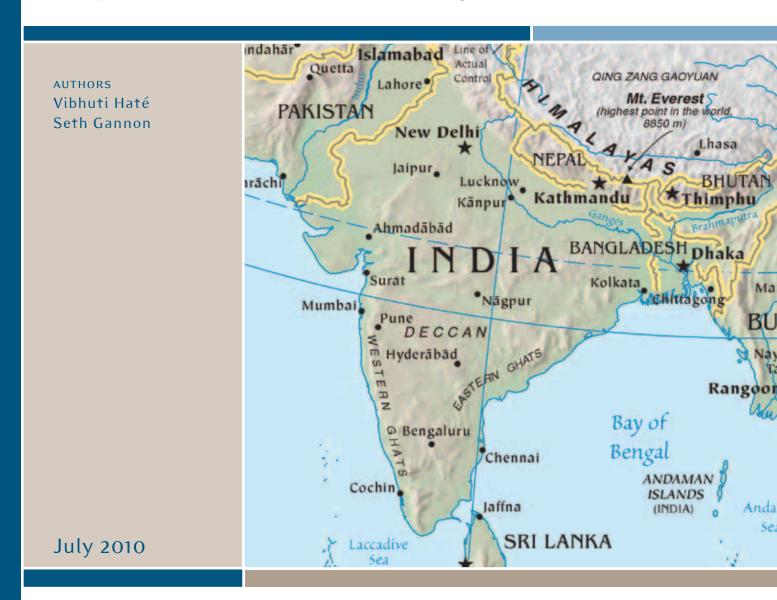
# Public Health in South Asia

A Report of the CSIS Global Health Policy Center



# Public Health in South Asia

A Report of the CSIS Global Health Policy Center

autнors Vibhuti Haté Seth Gannon

July 2010



#### **About CSIS**

In an era of ever-changing global opportunities and challenges, the Center for Strategic and International Studies (CSIS) provides strategic insights and practical policy solutions to decisionmakers. CSIS conducts research and analysis and develops policy initiatives that look into the future and anticipate change.

Founded by David M. Abshire and Admiral Arleigh Burke at the height of the Cold War, CSIS was dedicated to the simple but urgent goal of finding ways for America to survive as a nation and prosper as a people. Since 1962, CSIS has grown to become one of the world's preeminent public policy institutions.

Today, CSIS is a bipartisan, nonprofit organization headquartered in Washington, DC. More than 220 full-time staff and a large network of affiliated scholars focus their expertise on defense and security; on the world's regions and the unique challenges inherent to them; and on the issues that know no boundary in an increasingly connected world.

Former U.S. senator Sam Nunn became chairman of the CSIS Board of Trustees in 1999, and John J. Hamre has led CSIS as its president and chief executive officer since 2000.

CSIS does not take specific policy positions; accordingly, all views expressed herein should be understood to be solely those of the author(s).

© 2010 by the Center for Strategic and International Studies. All rights reserved.

Cover image: CIA.

Center for Strategic and International Studies 1800 K Street, NW, Washington, DC 20006

Tel: (202) 775-3119 Fax: (202) 775-3199 Web: www.csis.org



Vibhuti Haté and Seth Gannon<sup>1</sup>

### **Overview**

South Asia, a region of strategic importance, faces public health challenges on a demographic and geographic scale unmatched in the world. India, Pakistan, Bangladesh, Nepal, and Sri Lanka are home to nearly one-fifth of the world's population.<sup>2</sup> Even more dramatic, however, these countries are home to two-thirds of the world's population living on less than \$1 a day. South Asia's low life expectancy and high rates of malnutrition, infant mortality, and incidence of TB and HIV/AIDS are second only to those of sub-Saharan Africa. The region faces not only these and related health problems—poor sanitation, poor maternal health, poor access to healthcare services, and widespread malaria—but also an emerging chronic disease epidemic. Despite the magnitude of these interrelated challenges, these five countries on average spend less than 3.2 percent of their gross domestic products on health, compared to a global average of 8.2 percent. They constitute the world's only region to see its health expenditures fall from 2000 to 2006.<sup>3</sup>

Gains in the region's health in recent decades have been distributed unevenly, both within countries and across them. Rural areas do worse than urban areas in life expectancy, immunization rates, maternal health, malaria incidence, and access to almost all health services. Data show a similar discrepancy in health outcomes between the literate and illiterate, particularly in India. The same differences are seen across entire countries. Life expectancy in Sri Lanka exceeds that throughout the rest of the region by about eight years.<sup>4</sup> As the region's notable exception, Sri Lanka provides a useful example of health success, despite the island country's 26-year civil war.

