

At first glance, medicine may seem unrelated to foreign policy, but in reality it is an unappreciated partner of diplomacy. In many parts of the world, poverty, inequity based on ethnicity or sex, shoddy public infrastructure, and environmental degradation have resulted in poor health as well as political and social instability. Poor health, in



turn, fuels social vulnerabilities and discord, as illness diminishes productivity and disrupts family and social structures. The United States, a major funder of global health initiatives, has an opportunity to change the way it helps to tackle these challenges by investing in local health systems, equitable economic growth, and sustainable development. To break the cycle of poverty and disease, we believe that the United States should create the equivalent of a Marshall Plan for health — a program that would train and fund both local providers and U.S. health care professionals to work, teach, learn, and enhance the health care workforce and infrastructure in low-income countries. We envision this program as an International Health Service Corps (IHSC), through which health care workers would engage in medical-service and

capacity-building partnerships overseas in exchange for health-related graduate school scholarships and forgiveness of student loans. This effort should be targeted to health care providers in the United States and partner countries who are committed to serving the poor.

Although medicine's immediate aim is to combat illness and alleviate suffering, health care is also a tool for addressing the economic, social, and cultural problems associated with poor health. There is broad consensus that improvements in health can reduce poverty and contribute to long-term economic growth and development. The 2001 Commission on Macroeconomics and Health calculated that a 10% improvement in life expectancy translates into a 0.3% increase in economic growth. Interventions for human immunodeficiency virus infection, tuberculosis, and vaccine-preventable illnesses have all improved the condition of otherwise poor populations and demonstrated that just as disease transcends borders and can adversely affect regional economies, sound investments in health promotion can strengthen economies.<sup>1</sup>

Instituting such interventions, however, is challenging. One third of the world's population lives on less than \$2 a day; approximately 4.6 million people die annually from AIDS, tuberculosis, or malaria; and 6 million children die from preventable causes before reaching 5 years of

age. In addition, chronic conditions such as coronary disease and cancer are increasingly contributing to global mortality.<sup>2</sup> The health care systems of developing countries remain ill equipped to face these challenges. Lack of infrastructure and a skilled workforce poses the greatest impediment to social and economic development and health care delivery in resource-constrained settings. Many countries simply do not have the financial or human resources to train health care professionals, and those that do are losing them to better-off countries through "brain drain." Africa bears 24% of the global disease burden but hosts only 3% of the global health care workforce and is responsible for less than 1% of world health care expenditures.<sup>3</sup>

A number of U.S. academic medical centers are aiming to help address this gap and provide personnel and curricula to channel the growing interest in global health activities. As U.S. medical students and residents increasingly participate in international rotations, academic medical centers must partner with foreign institutions to provide structure for global health care delivery, research, and training.<sup>4</sup> Most programs recognize that there is a need both to improve current services and to train the next generation of in-country leaders and educators; they therefore teach U.S. staff shoulder to shoulder with in-country providers who understand the local context.

Yet programs that link U.S. academic medical centers with countries in need cannot grow beyond a pilot phase without substantial investments. Currently, these efforts are supported by the discretionary funds of academic medical centers, grant programs, and private philanthropy. The bulk of these funds is dedicated to supporting medical students, residents, and fellows during training. Little is allocated to the support of nursing or other allied health professions, in-country programs, or long-term placement, all of which can foster a deeper understanding of implementation challenges and the needs of local populations.

Outside of a handful of academic programs, the options are limited. For health professionals graduating from training, opportunities to work abroad must be weighed against financial obligations and compounding debt. Moreover, most such opportunities are offered by humanitarian relief organizations, which pay minimally and tend to prioritize immediate needs over longer-term investments. Relevant grants are few, despite the acute need of populations and the zeal of medical graduates. As a result, individual health care professionals and trainees wishing to work abroad must often pay their own way, and benefits to in-country partners are few.

