

Public Health and International Security

The Case of India

A Conference Report of the
CSIS Task Force on HIV/AIDS

Executive Director

J. Stephen Morrison

Authors

Pramit Mitra

Teresita C. Schaffer

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Center for Strategic and International Studies
1800 K Street, N.W.
Washington, D.C. 20006
Tel: (202) 887-0200
Fax: (202) 775-3119
Web: www.csis.org

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Acknowledgments

The CSIS Task Force's work and its work on India and other countries would not have been possible without the generous support of the Bill and Melinda Gates Foundation. We would like to acknowledge the intellectual contributions to this report of the representatives of the U.S. Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention (CDC), and the U.S. Agency for International Development (USAID). This report reflects their excellent programs that have been a vital part of India's fight against the HIV/AIDS pandemic.

We would like to thank the speakers who participated in the May 2 conference at CSIS, provided excellent ideas, and devoted their time to critique our report and provide intellectual input. They include Kent Hill from USAID, Ajay Mahal from the Harvard School of Public Health, Robert Bollinger from the Johns Hopkins School of Public Health, Altaf Lal from the U.S. embassy in New Delhi, Walter North from USAID, James Curran, Dean of the Rollins School of Public Health at Emory University, Miriam Claeson from the World Bank, and William Steiger from HHS. A special word of thanks goes to Rajat Gupta from McKinsey & Co. and Srinath Reddy from the All India Institute of Medical Sciences for initiating the idea of this conference and participating as speakers.

Finally, this report would not have been possible without the hard work of the CSIS HIV/AIDS Task Force team led by Stephen Morrison, who has directed the Task Force with skill and energy. Thanks also to Prashanth Vasu and Vibhuti Hate for providing excellent research and administrative support for this conference.

Introduction and Executive Summary

For the past three years, the HIV/AIDS Task Force of the Center for Strategic and International Studies has been examining the HIV/AIDS epidemic in India, and particularly, U.S. policy dealing with that epidemic. A high-level delegation visited India in January 2004. Since then, a few elements of broad consensus on HIV/AIDS policy have emerged: that HIV/AIDS is one of the major question marks hanging over India's promising future; that changing the trajectory of the epidemic will require substantially more resources than are currently available; that, as in other countries, the response to HIV/AIDS cannot rely only on medical means and instruments but must include the social dimension as well; that India's size calls for a strategic approach from its central government and for a more widespread surveillance effort; and that India's decision to decentralize its HIV/AIDS program was a wise move and perhaps the only way to make room for tailor-made approaches that suit India's extraordinary diversity.

But among India's senior health officials, another question comes up with painful regularity: How can India respond simultaneously to the extraordinarily complex demands of the HIV/AIDS epidemic and to its other public health problems? The fear among many in India is that the AIDS pandemic could get relegated to the back pages if a deadly epidemic, such as the avian flu, takes hold in the country. In other words, the challenge is to maintain focus on the AIDS pandemic while tackling other emerging health threats. This question is particularly pertinent in view of India's practice of creating specialized programs for high-priority problems (e.g., tuberculosis, family planning, and malaria).

The conference summarized in this report took place on May 2, 2006, and is an attempt to start a conversation on this broader topic. The conference topic—"Public Health and International Security"—takes a broad view of both health and security. During a half-day's deliberation, we looked at both the Indian and international contexts for an integrated approach to public health.

Our discussions highlighted the importance of health for economic development, at both the household and national levels. Among our key findings is the observation that three of the key requirements for fighting HIV/AIDS are also key elements in fighting avian influenza or indeed most of India's public health problems: an integrated disease surveillance and control system; participation of the public and private sectors; and strong linkages among clinical care, research, and public health institutions. India's tremendous scientific talent and its wealth of trained health personnel will be an asset; at the same time, the absence of people specializing in and dedicated to public health is a worrisome gap.

Two of the speakers introduced a creative new response to these issues, the newly launched Public Health Foundation of India (PHFI), which is intended both to fill this staffing gap and to help the country's national and public health leadership find new ways of thinking about the larger Indian response to these problems. It is being created by the government, but with direct participation by both private sector and international institutions, and should therefore be a pioneer in the difficult business of public-private partnership. It hopes to deliver strong training programs, vibrant partnerships with

international institutions (including those in the United States), and a major effort to demonstrate the value of public health expertise to the medical establishment. In India and elsewhere, creating an institution has been one of the most effective ways of creating effective policy changes, and this is the ambition of the PHFI.

Our hope is that this will be the beginning of a larger dialogue on how India, the private sector, and the international community can work together in creating a new model—or models—for a dynamic approach to public health, as India's economy and its international role in the world are being transformed.

Public Health and International Security

The Case of India

Pramit Mitra and Teresita C. Schaffer

The Conference: Introductory Remarks

Teresita Schaffer, director of the South Asia Program at the Center for Strategic and International Studies (CSIS), opened the conference on May 2, 2006, by sketching out the major changes in the Indian economy since economic reforms began in 1991. The growing economy has made the AIDS pandemic more troubling, perhaps even exacerbating the problem by creating an increased demand for migrant labor in economically successful parts of the country. India is home to the biggest population of poverty-stricken people. While some states have shown remarkable progress, many have lagged behind.