Running parallel to South Asia's persistent health problems has been its growing strategic importance to U.S. foreign policy, amplified after 9/11. India, as it undergoes dramatic growth in

<sup>&</sup>lt;sup>1</sup> Vibhuti Haté is a research associate with the CSIS South Asia Program. Seth Gannon is a research assistant with the CSIS Global Health Policy Center.

<sup>&</sup>lt;sup>2</sup> While definitions of South Asia differ, this report will look at these five countries, the most populous original members of the South Asian Association for Regional Cooperation (SAARC).

<sup>&</sup>lt;sup>3</sup> World Health Organization (WHO), "Global Health Observatory," 2009, http://apps.who.int/ghodata/.

<sup>&</sup>lt;sup>4</sup> Ibid.

its economy and population, has come since the Cold War to see the United States as its most important international partner. Convergent U.S. and Indian interests in Asia—expanding trade, stabilizing energy markets, showcasing democracy, and maintaining peace and prosperity through a balance of power—strengthened U.S.-India relations over the course of President George W. Bush's administration, culminating in a 2008 decision to share U.S. civilian nuclear technology with India. President Barack Obama reaffirmed the importance of the relationship soon after his arrival in the White House, inviting Prime Minister Manmohan Singh of India as the guest of honor to the first state dinner of his administration.

India's strategic rival, Pakistan, has held a similarly important position in U.S. foreign policy over the last decade, but for very different reasons. Its unregulated border with Afghanistan and the potential vulnerability of its nuclear arsenal have put Pakistan at the center of the U.S. campaign against al Qaeda and the Taliban. While the challenges that characterize India are those of growth, population, and scale, Pakistan faces crises in state authority, priorities, and resources.

From the U.S. foreign policy perspective, the other countries in the region present chronic and long-term policy challenges, in which health figures importantly in Bangladesh and Nepal. Bangladesh is one of the most densely populated countries in the world, which makes the provision of health services particularly difficult, especially to mothers and children. Nepal sits between India and China—not only the world's two most populous countries, but also two of the most geopolitically important. As of this report's publication, Nepal is the most recent country in the world to become a republic, and its young government faces tremendous health challenges across its difficult geography. Sri Lanka is a high performer in the health field; the challenge there is to ensure that Sri Lanka's remarkable record on human development is not undermined by a recurrence of its ethnic conflict.

# Health in South Asia: Familiar and Emerging Challenges

With approximately 1.6 billion people inhabiting 1.7 million square miles of territory, a conspicuous challenge to health in South Asia is that of scale. The sustainable provision of accessible, high-quality healthcare to such a population over such an area demands both substantial resources and efficient administration of their use. The region has seen significant growth in health expenditure on a per capita basis, even as health spending has declined as a share of gross domestic product (GDP). From 2004 to 2008, annual per capita health spending grew from \$11 to \$17 in Bangladesh; from \$27 to \$43 in India; from \$17 to \$20 in Nepal; from \$17 to \$24 in Pakistan; and from \$44 to \$81 in Sri Lanka. These increases are impressive, but using these funds efficiently and effectively remains a challenge. These averages also disguise the dramatic disparities that leave many people without adequate resources.

2 | PUBLIC HEALTH IN SOUTH ASIA

-

<sup>&</sup>lt;sup>5</sup> WHO, "National health accounts," 2010, http://www.who.int/nha/country/en/index.html.

