

## ***Global Health: A 21<sup>st</sup> Century Diplomatic Tool?***

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Most of us in the health professions have a simple response to the question of why we engage in global health: we do it because it is right to help those who are sick and in need, and because this is at the heart of our calling as health professionals. It is an opportunity to give back for all we have been given.

But there is an argument beyond the moral and humanitarian aspects of global health. In a changing and dangerous world, U.S. engagement in global health has emerged as a fundamental national interest. This is all the more true in the context of an increasingly militarized and unilateralist approach by the U.S. government responding to 9-11.

### ***BACKGROUND***

Foreign policy exists for two clearly delineated purposes: to protect vital national interests and to project core national values. How do we define national security, and how have America's security interests changed over the past half-century? And how does an emerging vision of global health relate to these issues?

In a world of nation-states separated by history, culture, ethnicity and centuries of warfare, security has traditionally been defined in terms of armed conflict. When seen from this vantage point, the appropriate people at the table for a discussion of national security were generals and diplomats. However, the limitations of that approach were driven home by the defeat of this strategy in Vietnam and its profoundly damaging domestic consequences that continued to play out for another decade. We are again facing this with the growing debacle in Iraq.

The 1970s and 1980s were a time of profound change around the world and in the U.S. As a consequence, our thinking about the parameters of national security was also forced to change. To a remarkable extent, prior to this era America had been a self-contained economy and society. Now it was suddenly faced with the imposing recognition of a world reality: globalization. Globalization is not a new force; in fact, the history of humankind is a history of progressive globalization from the time of the first migrations across the Bering Straits. What was new, however, by the last quarter of the 20<sup>th</sup> century was its rapidly accelerating pace and scale, driven by technological revolutions in communications and transportation and the lowering of trade barriers. These drivers began to transform globalization from a gradual process, one of many factors affecting economies and individuals, to a predominant force molding our common reality.

During this period, Japan's conquest of American markets, rather than American soldiers, led to a fundamental reassessment of what was meant by the concept of national security. What emerged by the 1980s was a consensus that national security and foreign policy interests went beyond a focus exclusively on conflicts, and acquired a critical economic dimension.

During this period, the people around the table at foreign policy discussions took on a new cast. They were no longer solely generals and diplomats; now economists and business leaders took a leading role. It was a highly effective transformation for American foreign policy. Reflecting this new paradigm, the Soviet Union was not so much defeated as it was driven out of business.

But the evolution of a deeper and more sophisticated vision of national security and foreign policy didn't end there. The technological changes that spurred globalization have accelerated even further in the decade and a half since that realignment. These changes have been so rapid that the process of normal societal response and adjustment — a process that historically has required a time period of one to two generations — has been swamped. Even at this early stage of the Information Age, the global norm has become instantaneous communication, the virtualization of financial markets that have eliminated the need to physically move currency, and the growing capacity to move people and goods at low relative cost at near the speed of sound. A chicken in every pot has been replaced by a satellite dish on every roof, or at least in every village around the world. The Internet reaches virtually every country in the world. Clearly, this is a trend that will increasingly be at the center of humankind's common reality in the 21st century.

What has begun to emerge in this more sophisticated vision is a recognition that a fundamental factor underlying both the global economics on which Americans depend and the physical safety that they demand is the state of global health and its dynamics. Inter-dependency has its risks as well as its benefits, and the risks are particularly stark in the health arena. A successful approach to national security must take this into account.

Significant change rarely takes place in a linear fashion, and is often marked by steps backward, attempts to hold back the tide. The changing global reality of inter-dependence and rapid uncontrollable change has driven a stark and reactionary counter-movement that has seen its most dramatic form in the medieval absolutism and rejectionism characterized by al Q'aeda. This reaction is also visible in other societies – including our own – in various manifestations of religious fundamentalism, all of which share the common themes of a longing to return to a simpler, more ordered, less complex and more manageable world. The attack on the World Trade Center used the very tools of globalizing commerce – jumbo jets, coded cell phone communications and electronic fund transfers. It was a symbolic attack on economic globalization and the U.S. role as the perceived driver of that process.

