

SPECIAL ARTICLE

The Future Role of the United States in Global Health

Emphasis on Cardiovascular Disease

Valentin Fuster, MD, PhD,^{a,b} Jendayi Frazer, PhD,^c Megan Snair, MPH,^d Rajesh Vedanthan, MD, MPH,^a Victor Dzau, MD,^e on behalf of the Committee on Global Health and the Future of the United States: A Report of the National Academies of Sciences, Engineering and Medicine

ABSTRACT

U.S. global health investment has focused on detection, treatment, and eradication of infectious diseases such as tuberculosis, malaria, and human immunodeficiency virus/acquired immunodeficiency syndrome, with significant results. Although efforts should be maintained and expanded to provide ongoing therapy for chronic infectious disease, there is a pressing need to meet the challenge of noncommunicable diseases, which constitute the highest burden of diseases globally. A Committee of the National Academies of Sciences, Engineering, and Medicine has made 14 recommendations that require ongoing commitments to eradication of infectious disease and increase the emphasis on chronic diseases such as cardiovascular disease. These include improving early detection and treatment, mitigating disease risk factors, shifting global health infrastructure to include management of cardiovascular disease, developing global partners and private-public ventures to meet infrastructure and funding challenges, streamlining medical product development and supply, increasing research and development capacity, and addressing gaps in global political and institutional leadership to meet the shifting challenge. (J Am Coll Cardiol 2017;■:■-■) © 2017 Published by Elsevier on behalf of the American College of Cardiology Foundation.

Global health is not only measured in the number of lives saved; it is linked to economic productivity and growth worldwide. Benefits from investment in global health can exceed costs by a factor between 9 and 20 for low- and middle-income countries (LMICs), respectively (1,2). Preventing, detecting, and responding to infectious disease (ID) outbreaks can save an estimated \$15 billion annually (3).

The United States has long been a leader in global health, through programs such as the President's Emergency Plan for AIDS Relief (PEPFAR); the President's Malaria Initiative; the Global Fund to Fight AIDS, Tuberculosis and Malaria; Gavi, the Vaccine

Alliance; and the more recent Global Health Security Agenda (GHSA). A commitment to global health is needed, and the new U.S. administration faces the challenge of ensuring that gains in global health are sustained and poised for further growth.

Foreign assistance is not "charity," but is an investment in the health of the recipient country, the United States, and the world at large. Although the burden of ID, for example, falls predominantly in LMICs, these same diseases represent threats to all countries, including the United States. Growing international travel and trade, interconnectedness, and interdependency of countries heighten a variety of health threats, such as avian influenza, Ebola, and

From the ^aIcahn School of Medicine at Mount Sinai, Zena and Michael A. Wiener Cardiovascular Institute, New York, New York; ^bCentro Nacional de Investigaciones Cardiovasculares Carlos III, Madrid, Spain; ^cCouncil on Foreign Relations, Studies Department, Washington, DC; ^dNational Academies of Sciences, Engineering, and Medicine, Board on Global Health, Washington, DC; and the ^eNational Academy of Medicine, Office of the President, Washington, DC. The authors have reported that they have no relationships relevant to the contents of this paper to disclose. Deepak L. Bhatt, MD, MPH, served as Guest Editor for this paper.

Manuscript received September 13, 2017; revised manuscript received October 31, 2017, accepted November 2, 2017.



**ABBREVIATIONS
AND ACRONYMS****AMPATH** = Academic Model
Providing Access to Healthcare**CVD** = cardiovascular disease**GDP** = gross domestic product**ID** = infectious disease**LMIC** = low- and middle-
income countries**NCD** = noncommunicable
disease**PRV** = Priority Review Voucher**R&D** = research and
development**RBF** = results-based financing**TB** = tuberculosis

Zika. A moderate influenza pandemic would result in an estimated 2 million excess deaths. The 2003 SARS outbreak cost the world \$40 to \$54 billion. In 2014, the United States committed \$5.4 billion in response to the Ebola outbreak.

As a result of improvements in sanitation and ID prevention, the burden of disease in LMICs is now shifting from IDs to non-communicable diseases (NCDs). Cardiovascular disease (CVD) and other NCDs, such as cancer, threaten the gains in life expectancy, productivity, and quality of life that have been achieved in LMICs. Brazil, Russia, India, and China currently lose more than 20 million productive life-years annually to NCDs, and that number is projected to increase 65% by 2030. The costs of disability, unplanned work absences, and accidents can exceed those of treatment of the underlying condition or injury by 400% (4). Research also shows that investors are less likely to enter markets with heavy disease burden (5,6). Human capital clearly contributes to economic growth, and thus, having a healthy population is critical for economic prosperity, which can then help create more stable partners and increased security for the United States.

The Institute of Medicine (IOM) (now renamed the National Academy of Medicine) Board on International Health was commissioned 20 years ago to report on addressing U.S. commitment to global human health (7). Their report demonstrated appreciation for the growing global interconnections, and the interdependency of the United States with other countries in health matters. Twelve years later, an independent committee appointed by the IOM Board on Global Health prepared a new report for the incoming Obama administration. *The U.S. Commitment to Global Health: Recommendations for the New Administration* (2009) called upon the U.S. research sector to collaborate globally, establish information-sharing networks, and support academia and health systems in LMICs (8). They recommended improving coordination across the U.S. government. U.S. coordination efforts, such as Feed the Future, PEPFAR, the President's Malaria Initiative, and GHSA, have consequently been successful (3).

As a follow-up to the first 2 reports, the National Academies of Sciences, Engineering, and Medicine was charged with identifying current global health priorities and making recommendations to the U.S. government and other stakeholders to increase responsiveness, coordination, and efficiency in

addressing global health (3). Based on a rigorous and evidence-based consensus process, the Committee settled on 14 recommendations that, if implemented, would deliver a strong global health strategy and maintain the role of the United States as a leader in global health. A detailed description of the Committee's approach and meeting agendas, as well as full reference lists, can be found in the Committee's full report (3).

An overview of the Committee's findings is represented in the **Central Illustration (3,9)**. The Committee identified 4 priority areas for action:

1. Achieving global security;
2. Maintaining a sustained response to the continuous threats of communicable diseases;
3. Saving and improving the lives of women and children; and
4. Promoting cardiovascular health and preventing cancer.

They also identified 3 additional cross-cutting areas to maximize the returns on investment, achieve better health outcomes and use funding more effectively:

1. Catalyze innovation through accelerated development of medical products and integrated digital health infrastructure;
2. Employ more nimble and flexible financing mechanisms to leverage new partners and funders in global health; and
3. Maintain U.S. status and influence as a world leader in global health while adhering to evidence-based science and economics, measurement, and accountability.

The Committee's full recommendations are summarized in **Figure 1 (3,9)**.

This paper presents the Committee's findings, recommendations, and rationale regarding a growing priority area in global health—detection and management of CVD—together with the various cross-cutting measures that can potentially maximize returns on investments in CVD management, achieve better outcomes, and use funding more effectively to achieve better cardiovascular global health:

1. Global cardiovascular health;
2. Screening for early detection and treatment of CVD;
3. Catalyzing innovation;
 - Accelerating drug development;
 - Research and development (R&D) capacity;
 - Digital health;
4. Smart financing strategies; and
5. Global health leadership.

Download English Version:

<https://daneshyari.com/en/article/8666800>

Download Persian Version:

<https://daneshyari.com/article/8666800>

[Daneshyari.com](https://daneshyari.com)