The region's health outcomes have improved, but remain unacceptably poor in many areas. From 2000 to 2007, all five countries saw progress in life expectancy, infant survival, and childhood immunization. Of the 27 million unimmunized children in the world, however, approximately 10 million live in India alone. Diarrhea, acute respiratory infections, and diseases preventable by vaccines make childhood mortality a continuing public health challenge, particularly in Pakistan, where 90 of every 1,000 children will die by age five. Improving immunization coverage requires expanding basic health services in rural areas and ensuring a resilient and inexpensive supply of vaccines.

The absence of basic health systems throughout the region has had disturbing ramifications for maternal health as well. In South Asia, shortfalls in health services, compounded by systemic poverty and malnutrition, result in one of the highest maternal mortality rates in the world. The problem is not distributed evenly. While Sri Lanka sees 58 maternal deaths for every 100,000 births, Nepal sees 830. In India, one confronts the sheer challenge of scale. Approximately 185,000 women in the South Asian region die during childbirth every year. With a population that exceeds 1.1 billion people, India accounts for 136,000 of those deaths, even though skilled professionals attend nearly 50 percent of births. Nepal and Pakistan have skilled professionals at only 19 percent and 29 percent of births, respectively; that gap can only be covered by a major expansion of health workers to provide services before, during, and after childbirth. Unattended home delivery is both a cultural tradition and a current necessity in many rural parts of Bangladesh, India, Nepal, and Pakistan. Furthermore, problems for maternal health start well in advance of birth. Although 78 percent of expectant mothers throughout the developing world receive at least one antenatal checkup, that number falls to 68 percent in South Asia.

#### HIV/AIDS, Tuberculosis, and Malaria

HIV/AIDS remains a major health challenge on the Asian subcontinent. The character of the epidemic is different from country to country, although in each it is geographically and demographically concentrated. In India, it centers on heterosexual transmission, primarily via female sex workers and migrant truck drivers. The National AIDS Control Organization (NACO), the agency primarily responsible for combating the disease, estimates that nearly 2.3

<sup>&</sup>lt;sup>6</sup> WHO, "Global Health Observatory."

<sup>&</sup>lt;sup>7</sup> WHO, "Implemented GIVS activities," May 12 2006, http://www.who.int/immunization/givs/activities/en/.

<sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> WHO, "Global Health Observatory."

<sup>10</sup> Ibid

WHO, "Improving Maternal, Newborn, and Child Health in the South-East Asia Region: India," http://www.searo.who.int/LinkFiles/Improving\_maternal\_newborn\_and\_child\_health\_india.pdf.
 UNICEF, "Childinfo: Statistics by Area/Maternal Health," November 2009, http://www.childinfo.org/antenatal\_care.html.

million HIV-positive adults live in India, a prevalence rate of 0.29 percent. <sup>13</sup> By those estimates, India's epidemic has fallen well short of the predictions of the 2002 National Intelligence Council report on AIDS, which foresaw 20 to 25 million HIV/AIDS cases in India by 2010—"the highest estimate for any country." <sup>14</sup> Pakistan's adult prevalence rate is 0.1 percent but increasing. <sup>15</sup> Its epidemic lies largely with injection drug users, among whom prevalence roughly doubled from 10.8 percent in 2005 to 21 percent in 2008. <sup>16</sup> Although its disease surveillance system is patchy and imprecise, the Nepalese government estimates that a relatively alarming 0.5 percent of its population lives with HIV, representing a sharp increase, a near tripling, from 1997 to 2005. <sup>17</sup> Heavy patterns of migration and sex trafficking, as well as low social awareness of HIV/AIDS, have produced Nepal's rampant epidemic among female sex workers, injection drug users, and mobile populations.

India has been by far the most successful and energetic in the region in fighting the epidemic. In cooperation with organizations like the U.S. Agency for International Development (USAID) and the Bill & Melinda Gates Foundation (BMGF), NACO has worked to improve surveillance, increase the number of infected people on antiretroviral treatment, and scale up prevention programs. Tamil Nadu, the state in which the epidemic was first identified, has seen an impressive reduction in infection rate. While changes in measurement practices makes trends elsewhere hard to determine with confidence, the same may be true in Andhra Pradesh, another high prevalence state. Health agencies in Pakistan and Nepal have not undertaken similar programs; international health organizations and nongovernmental organizations (NGOs) have been responsible for almost all HIV/AIDS prevention and treatment programs in those countries.