As an immediate consequence of the 9-11 attacks, security has become a far more explicit topic in the minds of Americans. But an in-depth look at what people perceive as personal security clearly goes far beyond military matters.<sup>1</sup> At its heart, the concept of security revolves around the safety and well-being of their children, their families, and their communities. Health, as dramatically characterized by concerns over bio-terrorism, is decidedly at the center of this perception. But any serious look at the health risks “from outside” faced by the U.S. public over the coming years shows that bio-terrorism is a relatively smaller threat when compared to the potential consequences of a number of larger global health trends.

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<sup>1</sup> The Global Health Council in cooperation with the survey research firm Lake Snell Perry & Associates has conducted a series of focus groups and national polls on this topic since 1999.

Even more than terrorism, failure to address the major threats to global health could reverse global economic integration and undermine our basic security. In a very real sense, microbes have responded more nimbly to the opportunities presented by globalization than has humankind.

To be useful, a framework for approaching such a vast set of issues must identify those variables that most warrant attention and action. There are four key issues in global health that relate directly to U.S. national interests:

- infectious diseases of global reach
- HIV/AIDS
- the health and development of children around the world, and
- women's reproductive health

### *INFECTIOUS DISEASES*

Over the past few years, it has become almost commonplace to hear that no microbe in the world is more than a day away from an American port of entry. The Institute of Medicine has laid out six factors that underlie the emergence and re-emergence of infectious diseases:<sup>2</sup>

- Human demographics and behavior
- Technology and industry
- Economic development and land use
- International travel and commerce
- Microbial adaptation and change
- Breakdown of public health measures

It is notable that four of these six factors have to do with economic and human dynamics outside the standard biomedical realm. Only the final two – microbial adaptation and the breakdown of health systems – are issues that traditionally fall within the health domain.

In short, global infectious diseases are a true and growing threat to Americans. Two million people cross international borders every single day, about a tenth of humanity each year. Of these, more than a million people travel from developing to industrialized countries each week. It is noteworthy that already over the course of the last half century, at least five times as many Americans have died from communicable diseases that have come to the U.S. from countries of the developing world than have died in all the military conflicts and terror attacks of the same period. SARS is only the most recent in what is likely to be a growing river of microbes that find their way from distant lands to our ports of entry. It is a bit surprising that so many are coming to this realization so late, but that is perhaps human nature.

Several important threats warrant special attention.

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<sup>2</sup> Lederberg J, Shope R, and Oaks S, eds. *Emerging infections: microbial threats to health in the United States*. Institute of Medicine, National Academy Press, Washington DC: 1992; pg. 47.

➤ Anti-microbial resistance

We are seeing increasing rates of antimicrobial resistance among both common and esoteric infections being brought to our hospitals. The fact that this is often perceived as a problem arising from health care practices within the U.S. misses the bigger picture. The degree to which antimicrobial resistance is being driven by use and misuse patterns of antimicrobials in developing countries around the world is underappreciated. In most of these countries, anyone can walk up to a street stall and buy any first generation of antibiotics, almost certainly any second generation, probably a third generation. These costly drugs are commonly dispensed in small doses, or taken partially, because those who need them cannot afford to take the full course and choose to save some for a later episode. Inadequate treatment is the perfect mechanism for creating selective pressure for the evolution of microbial resistance – for microbes, too, what doesn't kill them makes them stronger.

➤ TB

Tuberculosis (TB) is a clear example of the emerging global infectious threat, and what happens to TB globally will have enormous consequence on what happens in this country. TB was the great killer of the 19<sup>th</sup> century; the disease predominantly affected the poor but, because of its high infectiousness and lack of cure, did not spare the rich. Because of the development of effective treatment, by the early 1960s it was widely considered to be a disease of the past. But by the end of the century it had re-emerged with a vengeance. Today, around the world, it is estimated that at least two million people die each year as a result of TB<sup>3</sup> – the second leading cause of adult infectious death around the world. We have seen the re-introduction of TB into the United States, the growth of multi-drug resistant TB that no longer responds to our established treatment regimens, and increasing costs of dealing with this disease. It is notable that nearly half of new TB cases registered in the United States in recent years were among people who came here from other countries.