As we see it, the IHSC could be designed to address some of these shortcomings, by investing in partnerships and careers dedicated to improving global health equity. The program could offer loan forgiveness or scholarships to health care professionals who are committed to working abroad. For each year of global health

service, participants could earn loan repayment as well as a salary. The corps could include not only physicians but also nurses, physical therapists, and experts in health technology and bioengineering who could help to address the diverse public health needs in resource-poor settings.

The IHSC's goal would be to go beyond that of filling a human-resource void to focus on infrastructure development, knowledge transfer, and capacity building. To encourage such investments, grantees might be integrated into established international efforts. Some corps members would participate in the overseas operations of American universities, whereas others might work with credible, established nongovernmental organizations; the numbers doing so would be augmented by the financial incentive to work abroad. Alternatively, corps members could collaborate with programs such as the U.S. Agency for International Development or with the military to build the infrastructure and skills — often demolished by years of conflict — that are essential to recovering stability and security for populations devastated by poverty, violence, and social disruption.

Cuba provides an imperfect but potentially informative example of the dividends of “exporting” doctors. Having put key principles into practice domestically, particularly the principle that health care is a right and is essential to economic and social development — albeit with unclear results for its own population's health — Cuba extended this mandate to international public service. The country hoped to focus on bridging gaps in the health care workforce and in-

vested in training and educating local professionals in developing countries. The impact has been noteworthy: between 1999 and 2004, Cuban foreign-service workers increased doctor visits in resource-poor communities by 36.7 million, provided health promotion outreach for millions of underserved people, and taught 900,000 medical education courses to local personnel.<sup>5</sup>

The effect that an IHSC could have in the wake of disasters such as the recent Haitian earthquake is obvious: a cohort of trained professionals familiar with health care delivery in challenging, resource-strained circumstances could assist with relief and long-term recovery and rebuilding efforts. Even more important, however, is the effect their presence could have in areas with a long history of social and economic instability, such as Haiti before the earthquake. The IHSC would encourage the long-term placement of health care professionals with the aim of reconstructing primary care, health education, and the basic services that are essential to a country's growth and development. The goal would be not only to expand the number of health care service providers but to establish networks of such professionals and foster longer-term commitments and meaningful investments in the training of local leaders, all with an eye toward sustainability. The corps would provide opportunities for health care professionals to work in structured, mentored situations to help put in place the underpinnings of improvement in health care delivery, including economic development, eradication of poverty, access to education, infrastructure, and a safe environment.

These goals are achievable. A well-designed structure for international cooperation will ensure that they are achieved as quickly as possible.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the Department of Global Health and Social Medicine, Harvard Medical School (V.B.K., P.F.); the Department of Medicine, Massachusetts General Hospital (V.B.K.,

S.A.); and the Department of Global Health and Social Equity, Brigham and Women's Hospital (P.F.) — all in Boston.

1. Woodward D, Smith RD. Global public goods and health: concepts and issues. In: Smith RD, Beaglehole R, Woodward D, Dragler N, eds. *Global public goods for health: health economic and public health perspectives*. Oxford, England: Oxford University Press, 2003:3-29.
2. Farmer P, Frenk J, Knaul F, et al. Expansion of cancer care and control in low-income and middle-income countries: a call to action. *Lancet* 2010. (Accessed September 2,

2010, at [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)61152-X/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)61152-X/abstract).)

3. Working together for health: the world health report 2006. Geneva: World Health Organization, 2006. (Accessed September 2, 2010, at <http://www.who.int/whr/2006/en>.)
  4. Farmer PE, Furin JJ, Katz JT. Global health equity. *Lancet* 2004;363:1832.
  5. Cuba & global health. Decatur, GA: Medical Education Cooperation with Cuba, 2010. (Accessed September 2, 2010, at <http://www.medicc.org/ns/index.php?s=12&p=0>.)
- Copyright © 2010 Massachusetts Medical Society.