As in many parts of the world, the HIV/AIDS epidemic in South Asia has contributed to a resurgence of tuberculosis (TB) morbidity and mortality. TB coinfection is the region's leading killer of HIV-positive people, who have accounted for a growing share of TB infections over the last decade. India accounts for more of the global burden of TB than any other country. B Directly observed treatment strategy (DOTS)—the most effective known response to TB—is now available in all five countries, but the region has seen cases of multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB). Although determining the true reach of MDR-TB and

 $<sup>^{\</sup>rm 13}$  Department of AIDS Control, NACO, Annual Report, 2009–10 (New Delhi: NACO, 2010), http://www.nacoonline.org/upload/AR%202009-10/NACO\_AR\_English%20corrected.pdf.

<sup>&</sup>lt;sup>14</sup> National Intelligence Council, "The Next Wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India, and China," September 2002, http://www.fas.org/irp/nic/hiv-aids.html.

<sup>&</sup>lt;sup>15</sup> Population Reference Bureau, "HIV/AIDS Among Adult Population, Ages 15–49, 2007/2008 (%)," 2009, http://www.prb.org/Datafinder/Topic/Bar.aspx?sort=v&order=d&variable=125.

<sup>&</sup>lt;sup>16</sup> Syeda Samra Iqbal Jaferi, Muhammad Ilyas, and Muhammad Idrees, "AIDS crisis in Pakistan," *Journal of General and Molecular Virology* 1, no. 3 (October 2009): 33–34.

<sup>&</sup>lt;sup>17</sup> Population Reference Bureau, "HIV/AIDS Among Adult Population."

<sup>&</sup>lt;sup>18</sup> Peter Donald and Paul Van Helden, "The Global Burden of Tuberculosis—Combating Drug Resistance in Difficult Times," *New England Journal of Medicine* 360, no. 23 (June 4, 2009): 2393–2395.

XDR-TB requires further surveillance, TB programs must ensure the completion of drug regimens to prevent resistance, swiftly diagnose and fully treat patients with MDR-TB or XDR-TB, and integrate HIV and TB prevention and research to slow the spread of drug-resistant TB among the most vulnerable population. Historically, TB programs on the subcontinent have not been integrated with HIV/AIDS programs.

The region's antimalaria programs have shown considerable progress and have reduced the reported incidence of the disease by approximately 25 percent in 10 years, thanks largely to greater commitments of national funds. 19 Despite these gains, malaria remains a powerful killer in South Asia. Although India's National Anti-Malaria Program has significantly reduced the number of related deaths, challenges related to migration, environmental degradation, widespread drug resistance, and decreasing resources make the fight against malaria an urgent one. Pakistan faces an intransigent malaria epidemic, due in large part to monsoon rains, vast irrigation networks, and weak governance.<sup>20</sup> Poor health systems, too few trained staff, low levels of sanitation, and inadequate coordination at every level of government make political and financial leadership paramount, and Pakistan has provided too little of each. Although Nepal has cut its reported malaria cases nearly in half since 2000, over 80 percent of its population remained at risk of infection in 2008.<sup>21</sup> Insufficient health systems at every level—funding, staff, infrastructure, diagnostic and treatment capacity—facilitate continued endemic malaria in the particularly vulnerable areas along Nepal's border with India. Similarly susceptible are the hilly, forested regions of Bangladesh, which see regular epidemics despite that country's bed net distribution and other cost-effective strategies. The retirement of Bangladesh's most experienced generation of malaria experts, along with the high cost of pesticides in the wake of a national ban on DDT, has constrained progress over the last decade.<sup>22</sup> Environmental changes due to worsening climate change also have the potential to undo the region's malaria progress.

#### Noncommunicable Disease

Noncommunicable diseases pose an even larger health challenge. Cardiovascular disease, respiratory disease, digestive diseases, cancer, and diabetes already account for over 50 percent of deaths in these five countries.<sup>23</sup> Consistent with the size of its population, India is the site of more than 80 percent of the region's chronic disease deaths. In 1990, noncommunicable disease was

<sup>&</sup>lt;sup>19</sup> WHO Regional Office for South-East Asia, "Malaria Situation in SEAR Countries: Bangladesh," 2009, http://www.searo.who.int/en/Section10/Section21/Section340\_4015.htm.