TB, carried by cough droplets, is readily transmitted in close quarters, such as airplanes; it has been termed “ebola with wings.” Given the high prevalence of dormant infections around the world, it will not be feasible to stop infected individuals at our borders without effectively closing those borders. The only reasonable strategy for protecting the health of Americans from this risk is to address the spread of TB at its source.

➤ Vector-borne diseases

Diseases transmitted by common vectors, such as mosquitoes, pose another threat. Three examples show why:

- West Nile fever emerged in the past several years as a well-recognized and rapidly spreading infection; from an initial introduction in Queens, New York four years ago, it has hitchhiked on its mosquito vectors into almost every one of

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<sup>3</sup> *World Health Report 2002*. World Health Organization, Geneva: 2002

the Lower 48 states. But, despite its publicity, West Nile virus is a relatively benign infection for humans (if not for crows).

- Malaria, in contrast, kills more than one million people a year around the world, and the vector responsible for its transmission, the *anopheles* mosquito, is endemic to the southern parts of the United States.<sup>4</sup> Over the past several years there have been hundreds of cases of malaria in this country, for the most part imported, although a small number of them have been transmitted within U.S. borders. States as far north as Vermont have recorded malaria deaths. With the advance of global warming and global climate change, the range of mosquitoes capable of transmitting malaria has expanded significantly in the United States. With a huge pool of human malaria infections in dozens of countries – an estimated 300 million serious clinical cases a year – we stand at risk for reintroduction and for serious consequences.
- Yet another dangerous mosquito-transmitted disease, Dengue Hemorrhagic Fever is an ongoing threat in parts of Asia and is emerging now as a major threat to health in Central America and the Caribbean. With rapid onset and an often-disastrous clinical course, and with no drugs or vaccines readily available for effective treatment or prevention, this is currently a growing concern to public health officials in the southern parts of the United States as the disease continues to spread northward.

These are just a few examples of global infectious disease risks that could be of very real consequence to Americans in the coming years. Objective assessments rate the likely health impact of these “naturally” introduced infections as considerably higher than the current set of organisms on the bio-terrorism watch list. Yet the resources for addressing them are dangerously lagging – a critical lapse in our national security response.

### ***HIV/AIDS***

While it is certainly an infectious disease, the threat of HIV/AIDS to American national security is qualitatively different than these other infections. While AIDS has claimed hundreds of thousands of American victims and continues to be a leading cause of death of young African Americans, widespread awareness and means taken to prevent infection make it unlikely that it will further accelerate in this country. Here and in other affluent countries, we have found means to mute its consequences among its victims through the use of highly active anti-retroviral therapy (HAART). HAART has sharply reversed the mortality trends of AIDS here since its introduction in the mid-1990s, and for many has turned AIDS from a death sentence into a chronic disease. But the effects of AIDS in countries of the developing world have finally become of direct concern to American foreign policy leaders.

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<sup>4</sup> In fact, the Centers for Disease Control and Prevention (CDC) was initially founded as an institution to combat malaria in the U.S.

This year, over four million people will be newly infected with the AIDS virus, and nearly three million who were infected several years ago will die.<sup>5</sup> Ninety-five percent are in developing countries. The total number of people alive with HIV infection around the world is now over 42 million, and more than 20 million have died since the global pandemic started two decades ago.

HAART treatment for the millions infected in the developing world is still an empty promise. Over the past two years enormous drug price reductions have reduced the annual cost of drug treatment for an infected individual from \$20,000 to just over \$200, but seen in the context of health systems that devote somewhere between \$5 and \$10 per year to health care *per capita*, and where those most in need often earn no more than \$1 a day, this is still an enormous financial hurdle. In addition, the issues of follow-up, of maintaining therapy, of assuring that people get and take their drugs on a regular basis so as not to again engender the development of resistant strains of HIV, are critical to the future of the global AIDS pandemic, and pose enormous challenges to the health systems in most developing countries.