India's economic development has improved markedly since India opened its doors to the world economy. Per capita income in the western state of Maharashtra, for example, is five times that of a poor state like Bihar. (See table 1.) Literacy and urbanization have increased more dramatically in progressive states like Maharashtra, Tamil Nadu, and Andhra Pradesh, compared to laggards like Bihar and Uttar Pradesh. These differences, Ambassador Schaffer argued, have a profound impact on the public health challenges facing India and the HIV/AIDS pandemic.

The other major development relevant to India's health sector is its growing relationship with the United States. In addition to the end of the Cold War, the fight against terrorism has reshaped the historically troubled relationship between these two democracies. Since India is now seen as a strategic partner in Washington, D.C., the HIV/AIDS pandemic has become a serious concern for policymakers in the United States. There is no doubt that managing the AIDS crisis is crucial to India's emergence as a stable economic power. This is in addition to the mammoth health burden faced by India, based on a poor economy and low income levels. Malnutrition, tuberculosis (TB), and malaria are big scourges in the country.

Table 1. Literacy Rate, Poverty Rate, Income

State	For the Year 2001		
	Literacy rate (%)	Poverty rate (%)	Real per capita income (rupees)
Bihar	47	47	3,500
Uttar Pradesh	57	33	5,700
Gujarat	66	16	16,780
Maharashtra	77	29	16,000

Source: PowerPoint presentation, Ambassador Teresita Schaffer, CSIS South Asia Program.

As a recent CSIS report on the U.S. contribution to India's fight against HIV/AIDS pointed out, official and private U.S. sources represent by far the biggest international source of financial support for HIV/AIDS in India and the biggest external source of scientific cooperation and technology. Indian medical professionals come in large numbers to the United States to be trained. U.S. policymakers need to figure out the best way to supplement the growing trade and business relationships in the health and science arenas. In light of these synergies, Ambassador Schaffer stressed that the United States is in a good position to provide significant expertise, both financially and in terms of know-how, to help the Public Health Foundation of India (PHFI) set up public health schools in India. She concluded her remarks by introducing the panel (see agenda in the appendix) and summarizing the issues that these panels will focus on.

Panel I

Panel Moderator

Kent Hill

Panelists

Ajay Mahal, Robert Bollinger, and Altaf Lal

Kent Hill, Assistant Administrator for Global Health, USAID

Kent Hill moderated the first panel, which put India's HIV/AIDS pandemic into the larger context of the country's many public health challenges. Before introducing the panel, Dr. Hill briefly outlined the breadth of the U.S.-India partnership, especially in the health sector.

The U.S.-India partnership has seen robust growth in the past few years, which is part of the broader transformation in relations between the two countries. Dr. Hill said that U.S. assistance, spearheaded by the United States Agency for International Development

(USAID), has played a major role in helping the Indian government address its public health problems. For instance, USAID partner organizations have been instrumental in promoting the use of contraceptives in the populous state of Uttar Pradesh. Elsewhere, U.S. financial and technical assistance has brought India closer to its goal of eradicating the scourge of polio, Dr. Hill said.

In Tamil Nadu, U.S. assistance has played a major role in the fight against HIV/AIDS. Dr. Hill pointed out that the Indian Health Ministry has credited the USAID-funded AIDS Prevention and Control (APAC) project, which began in 1995, for the notable reduction in high-risk behavior by truck drivers and other at-risk groups. The project is implemented primarily through Voluntary Health Services, which in turn makes grants to nongovernmental organizations (NGOs). Equally significantly, USAID has helped India to setup an integrated disease surveillance system that aided the health officials in detecting cases of the avian influenza in Maharashtra state in early 2006.

The character of U.S. assistance to India is also beginning to change. From pure development assistance, Dr. Hill explained, U.S. assistance is taking the shape of what Dr. Condoleezza Rice has termed “transformational diplomacy.” As India grows more prosperous, local resources, including private-sector funds, will dwarf U.S. assistance in the public health arena. In order to remain significant, USAID is thinking up new ideas on how to have the maximum impact with its limited resources.

To address these issues, the U.S. government has adopted three broad strategies:

- USAID is looking to develop public-private partnerships that can generate significant resources. One such partnership is the recently launched Indo-U.S. Corporate Sector Fund for HIV/AIDS, which is a partnership among U.S. and Indian businesses to fight AIDS. Six companies have already pledged a total of \$1.3 million to the fund, which in turn will provide resources to help Indian companies take a more active role in the fight against AIDS.
- USAID is looking to build the capacities of local partners so that its limited resources can be used to train successful programs and help successful models scale up. For instance, many USAID partners have successfully competed for assistance from the Bill and Melinda Gates Foundation.
- USAID is also looking for ways to attract seed money from other donors in order to supplement its own resources and help successful organizations expand their programs.