<sup>&</sup>lt;sup>20</sup> WHO Regional Office for the Eastern Mediterranean, "Epidemiological situation: Country profiles: Pakistan," http://www.emro.who.int/rbm/CountryProfiles-pak.htm.

 $<sup>^{21}</sup>$  WHO Regional Office for South-East Asia, "Malaria Situation in SEAR Countries: Bangladesh."  $^{22}$  Ibid

<sup>&</sup>lt;sup>23</sup> The most recent data available from WHO (2005 for India and Pakistan and 2002 for Bangladesh, Nepal, and Sri Lanka) ascribe approximately 6,755,000 of 13,242,000 annual deaths to noncommunicable disease. See WHO, "Region and county specific information sheets: Impact of chronic disease in countries," http://www.who.int/chp/chronic\_disease\_report/media/impact/en/index.html.

responsible for 40 percent of deaths in India. By 2005, that number had risen to 53 percent. Over 60 million people will die of a chronic disease in India in the next 10 years. India's diabetes caseload alone skyrocketed from 19.4 million people affected in 1995 to 32 million in 2003. India could see a caseload as high as 80 million people by 2030. A Only about 7 million people suffer from diabetes in Pakistan—still more than enough to give the country one of the world's 10 worst diabetes caseloads.

Noncommunicable diseases place substantial drag on the regional economy and poverty alleviation efforts. The World Health Organization (WHO) estimates that stroke, diabetes, and cardiovascular disease cost India \$8.7 billion and Pakistan \$1.2 billion in 2005. <sup>26</sup> Partial but accurate explanations for South Asia's chronic disease burden include dietary patterns, inactive lifestyles, socioeconomic obstacles, insufficient health facilities, and a lack of good information regarding chronic disease risk factors. Tobacco use has also increased substantially in the region over the last decade. Managing South Asia's surge in chronic diseases will require determined, strategic, and well-resourced efforts from the region's governments and their partners, including the United States.

#### Malnutrition

Malnutrition is a more historically familiar but hardly less difficult enemy of South Asian well-being. The percentage of people in the region who are malnourished fell from about 25 percent in 1990 to about 21 percent in 2005 (increasing only in Pakistan), and the number of malnourished people fell in Sri Lanka and Bangladesh and held steady in Nepal over the same time period. Rapid population growth in India and Pakistan, however, has outpaced these proportional and national gains. The number of malnourished people in the region as a whole rose from 283 million in 1990 to 314 million in 2005. Again, by the sheer size of its population, the balance of the problem lies in India, home to more severely malnourished people than the entirety of sub-Saharan Africa.<sup>27</sup> Agricultural disruption due to climate change may deepen this problem in the coming decades.

Women and children are particularly vulnerable. A shortfall in micronutrients—a phenomenon even more common in South Asia than the simple unavailability of food—often results in stillbirth or stunted development of the brain. Over 20 percent of children less than five years of

 <sup>&</sup>lt;sup>24</sup> V. Mohan, Z. Madan, R. Jha, R. Deepa, and R Pradeep, "Diabetes: Social and Economic Perspectives in the New Millennium," *International Journal of Diabetes in Developing Countries* 24, no. 2 (2004): 29–35.
 <sup>25</sup> "WHO ranks Pakistan 7th on diabetes prevalence list," *The Nation* (Karachi), November 15, 2008, http://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Regional/Karachi/15-Nov-2008/WHO-ranks-Pakistan-7th-on-diabetes-prevalence-list.
 <sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> Food and Agriculture Organization (FAO), "Monitoring progress by country 2004–2006," http://www.fao.org/economic/ess/food-security-statistics/monitoring-progress-by-country-2004-2006/en/.

age in every country in the region are underweight.<sup>28</sup> In part, the problem is cultural: discriminatory attitudes still prevalent in some areas leave women with insufficient access to food, even when they are pregnant.