Long-overdue changes are finally taking place. The Global Fund to Fight AIDS, TB and Malaria is raising and dispensing money to support both treatment and prevention in highly affected countries, but it is billions short of its ambitious financial goals. And President's Emergency Plan for AIDS Response (PEPFAR), which promised a five-year investment of \$15 billion, is now close to achieving that level of funding, and shows that even an Administration focused on the military aspects of national security can recognize the profound dangers and the moral imperatives of a world destabilized by AIDS.

What is going to happen to the tens of millions of infected people in the developing world? A great many will die, most of them adults in their prime of life. And their loss will leave their societies in disarray, as we are seeing in Africa right now. The average life expectancy in Zimbabwe and Botswana is dropping into the 30s as a result of HIV, from the mid 60s a few years ago. In many places in southern and eastern Africa today, fully one-third of adults of reproductive age are infected with HIV and as many as eighty percent of the children seen in pediatric wards are HIV-infected.

This will profoundly affect those societies as they lose their adults in the prime of life. Very often those at highest risk of HIV infection are the ones who have climbed to the middle class and positions of economic, political and military leadership. As these adults die, and as these countries lose their leadership and infrastructure, widespread social disarray is almost inevitable. This reality has been noted by recent CIA analyses that pose HIV as a significant destabilizing force in highly affected countries of Africa, and a major risk for emerging hot-spots such as India, China and the countries of the former Soviet Union.<sup>6</sup>

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<sup>5</sup> *AIDS epidemic update*. Joint United Nations Programme on HIV/AIDS and the World Health Organization, Geneva: 2002.

<sup>6</sup> The next wave of HIV/AIDS: Nigeria, Ethiopia, Russia, China and India. National Intelligence Council: *ICA 2002-04D*, 2002.

In addition, we have a situation in which conservative projections estimate the number of orphans in Africa as a consequence of AIDS at 40 million by the year 2015. The reality of the developing world today is that young people without parents – in communities in which their cousins, their uncles and extended families are equally smitten by the virus – have no place to go but to the streets of the exploding cities of Africa. This is not only a humanitarian concern, but a pressing national security concern. The history of conflicts in Africa over the past few decades reveal a deeply disturbing pattern: the growth of the use of children as vehicles for armed conflict. Militia leaders have been quoted as saying that a 12-year-old is the perfect recruit: old enough to carry an AK-47 and to understand and follow orders, but too young to have compunctions against acts of terrorism and human depredation.

This has very real potential consequences for the U.S. Because American values make it unlikely that the U.S. will sit by and watch genocide and mass murder take place over an extended period, it is very likely that the American military will get involved in one or more of these conflicts in Africa in the coming decades. As coverage of today's Iraq war demonstrates, Americans will watch unfolding events live. Our national security is very much at stake.

### ***CHILD HEALTH AND DEVELOPMENT***

Child survival efforts are often characterized as humanitarian programs. They are indeed humanitarian, in the best traditions of the U.S. But efforts to assure the good health and development of children are also profoundly important for the future of this country and of the planet. Three quarters of the children born in this decade will be born in developing countries around the world. This means that three quarters of the people who will constitute global humanity by the middle of the 21st century will have been born and raised in those societies.

Analyses carried out by the CIA in the late 1990s found a high degree of correlation between political instability and high child mortality rates in developing countries.<sup>7</sup> The sense of hopelessness and inability to control their families' destiny that comes from watching children die serves as an enormous brake on the ability of the world's poor to become stakeholders in their own societies.

Today, one-third of adults in developing countries have some degree of cognitive delay or dysfunction as a result of malnutrition or disease in childhood. This is an enormous squandering of human potential with very real consequences for the shape of this century. When we consider that in a globalized world these are our trading partners, our markets, labor forces, the people next door, it is clear that the health and development of the world's children should be of immediate concern to Americans as we think about the future.

### ***WOMEN'S REPRODUCTIVE HEALTH***

Reproductive health does not appear high on today's national security radar screen, but it should. If the fundamental rights and well-being of women, half the world's people, are at risk – which

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<sup>7</sup> Esty D, Goldstone J, Gurr T, Harff B, Surko P, Unger A, and Chen R. "The State Failure Project: Early Warning Research for US Foreign Policy Planning," chap. 3 in Davies R and Gurr T (eds.), *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*. Rowman and Littlefield, Boulder, CO and Totowa, NJ: 1998.

they are, particularly in the context of fundamentalist counter-movements such as the Taliban and similar religious conservative groups in the U.S. and elsewhere that look to return women to more traditional and subservient roles – this will inevitably have enormous spill-over effects.