Dr. Hill concluded by commenting that the United States will continue to provide cutting-edge technical public health assistance and financial help, but increasingly, these programs will be supplemented by India’s own growing technical expertise.

Ajay Mahal, Assistant Professor of International Health Economics,
Department of Population and International Health, Harvard School of Public Health

Ajay Mahal, assistant professor of international health economics at the Harvard School of Public Health, focused on the linkages between public health and economic growth in India. Dr. Mahal began by summarizing India’s rapid economic growth since the early

1980s. Between 1950–1951 and 1980–1981, India’s GDP per capita grew by 52 percent, but since 1980–1981, India’s GDP per capita has grown by 124 percent, with most of the growth taking place after major economic reforms started in 1991.

Dr. Mahal then turned his attention to India’s public health indicators, commenting that although trade, investment, and capital market reforms have kept the government busy in the post-reform years, improving health has not generated the same enthusiasm. Although improving education has been given some thought to in resource allocation, health has always ended up at the bottom of the priority list. This neglect is reflected in the country’s poor health indicators as compared to its peers. For instance, India lags behind China in almost all health indicators and is even behind Bangladesh when it comes to infant mortality rate.

Table 2. Health Achievements: Life Expectancy at Birth, 1960–2002

Country/Region	Life Expectancy at Birth				
	1960	1970	1980	1990	2002
<i>Regions</i>					
Africa	41.6	45.6	49.1	51.6	46.6
Asia	41.0	55.4	60.5	64.1	67.3
Latin America and the Caribbean	56.6	60.5	64.8	68.1	71.1
East Europe	67.4	69.9	68.2	69.5	68.8
Middle East	48.7	54.4	59.4	64.5	68.8
Developed Countries	69.6	71.4	74.2	76.3	78.5
<i>Countries</i>					
China	36.3	61.7	66.8	68.9	70.7
Brazil	54.8	58.9	62.6	65.6	68.6
Bangladesh	39.8	44.3	48.6	54.8	62.1
Republic of Korea	54.2	59.9	66.8	70.3	73.9
India	44.3	49.4	54.2	59.1	63.4

Source: PowerPoint presentation given by Ajay Mahal. Adapted from the World Development Indicators database (World Bank 2005).

Note: Data are for the 88 countries that account for approximately 90 percent of the world’s population. Regional estimates are based on population-weighted averages of country-level life expectancy at birth.

Table 3. Health Achievements: Infant Mortality Rate, 1960–2002

Country/Region	Infant Mortality Rate (per 1000 live births)				
	1960	1970	1980	1990	2002
<i>Regions</i>					
Africa	158.3	136.3	107.8	98.4	90.9
Asia	141.4	100.5	75.9	58.5	43.6
Latin America and the Caribbean	99.3	83.7	57.5	40.8	26.5
East Europe	51.9	31.1	26.2	20.1	15.8
Middle East	164.2	139.7	98.1	61.7	41.4
Developed Countries	31	20.4	12	7.8	5.1
<i>Countries</i>					
China	150	85	49	38	30
Brazil	115	95	67	50	33
Bangladesh	149	145	129	96	48
Republic of Korea	90	43	16	8	5
India	146	127	113	84	65

Source: PowerPoint presentation given by Ajay Mahal. Adapted from the World Development Indicators database (World Bank 2005).

Note: Data are for the 88 countries that account for approximately 90 percent of the world's population. Regional estimates are based on population-weighted averages of country-level infant mortality rates.

Dr. Mahal then outlined various studies that have tried to establish a definitive relationship between strong public health performance and growth in productivity and national output. For instance, studies have shown that healthier people incur lower household financial expenses and indirect costs in the form of the withdrawal of children from school or of other members from work.

At the macroeconomic level, Dr. Mahal said, studies have found a positive correlation between increases in productivity and improvements in health indicators. He cited a 1970–2000 cross-state panel study for India,¹ which found that a one-year gain in life expectancy translates into an increase in output of approximately 1–3 percent. Interestingly, the study also concluded that if the state of Uttar Pradesh had Kerala's life expectancy, it would have a state domestic product that is 17–47 percent higher than its current level. Health expenditure, studies have shown, is one of the key reasons why many households slip into poverty in India.

But a strong emphasis on public health alone is unlikely to be a sustainable strategy in the long run, unless it is accompanied by sensible policies in other areas such as India's burgeoning young adult population and the elderly. Increasing employment opportunities for India's staggering young adults will have serious implications for crime and other socioeconomic indicators.

More importantly, Dr. Mahal predicted that India's ageing population will put the Indian government under severe financial stress in the coming years. This problem is not

¹ P. Duraisamy and Ajay Mahal, "Health, Poverty, and Economic Growth in India," in *Financing and Delivery of Health Care Services in India*, ed. Ministry of Health and Family Welfare, Government of India, 1–17 (New Delhi: Cirrus Graphics Private Limited, 2005).

unlike the potential crisis facing the U.S. government, which will have to deal with increasing Social Security and Medicare costs from retiring baby boomers. The elderly dependency ratio (proportion of those 65 years and older to those 15 to 64-years-old) in India will go up from about 7 percent at present to 23 percent by the year 2050, according to figures from Dr. Mahal.