Policymakers in South Asia have paid inadequate attention to the malnutrition crisis and its complex, systemic causes. An effective, sustainable approach will require medical, economic, and agricultural solutions, brought to scale across the region. Given the magnitude of such an undertaking and the reality of limited resources, success calls for high-level political leadership on agricultural productivity and poverty alleviation.

#### Sanitation and Hygiene

In recent years, South Asia has seen considerably improved access to drinking water, but its sanitation situation remains desperate.<sup>29</sup> Seventy-four percent of the population of South Asia has no access to improved sanitation facilities—defined as any facilities that hygienically separate human excreta from human contact—compared to 29 percent of the global population.<sup>30</sup> Over 40 percent of South Asia's population still defecates in the open. That number is down from 66 percent in 1990 but still represents far more open defecation than any other region in the world.<sup>31</sup> Open defecation has long been the norm, and understanding of the links between poor hygiene and waterborne disease remains low in many areas. This sanitation situation carries grave consequences. With 27 percent of the world's children under age five, South Asia has 29 percent of the world's under-five deaths from diarrhea. The region claims three of the seven countries with the greatest numbers of children dying from diarrhea. India tops the list with 386,000 deaths annually, Pakistan ranks sixth with 53,300, and Bangladesh seventh with 50,800.<sup>32</sup>

### Health Inequality in South Asia: Uneven Resources, Uneven Outcomes

Education, class, geography, and urban or rural residence have a profound influence on health services and outcomes. The average life expectancy in the Indian state of Kerala, with a literacy rate over 90 percent, is over 70 years, compared to approximately 55 years in less-educated Madhya Pradesh.<sup>33</sup> Throughout South Asia, women who have completed secondary education are

<sup>29</sup> WHO and UNICEF, "A Snapshot of Sanitation in SACOSAN Countries," November 2008, http://www.unicef.org/rosa/ROSA SACOSAN final ROSA SACOSAN snapshot.pdf.

<sup>&</sup>lt;sup>28</sup> Population Reference Bureau, "Underweight Children Age <5 (%)," http://www.prb.org/Datafinder/Topic/Bar.aspx?sort=v&order=d&variable=1.

<sup>&</sup>lt;sup>30</sup> This figure is for the broader Millennium Development Goals Southern Asia region. See UNICEF and WHO, *Progress on Sanitation and Drinking Water: 2010 Update* (Geneva: WHO and UNICEF, 2010), http://www.who.int/water\_sanitation\_health/publications/9789241563956/en/index.html.
<sup>31</sup> Ibid.

UNICEF and WHO, Diarrhoea: Why Children Are Still Dying and What Can Be Done (New York: UNICEF and WHO, 2009), http://whqlibdoc.who.int/publications/2009/9789241598415\_eng.pdf.
 See Nachammai Raman, "How almost everyone in Kerala learned to read," Christian Science Monitor, May 17, 2005, http://www.csmonitor.com/2005/0517/p12s01-legn.html; National Informatics Center,

two to four times more likely to solicit and receive antenatal care.<sup>34</sup> The richest fifth of India's population has a 64 percent immunization rate, compared to 21 percent for the poorest fifth. Even more dramatically, 60 percent of the richest women in India have knowledge of the sexual transmission of HIV/AIDS, knowledge that only 5 percent of their poorest counterparts share.<sup>35</sup>

Similar disparities exist between South Asia's urban and rural populations. Skilled health personnel attend 24 percent more urban births than rural births in Bangladesh, 36 percent more in India, 33 percent more in Nepal, and 30 percent more in Pakistan. While 72 percent of one-year-old children in Indian cities are vaccinated against measles, only 54 percent of rural children receive the same protection. In Nepal's rural regions, 84 children out of every 1,000 will die in their first five years. In its cities, that number falls to 47.<sup>36</sup>

These inequities demonstrate the need to tailor public health interventions to the character and magnitude of each area's challenges. The disparity between urban and rural areas illustrates that the problem of scale in South Asian health is one not only of population but of geography: Adequate infrastructure and health systems simply do not extend to vast portions of the subcontinent.