In the U.S. and other affluent countries, we recognize that a key element of good reproductive health is the ability of women to determine for themselves the timing and number of their pregnancies. Far too often, this is not the case in the developing world. The availability and use of voluntary methods of family planning, both reversible and non-reversible, have expanded enormously over the past quarter century, and in past decades the U.S. has played a true leadership role in this global trend. But the reality remains that more than 120 million women around the world today would like to limit or space their child-bearing, and yet do not have effective access to family planning services and methods.<sup>8</sup>

There is clear evidence that, acting on their own choices and with the availability of decent services, women in the developing world who currently experience very high fertility would substantially reduce their family size. Thus, the reproductive health of the world's women, and their ability to determine their own reproductive future, has direct consequences on global population growth. During the past 13 years, the population on the planet has grown by one billion people, the total number of humans alive on earth when Thomas Jefferson was president. And while six billion healthy and productive humans would not constitute a threat to America's security interests, the reality is quite different. A high proportion of the world's six billion people – and particularly those with the highest fertility rates – live in grinding poverty and malnutrition, as unwilling stepping stones for communicable diseases, desperate for better opportunities and today able to migrate at a scale and over distances never before imaginable. In an era of unparalleled environmental challenges, this warrants our attention and action based both on our values and our enlightened self-interest.

### *CONCLUSION*

These realities and threats warrant the placement of global health squarely on the map of national security and foreign policy. Over the long run, this placement is inevitable, driven by the realities of today's world. However, the difference between wise policy and reactive policy is anticipation.

The foreign policy discussions of this century will increasingly be driven by those dedicated to a world of improved health and sustainable development among those at highest risk, because this is critical for our mutual safety and prosperity. Those who understand health threats, health opportunities and health realities, and the interplay between the developing world and the U.S., are essential partners in forging a safer world. They are also essential for conveying a basic fact: while the threats are evident, this is truly not a gloomy scenario. The new century presents us with the opportunity to make global health an achievable vision. We know that each of the challenges described here can be addressed constructively and rapidly, and to the benefit of all

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<sup>8</sup> Ross, J.A. and Winfrey, W.L. Unmet Need for Contraception in the Developing World and the Former Soviet Union: An Updated Estimate, in *International Family Planning Perspectives*, 2002, 28 (3): 138-143

humankind. This truly presents the opportunity to show the United States and its engagement in the world in a very different light from its current misadventure in the Middle East.

The knowledge and technology at our disposal to address the key issues of global health have evolved rapidly over the past few decades. What is needed now is the policy attention and the level of resources that will make a difference.

How expensive is that future? There are two billion people in the world living on less than \$2 per person per day. The WHO Commission on Macroeconomics and Health has looked at the total cost of a basic health package that would address all of these issues, delivered efficiently in a developing country setting.<sup>9</sup> Their estimate is \$34 *per capita* per year – a tiny fraction of the more than \$4,000 spent each year on health care costs for every man, woman and child in America. If the U.S. were to invest \$10 billion a year in addressing global health (less than one tenth of one percent of the federal budget), it could have enormous consequences. Consider the benefits to national and global security, and pose these figures against our current military expenditures of nearly \$400 billion a year. The arguments speak for themselves.

This essay has taken a hard-nosed approach and discussed global health from the standpoint of national interests. But the United States' finest moments have always come when our policies and priorities were driven by our national values. We are a nation founded on the belief that *all people are created equal and endowed by their creator with certain inalienable rights, among them life, liberty and the pursuit of happiness.*

Life, liberty and the pursuit of happiness are not conceivable in a world in which disease and vast inequities in health hold the upper hand. A true projection of our founding values places global health squarely within our principal foreign policy priorities.

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<sup>9</sup> Sachs J, Chair, Commission on Macroeconomics and Health. *Macroeconomics and health: investing in health for economic development.* WHO, Geneva, Switzerland: 2001.