Rising medical costs and easier access to sophisticated medical treatment will mean that the cost to the government in the form of pensions, medical reimbursement for retirees, and other costs will only get worse. This means that India has to significantly increase health insurance and improve spending on public health as soon as possible, Dr. Mahal concluded.

Robert Bollinger, Professor of Infectious Diseases, Johns Hopkins School of Public Health

Reflecting on his experience in India, Robert Bollinger focused his talk on the recent outbreak of the avian flu pandemic in Asia and the complicated public health response needed to deal with such a disease effectively. Dr. Bollinger started by giving a brief overview of the bird flu outbreak in India and the different strains of the virus that cause the disease.

Dr. Bollinger focused especially on three conditions required to deal with a fast-moving epidemic such as that caused by the avian influenza virus: (1) an integrated disease surveillance and control system, (2) participation of public and private sectors, and (3) strong linkages among clinical care, research, and public health institutions. The number of organizations and players who have to work together to deal with such an epidemic is long and includes public agricultural programs, private poultry industry, households, public veterinary programs, private veterinary providers, local and central government agencies, civil authorities, bird specialists, vaccine manufacturers, vaccine developers, public health professionals, and the general public. The relationship between these multiple partners is further complicated by the fact that a fast-moving disease such as the bird flu must be detected early and followed by a swift response.

Dr. Bollinger noted that despite the major differences between the dynamics of the avian influenza and HIV/AIDS epidemics, the same three factors—surveillance and control, public-private partnership, and integration of research, care, and public health—are critical to addressing the HIV/AIDS epidemic. Fighting HIV/AIDS, too, requires the cooperation of a dauntingly long list of different public and private actors. One could apply the same logic to other major public health problems as well.

This makes a powerful case for taking an integrated approach to public health. So, a public health system that includes strong disease surveillance, strong linkages among clinical care, public health, and research, and effective mechanisms for public-private cooperation provides the best basis on which to fight not just the diseases that are in the news today, like HIV/AIDS and avian influenza, but tomorrow's public health problems as well.

Dr. Bollinger noted that the Public Health Foundation of India can help meet these challenges by supporting the public health education of clinicians, researchers, and public health professionals, emphasizing the integration of public health education and research

with existing clinical care and clinical research programs. This would demonstrate the value of an effective public health system to government, industry, clinicians, and researchers.

Dr. Bollinger ended his presentation by outlining some of the challenges the Public Health Foundation of India will have to overcome. Among other things, public health education is not integrated with other sectors of the education system. In fact, very few among the Indian public, NGOs, industry, and health care providers recognize the value of high-quality public health programs.

In addition, there are a limited number of high-quality, mentored field-research training opportunities for prospective public health students. These will need to be expanded. Similarly, there are limited numbers of well-compensated, desirable jobs that require a high-quality public health education. Dr. Bollinger stressed the importance of creating awareness in the Indian government about the benefits for the public at large and the Indian economy of establishing a public health school. A robust public health system can play a crucial role in limiting the damage done by an epidemic like the avian influenza virus and thus prevent an economic catastrophe.

Altaf Lal, Health Attaché, U.S. Embassy, New Delhi

Altaf Lal provided details about the breadth of U.S.-India cooperation by citing a number of examples. Dr. Lal began by mentioning the rapid U.S. assistance provided when the first case of bird flu was reported in India. The U.S. government sent diagnostic reagents to prevent a potential outbreak of the bird flu within two weeks after the Food and Drug Administration (FDA) approved the reagents. India was the first country to receive these reagents, showing the growing commitment by the U.S. government to strengthen India's public health infrastructure.

The Indo-U.S. relationship in the health arena predates today's expansion in the overall relationship. Dr. Lal pointed out that the United States is the country that has invested the most in India to meet the challenge of HIV/AIDS. India is not a "focus country" under the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), but outside of the PEPFAR countries, the India program is the largest bilateral program supported by the United States. U.S. government agencies such as the USAID and its predecessor agencies have been working in India almost since India's independence and have made a significant investment in India's scientific education capacity.

Dr. Lal added that the United States Department of Health and Human Services (HHS) is sponsoring seven bilateral projects with the Indian government, and more than 400 technical experts from the U.S. government (not including researchers from U.S. universities) visit India each year, making India one of the most frequently visited countries. The scope of U.S. assistance is rapidly growing: For instance, there are 125 United States-funded research projects at the Tuberculosis Research Centre (TRC) in Chennai, one of India's premier research institutes dedicated to tuberculosis and HIV/AIDS research. This figure is impressive, given that there were no such collaborative projects in 1990.

Dr. Lal concluded by saying that, with the right policy guidelines, India and China will both be important players in the biotechnology sector in the coming decades. India

already has world-class pharmaceutical companies. Indian drug manufacturers have had a major impact on the market for antiretroviral drugs (ARVs), and several India-made ARVs are currently being reviewed by the Food and Drug Administration (FDA). India is also a significant manufacturer of bulk pharmaceutical inputs.