## Sri Lanka: South Asia's Health Outlier

Sri Lanka has been an exception to most of these regional generalizations for two generations. When it became independent in 1948, 50 percent of its population was already literate. Today, that figure is closer to 90 percent, and a healthy majority of Sri Lankans completes secondary education. Relative wealth, stronger health infrastructure, smaller scale, and leadership that regarded health and education as political necessities have helped Sri Lanka achieve dramatic gains in health, particularly in comparison to the rest of South Asia. The island nation's average life expectancy of 71 years rivals the developed world and the healthiest states in India and Pakistan. By embedding immunization in its primary healthcare program for children, Sri Lanka has achieved a 98 percent vaccination rate.<sup>37</sup> It has largely devolved public health decisionmaking to the local level, resulting in customized programs that focus on educating women, preventing diarrhea, and ensuring infant and maternal health. In addition to these local prevention efforts, the national government provides healthcare to all its citizens. That Sri Lanka has achieved these

<sup>&</sup>quot;Kerala," 2005, http://india.gov.in/knowindia/aboutkerala.php; Department of Public Health and Family Welfare, Government of Madhya Pradesh, "Medium Term Health Sector Strategy: Madhya Pradesh," 2006, http://www.mp.gov.in/health/archives/mths.pdf.

<sup>&</sup>lt;sup>34</sup> World Bank, Sparing Lives: Better Reproductive Health for Poor Women in South Asia: Summary for Policymakers (Washington, D.C.: World Bank, 2008), http://siteresources.worldbank.org/ SOUTHASIAEXT/Resources/Publications/448813-1231439344179/sparinglivespolicymakerssummary.pdf.

<sup>&</sup>lt;sup>35</sup> Population Reference Bureau, "Data Finder," http://www.prb.org/DataFinder.aspx.

<sup>&</sup>lt;sup>36</sup> WHO, *World Health Statistics*: 2010 (Geneva: WHO, 2010), http://www.who.int/whosis/whostat/EN\_WHS10\_Full.pdf.

<sup>&</sup>lt;sup>37</sup> WHO, "Global Health Observatory."

outcomes for 20 million people while struggling to escape from a 26-year civil war provides a powerful case study.

Alongside its health successes, Sri Lanka has pockets of much weaker results, especially in the war-affected areas of the north and east and in those parts of the hilly interior that have large groups of Tamil plantation workers. It faces continuing challenges of internally displaced persons tied to conflict. At the conclusion of the war in May 2009, as many as 300,000 people were displaced, living in miserable conditions in government-controlled camps. Most of these have been released and resettled. Rebuilding the war-torn areas will take years. The health picture among these populations is bound to be more difficult than these encouraging figures suggest. However, the most important factors contributing to Sri Lanka's favorable human development profile apply to the war-affected populations as well: high literacy, strong investments in health starting in the early postindependence period, and a well-developed expectation that "normal life" must include access to health facilities.

Sri Lanka has enjoyed certain advantages. The size of its population, about 20 million, is far more manageable than those of Bangladesh, Pakistan, and India. Population growth, now about 1.4 percent, has been low for a couple of generations. Sri Lanka's maritime location historically made it a trading post and gives it the potential to reclaim that role. Its spectacular scenery and benign weather provide it with strong industries in tourism and agricultural exports. Government policies have created a robust mix of public and private healthcare, ensuring near universal coverage. Sri Lanka has maintained and expanded the universal education system it inherited at independence and used it to spread health messages.

# Recommendations for U.S. Policy

U.S. strategic and global health interests align in helping South Asia contend with its dual epidemics of communicable and noncommunicable disease. These powerful emerging markets and strategic hotspots face complex public health challenges on a scale unmatched in the rest of the world. To take advantage of its strengths and most effectively complement national health programs in South Asia, the United States should:

Ensure the best returns from its existing programs. USAID invests nearly \$300 million a year across Bangladesh, India, Nepal, and Pakistan to strengthen health systems, support national TB programs, improve maternal and child health, increase access to water and sanitation, and implement the President's Emergency Plan for AIDS Relief (PEPFAR). The agency funds food-for-work and relief programs for some 7.5 million women and children in need in rural India, and it trains health workers, supports community programs, and distributes medical supplies in rural Nepal. The Centers for Disease Control and Prevention also maintains programs throughout the region, including an Indian office of its Global AIDS Program. The United States should focus on maximizing the impact of these important programs, particularly by maintaining and expanding its work on the grave disparity between urban and rural health.