Panel II

Panel Moderator

Walter North

Panelists

James Curran and Miriam Claeson

Walter North, Deputy Assistant Administrator, Bureau for Policy and Program Coordination, USAID

Reflecting on his experience as a former India Mission director of USAID, Walter North focused his introductory remarks on the broader public health challenges facing India. He began by mentioning that while HIV/AIDS is the focus of the day's conference, the panelists and audience should keep in mind the plethora of health challenges facing policymakers. These include a wide range of preventable childhood diseases, which kill approximately 2.5 million children in India every year. This figure also includes a disproportionate number of girl children from lower caste and poor families.

Mr. North also outlined some of the challenges that the Public Health Foundation of India will have to keep in mind. These include the wide differences among Indian states in their economic performance and governance. States like Uttar Pradesh, Madhya Pradesh, and Bihar, Mr. North observed, have fallen far behind the fast-performing states in the south, such as Tamil Nadu. These three states together represent almost half of the people under the poverty line population of India—approximately 120–150 million Indians. They also face serious corruption and unstable leadership.

Like China, India has made impressive strides against eradicating poverty since its independence in 1947. Also like China, however, India has wide fluctuations in regional development. Variations between state performances also mean that the quality of public health infrastructure varies widely between the well-governed states and the laggards. In addition, since health is both a federal and a state concern, mobilizing and managing financial resources becomes more complicated, Mr. North noted. But the good news is that as the successful campaign to eradicate polio shows, India can harness its immense intellectual resources with effective leadership from the government.

James Curran, Dean, Rollins School of Public Health, Emory University;
Director, Association of Schools of Public Health (ASPH)

James Curran focused his discussion on public health and its relevance in the Indian context. Dr. Curran began his talk by mentioning a 1988 Institute of Medicine (IOM)

study called *The Future of Public Health*, which critically assessed the status of public health in the United States and gave a statement of the fundamental purpose of public health. According to the study, the fundamental obligations of public health agencies are to:

- Protect against environmental hazards
- Prevent epidemics and the spread of disease
- Prevent injuries
- Promote and encourage healthy behavior and mental health
- Respond to disasters and assist communities in recovery
- Assure the quality and accessibility of health services

Dr. Curran pointed out that it is important for policymakers to think of the purpose of public health as they move ahead with their plan to establish such institutions in India. It is critical for policymakers to understand that public health agencies are different from clinical agencies. The perspective of public health agencies is much broader than that of medicine. Unlike hospitals and clinics that are concerned with subsets of the population, public health is concerned with the well-being of the entire population. Public health officials seek to create the necessary conditions for people to live healthy lives through communitywide prevention and protection programs.

Because of the very nature of public health activities, they are more intrusive and controversial. Often, as in the case of the antismoking campaign, public health officials ask people to make lifestyle choices that many find invasive. Furthermore, although care and treatment issues are much simpler to deal with, there is always an inherent clash between care and treatment, according to Dr. Curran.

Moving to the HIV/AIDS pandemic in India, Dr. Curran said that although the epidemic has been instrumental in galvanizing impressive amounts of domestic and foreign resources, it has some unique problems that may make it a poor model for the Indian public health venture. HIV/AIDS is highly stigmatized and sufferers are disproportionately found in marginalized segments of the population, including commercial sex workers and drug addicts. This situation, in addition to the taboo associated with discussing sex in many societies, makes tackling the epidemic as a public health issue notoriously difficult. In addition, the high cost of treatment makes AIDS a formidable issue.

Dr. Curran concluded by outlining some key challenges for the Public Health Foundation of India. The most fundamental problem is likely to be the lack of knowledge about the public health profession. Although the typical health care professional in India, such as a physician or a nurse, is well respected, Indians do not know much about public health as a career choice. Even in the United States, outside university campuses, public health professionals do not command the same respect as doctors. The Indian government will have to figure out ways to create suitable career opportunities for graduates with a public health degree and integrate the work of newly created public health institutions with the thriving private health care sector.

Dr. Curran also stressed the importance of respected Indian medical professionals taking leadership roles in promoting the public health venture and boosting bilateral technical assistance from the United States to India for this project. In addition to providing financial resources, the U.S. government can play a key role in helping India in vital areas such as curriculum development.

Miriam Claeson, Program Coordinator HIV/AIDS, World Bank

Miriam Claeson, basing her remarks on the World Bank's activities to combat HIV/AIDS in India, focused her talk on the gaps in the Indian health infrastructure. Dr. Claeson argued that although there is a case to be made for more private-sector participation in the fight against AIDS in India, the government still has a critical role in providing core infrastructural competencies that cannot be left to the marketplace.

According to a survey of Indian health professionals by the World Bank, there are three big gaps that need immediate attention: increasing social participation and empowerment, improving regulation and enforcement in the public health sector, and ensuring the quality of personal and population-based health services. Although India has taken some tentative steps toward writing legislation to prevent discrimination against people suffering from HIV/AIDS, these laws need to be strengthened and enforced more vigorously to destigmatize the AIDS disease. The Indian government, Dr. Claeson claimed, also has to do more to attract quality personnel to the health sector.

India is in a good position to contain its AIDS pandemic. The success of Tamil Nadu shows that with the right policy decisions and resources, combined with strong political will, India can win the fight against the disease. While India has done a good job of collecting data and mapping the progress of the disease at the national level, individual state response has varied widely. Like previous speakers, Dr. Claeson explained that differences in resources among Indian states are a critical issue. The key for India is to tailor innovative intervention models based on the strength and weaknesses of individual states.

Using findings of the World Bank Disease Control Priorities Project (DCPP), an ongoing effort to assess disease-control priorities and produce analysis and resource materials to improve health policy making in developing countries, Dr. Claeson said that India could do more to exploit low-cost opportunities to improve public health. For instance, the success of peer-based programs in Tamil Nadu shows that these projects should be expanded nationwide. In addition, India should also simultaneously focus more resources on a disease like tuberculosis and on diseases that afflict children in particular.



Shaping a Response: Public Health Foundation of India

Rajat Gupta, Senior Partner, McKinsey & Company

Rajat Gupta, senior partner at McKinsey & Company, is one of the key drivers behind the Public Health Foundation of India. He provided a personal perspective on the public health school initiative in his short presentation and said that the project should be viewed as part of a

bigger development model, because it has bearing on a host of issues, such as women's rights and economic development. He said that although the project has got off to a good start, there are still many unanswered questions and big challenges ahead.

One of those challenges is to create demand for public health professionals. Mr. Gupta stressed that without adequate job opportunities, there would not be enough incentive for qualified applicants to go to these public health schools. While demand for graduates from these schools will be a key test for the success, it is also imperative that the schools graduate enough students every year to have an impact. That has proved difficult to accomplish in India. For instance, the Indian Institutes of Technology (IITs), a chain of seven engineering colleges that run highly coveted undergraduate engineering programs, has managed to increase the number of seats from 2,000 to 4,000, only, in 35 years. Although the small number of students at the IITs has allowed the schools to maintain the high quality of their programs, it has also represented a small drop in the ocean in a country like India with its billion-plus population.

Mr. Gupta concluded his remarks by saying that the objective of the foundation was not simply to mobilize resources for the establishment of public health schools, but also to act more like a think tank, providing a platform to debate the health priorities facing India, generating fresh ideas to improve the quality of public health education, and creating demand for public health professionals by working with state governments. Mr. Gupta said that by adopting a public-private partnership model and incorporating multiple stakeholders from various sectors of the economy, the foundation has built a good base from which to start its work.

K. Srinath Reddy, Head, Department of Cardiology, All India Institute of Medical Sciences

As one of the founding members of the Public Health Foundation of India, K. Srinath Reddy provided insight into the objectives and operational details of the foundation. As head of the Department of Cardiology at the All India Institute of Medical Sciences in New Delhi, Dr. Reddy was in a position to talk not only about the public health school initiative, but also about the health infrastructure in India. He began by giving a brief overview of the many diseases afflicting the Indian population. The second half of Dr. Reddy's presentation focused specifically on the structure of the public health school initiative.

Drawing from data from organizations, including the World Health Organization (WHO), Dr. Reddy said that India is undergoing a major economic transformation, and with that, its disease burden is also changing. For example, India still carries a disproportionate number of tuberculosis sufferers in the world, but Indians are also becoming increasingly susceptible to "lifestyle diseases" more prevalent in affluent Western countries. India accounts for nearly one-third of the global TB burden. According to the WHO, India has more cases of tuberculosis than any other country in the world and twice as many cases as China, which has the next highest number. (India's incidence rate of more than 200 per 100,000 people is one of the highest in the world.) Dr. Reddy pointed out that TB kills approximately 500,000 Indians every year—more than 1,000 every day or approximately 1 every minute. Child malnutrition, anemia, and other problems also take a dramatic toll.

Furthermore, Indians also have a high risk of lifestyle diseases common in affluent countries. For instance, incidents of cardiovascular disease (CVD), diabetes, hypertension, and tobacco-related problems are rapidly increasing. The figures paint a grim picture: For instance, the years of life lost due to CVD in populations aged between 35 and 64 was 9.2 years in 2000, but that figure is expected to go up to a staggering 17.9 years by 2030, according to Dr. Reddy. This is high compared to other developing countries like China, where the figure was 6.7 years in 2000 and is expected to reach 10.5 years by 2030. In the United States, the figure is expected to drop from 2 years in 2000 to 1.6 by 2030.

Incidence of hypertension in India is expected climb from 118 million in 2000 to 214 million by 2025, and the number of Indians with diabetes is expected to climb from 30 million to more than 60 million. Dr. Reddy stressed that CVD and other related diseases are no longer confined to affluent Indians in urban areas only. For example, 32 percent of deaths in rural Andhra Pradesh in 2004 were due to CVD. People with lower income levels are more vulnerable to CVD, diabetes, and other health issues. This disease burden will come at a steep economic cost. The WHO estimates that in 2005, India lost \$9 billion in national income from premature deaths due to heart disease, stroke, and diabetes. That figure will rise to a staggering \$237 billion over the next 10 years.