- Achieve maximal "bang for the buck" with vaccines. Vaccines have saved millions of lives in South Asia, but portions of Bangladesh, India, Nepal, and Pakistan remain unimmunized. Past progress has been highly uneven. Immunization is likely the single most cost-effective intervention to save lives across the population. Bill and Melinda Gates have labeled the next 10 years the "Decade of Vaccines." With adequate attention and resources, such a decade could have its most profound impact in South Asia.
- Make South Asia a focus of emerging Obama administration programs. Two new Obama administration priorities—the Feed the Future Program and the Global Health Initiative (GHI)—should pay proportionate attention to the needs of South Asia. Feed the Future aims to address the causes of hunger and emphasizes country ownership. Already, USAID has identified Bangladesh and Nepal as Feed the Future focus countries and India as a key partner. The success of the Asian subcontinent's "Green Revolution" of the 1960s provides evidence of the effects such a program can have. Solving malnutrition in South Asia will require a well-resourced and comprehensive approach that accounts for poverty, climate change, and the widespread shortage of micronutrients.

GHI will invest \$63 billion over six years to improve health outcomes in partner countries and consolidate the health gains created in the last decade by programs such as PEPFAR. Its heavy emphasis on maternal and child health is well-suited to South Asia, which should be the site of focused investment in that area. The administration recently released the list of eight GHI Plus focus countries, which included Bangladesh and Nepal—a promising sign that the initiative's priorities will reflect South Asia's dramatic needs and the program's potential impact in the region.

Encourage civil society and public-private partnerships on health. Public-private partnerships and NGOs have an important role to play in achieving health progress. Their track record in South Asia is strong. The Public Health Foundation of India has established four institutes to train health professionals, in cooperation with the Indian government and U.S. schools of public health, with five more under discussion. The BMGF Avahan Initiative has helped to reduce the prevalence of HIV/AIDS in the Indian states of Tamil Nadu and Andhra Pradesh through robust partnerships with NACO and state AIDS control agencies. Avahan played a central role in the third National Family Health Survey, which gave the clearest picture yet available of India's recalcitrant HIV/AIDS epidemic. The efforts of the Global Fund to Fight AIDS, TB, and Malaria, as well as the work of NGOs in concert with USAID, have demonstrated similar results.

Whenever possible, the United States should support these efforts. Even political and rhetorical support can pay powerful dividends. The Nobel Prize awarded to microcredit leader Dr. Mohammed Yunus generated worldwide interest in his work. Pfizer, General Electric, and the Mayo Clinic established partnerships with Grameen Health, Dr. Yunus's program to develop a low-cost healthcare network in South Asia using mobile phone technology. Grameen Health now runs 51 clinics, each providing medical care to rural populations at an annual insurance premium of \$2 per person. Although the U.S. government

disburses no similar humanitarian award, the significance of its endorsement and the support of its experts can provide publicity, credibility, and political capital to worthwhile civil society endeavors.

Expand cooperation on noncommunicable diseases and pandemic preparedness. South Asia's substantial and growing chronic disease burden reflects an emerging epidemic that will dominate its future public health landscape. Likewise, the recent H5N1 and H1N1 epidemics demonstrate that pandemics can originate anywhere—particularly in population and agricultural centers like those of South Asia—and will pose a frequent risk to the world's health in future decades. The region's epidemiological transition creates similarities with the United States' own chronic disease epidemic, and U.S. surveillance and preparedness expertise can help ensure that South Asia is not the origin of a worldwide pandemic. On both of these emerging priorities, the United States should expand its cooperation with South Asian nations on research, policy, and best practices.



1800 K Street, NW | Washington, DC 20006 Tel: (202) 887-0200 | Fax: (202) 775-3199 E-mail: books@csis.org | Web: www.csis.org