Dr. Reddy observed that the Indian government, through its publication, *National Rural Health Mission (2005–2012)*², has laid out a comprehensive health plan for the nation.

Nevertheless, much more needs to be done. Specifically, the health plan would benefit from a robust public health infrastructure. This will aid in effective policy development, program design and evaluation, health system management, and public health research. It will also serve to energize the health system and improve the quality and delivery of health services. These requirements, in Dr. Reddy's opinion, could be fulfilled by schools of public health.

The second half of Dr. Reddy's presentation was devoted specifically to the Public Health Foundation of India and the establishment of the public health schools. At present, India has very few public health programs and graduates a limited number of students with M.P.H. degrees. In most cases, these programs are not multidisciplinary in nature, as they are in U.S. public health schools. In addition, these programs in most cases are restricted to medical students. To make matters worse, a lack of awareness about public health professions and a lack of career opportunities mean that faculty recruitments and research opportunities are limited.

Dr. Reddy explained that the charter of the Public Health Foundation of India goes beyond just establishing schools of public health but also includes policy development and advocacy work. More specifically, the charter mandates include:

- Establishing new institutes of public health
- Assisting existing institutes in enhancing their capacity and output

² Ministry of Health and Family Welfare, *National Rural Health Mission (2005–2012)*, available at <http://mohfw.nic.in/NRHM%20Mission%20Document.pdf>.

- Promoting research in prioritized areas of public health to inform policy and empower programs
- Facilitating policy development, program evaluation, and advocacy on public health–related issues
- Enabling the development of standards and the adoption of a credible accreditation system for public health courses

Each school will accept 150 students into its M.P.H. program and will collaborate with state governments and other civil society organizations for on-site practical training. Dr. Reddy said that promising students with leadership potential would be sent overseas to get a public health education. These students would be expected to return to India and do doctoral work and teach. The public health schools will also collaborate with leading public health institutions abroad (mainly in the United States) and create long-term visiting faculty programs. Research work will focus on epidemiology (including social determinants), health interventions (design and evaluation), health economics (including health care financing), health systems (organization; performance; innovations) and health-impact assessment (policies in other sectors).

One of the big questions regarding the public health school initiative is whether there will be enough jobs for graduates from these schools to make the venture successful. The foundation aims to take steps to provide adequate career opportunities by working closely with state governments, civil society organizations, the private sector, and funding agencies, according to Dr. Reddy. The state governments will be requested to provide infrastructure support such as land, sponsorship for students, and recruitment opportunities for graduates. In return, states can expect to receive trained public health worker assistance in policy development and design and delivery of their health care systems, as well as the opportunity to host the new public health institutions, which, in turn, could help attract other resources to these states.

Turning next to the structure of the Public Health Foundation of India, Dr. Reddy pointed out that its governing board consists of various high-level officials from the Indian government, in addition to distinguished figures from academia, leading private-sector companies, Indian civil society, and donor organizations. The foundation has raised \$25 million so far (\$15 million each from the Indian government and the Bill & Melinda Gates Foundation and the rest from individuals and other organizations) and needs approximately \$120 million for the five planned public health schools.

Dr. Reddy concluded by outlining some of the distinctive features of the public health school initiative that include adopting a public-private sector partnership model, keeping the scale large to address the current and future demands for trained public health professionals, and making the management autonomous and flexible to keep the curriculum current and address the needs of the Indian health sector. Dr. Reddy said that the U.S. government could help the venture by training Indian faculty, helping in curriculum development, engaging in faculty and student exchange programs, and conducting joint research programs.

Lunch Speaker

William Steiger, Director, Office of Global Health Affairs, Special Assistant to the Secretary for International Affairs, U.S. Department of Health and Human Services

The last speaker for the conference was William Steiger, director of the Office of Global Health Affairs (OGHA) and special assistant to the secretary for international affairs at the Department of Health and Human Services. The focus of Dr. Steiger's talk was the growing U.S.-India strategic partnership in the health sector. Dr. Steiger pointed out that India is now one of the most important countries for projects funded by the Department of Health and Human Services. This partnership grew substantially in the 1990s. For instance, there are currently 100 peer-reviewed research projects in India, compared to 0 in 1990. Dr. Steiger argued that this growth in importance and collaboration is a reflection of India's growing prominence in world affairs. In addition, in the recent G-8 health ministerial meeting, the first since 1975, India was invited as an observer country. This further demonstrates India's growing contribution to the global health care industry.

Dr. Steiger also spoke about the HIV/AIDS pandemic in India. The U.S. government at present spends approximately \$29 million per annum to fight the disease in India. The principal focus is on preventing new infections, increasing care for people with AIDS, and strengthening domestic capacities. The challenge, Dr. Steiger commented, is to balance the allocation of the limited resources between short-term goals of treating people and long-term concerns such as strengthening infrastructure. The goal of HHS is to build local institutions so that they can eventually be self-sufficient and to bring in the Indian corporate sector to help with the fight against AIDS. Further, the HHS seeks to provide federal and state governments with technical advice on treating HIV/AIDS.

Dr. Steiger also enumerated two major goals for the United States with respect to global health care. First, the United States seeks to recommit to the goals that the G-8 has endorsed, in order to combat epidemics such as HIV/AIDS, tuberculosis, and malaria, all of which are problems in India. Second, the United States seeks revised international health regulations. Whereas, previously, international health regulations covered only cholera, yellow fever, plague, and smallpox, the new regulations will be more robust and would be more efficient in responding to emerging challenges such as the avian flu epidemic.

Key Findings

General

This is a critical time for India's fight against HIV/AIDS. While there has been a moderate slowdown in the prevalence rate in Tamil Nadu, the HIV/AIDS epidemic is now spreading to urban areas and to previously unaffected states like Bihar and Uttar Pradesh.

U.S.-India engagement on health issues is progressing at a rapid pace. Along with positive developments in the bilateral relationship, improving India's health infrastructure

continues to be a priority area for the U.S. government. The rapid response of the United States to a potential bird flu epidemic in India is a perfect example of such cooperation.

The U.S. government is working on new models of cooperation such as public-private partnerships that can generate significant resources. One such partnership is the recently launched Indo-U.S. Corporate Sector Fund for HIV/AIDS, which is a partnership among U.S. and Indian businesses to fight AIDS.

Public Health Infrastructure

Despite the tremendous differences in the diseases that India needs to respond to, a few key elements are central to the public health response.

These include: an integrated disease surveillance and control system; participation of the public and private sectors; and strong linkages among clinical care, research, and public health institutions.

According to a World Bank study and data provided by speakers at the conference, India has poor health indicators, despite having strengths such as a well-developed administrative system, good technical skills in many fields, and an extensive network of public health institutions for research, training, and patient care.

Most participants felt that although India has a large pool of technical people who are well trained in the hard sciences, there is a shortage of workers who can carry out the functions of public health effectively. Some key areas of weakness relate to public health regulations and their enforcement and to building partnerships with communities and universities for improving public health.

Graduates from public health schools can fill these fundamental gaps in India's public health capabilities by staffing various state health ministries. The states that will host these schools of public health, in particular, can expect to receive trained public health worker assistance in policy development and design and delivery of their health care systems, as well as the opportunity to host the public health institutions.

Public Health Foundation of India

The Public Health Foundation of India has got off to a good start. The project has already raised \$25 million as seed money, and future donations are expected to come in as projected. The scope of the public health school initiative is ambitious and if successful, could have a major positive impact on India's public health capacities.

The idea of setting up schools of public health was welcomed by all participants. But without adequate career opportunities for graduates of these schools, the public health school initiative will fail to produce the desired outcomes.

The U.S. government has played a vital role in promoting the public health venture by establishing and strengthening relationships among key public health experts on both sides. For instance, the programs of the Fogarty International Center at the National Institutes of Health (NIH) have been well received by Indian participants. These programs should be expanded with a particular emphasis on strengthening public health education in India.

Appendix

Draft Agenda for a Conference on Public Health and International Security: The Case of India

May 2, 2006

The purpose of this half-day conference is to look beyond the immediate issues of HIV/AIDS and the possibility of an avian flu epidemic, both already well ensconced in Washington's worry list. This conference will highlight how public health fits into the growing U.S.-India relationship, both as an area of cooperation and as a factor in determining India's medium and long-term future. It will examine tools for developing a public health capability in India that can service both the threats we already know about and those that may develop in the future, and that can serve as a center of excellence for dealing with the health issues that threaten international security.

9 AM Keynote Address: Health and the U.S.-India relationship

- Brief scene-setter: Teresita Schaffer, CSIS

9:30 Panel I. The Indian scene: public health as a development/strategic problem and as a policy issue. HIV/AIDS as part of a larger challenge, including chronic disease and future threats like a potential avian flu epidemic.

- Panel chair: Dr. Kent Hill, USAID (confirmed)
- Dr. Ajay Mahal, Harvard School of Public Health (confirmed)
- Dr. Robert Bollinger, Johns Hopkins School of Public Health (confirmed)
- Dr. Altaf Lal, U.S. Embassy, New Delhi (confirmed)

11:00 Panel II. Filling the gaps: the international context

- Panel chair: Walter North, USAID (confirmed)
- Dr. James Curran, Dean, Rollins School of Public Health, Emory University; Director, Association of Schools of Public Health (confirmed)
- Dr. Miriam Claeson, World Bank (confirmed)

12:30 PM Shaping a Response: Public Health Foundation of India

- Rajat Gupta, McKinsey & Company (confirmed)
- Dr. Srinath Reddy, All India Institute of Medical Sciences (confirmed)

1:30 Lunch:

- William Steiger, HHS (confirmed)

