



The vicious cycle reaches beyond health itself. A community's general poor health usually means that agricultural productivity and school attendance lag. As an example, a 1987 UNICEF-funded study in Nigeria found that the large numbers of rice farmers suffering from Guinea worm disease (dracunculiasis) resulted in the loss of 20 million dollars a year in unharvested rice. That was only one crop in a small part of one

Other important advances in global health have come from the recognition that health improvements require collaboration with other public sectors to improve such critical areas as agriculture and the availability of safe drinking water. At last, policy makers are coming to understand the importance of a healthy population to a nation's economic well-being.

Advances notwithstanding, a quarter century after the world resolved to implement primary health care as a means of achieving "health for all," little has changed to provide routine, rudimentary health services to most of the world's poor. Our victories have been modest compared with what is needed. We are discovering "new" infections much faster than we are eradicating older ones, and that dynamic is not likely to change. Moreover, many improvements are limited to pilot projects or only parts of some countries. Much more can and ought to be done.

We have the technology to make a much greater impact on global health, and we are acquiring more tools each year: old and new vaccines, tablets that treat many parasites at once, antibiotics, oral rehydration therapy to counter diarrhea, bed nets to protect against mosquitoes, condoms to protect against HIV/AIDS, and more. We are lacking, however, in adequate enlightenment and the money and political will to put our tools to maximal use for everyone's benefit. We need fewer global resolutions and more manifest global resolve to help reduce disease and death wherever we can, as soon as we can, and for as long as necessary.

Current initiatives are piling up. In addition to those mentioned above, we now have AIDS control efforts, STOP TB, Roll Back Malaria, Intestinal Helminth Control, and more. But the nitty-gritty, foundation-building work of improving primary health care services is neglected, even by its most vocal advocates. Some expensive, hard-won gains in disease control are in danger of being rolled back because local primary health care services are too weak to sustain them. Two said examples of this are African sleeping sickness and yaws. The ongoing training, support, supply, and supervision of peripheral health workers needed to provide routine, prioritized services to fight these diseases is woefully lacking. That frontline health workers are too few, and even those few and commonly ignored, is a failure primarily affecting their communities and countries, but it also means less protection for the rest of the world as well.

Countries need sustained help to come up with programs that address their priority diseases simultaneously, and they need to be held publicly accountable for meeting announced, disease-fighting benchmarks along the way. We have missed some opportunities already. A generation ago, immunizations to control measles were conducted simultaneously with vaccinations to eradicate smallpox, but only in West Africa, while such a combined strategy for polio eradication and measles control was used only in the Americas. Both were successful. The Carter Center is now helping two Nigerian states to combine health education with mass drug administration against onchocerciasis as part of the African Program for Onchocerciasis Control (APOC), with similar interventions against schistosomiasis and lymphatic filariasis. But Nigeria has 36 states and APCO cover 19 countries, each of which has other diseases that also require better control.

Badly needed improvements in public health cannot be achieved in the typical three –or five-year time frame. It would be more realistic for developing countries to seek sustained assistance from developed countries until they can stand on their own feet

in the fight against disease. Since the late 1970s, the Centers for Disease Control and Prevention (CDC) has helped 20 Asian, African, European, and American countries develop national programs modeled after its own Epidemic Intelligence Service (EIS). In each country a single, experienced epidemiologist from CDC works for about five years, training local physicians to do routine surveillance and analyses, to investigate suspected epidemics, and to conduct operational studies under local conditions. Simultaneous assistance in upgrading diagnostic laboratory service is sometimes included. Even while they're being trained, however, the trainees are producing epidemiological information that is useful to the ministry of health. Within five years or so, the country has a service that is self-sustaining because graduates of the program help train and mentor new recruits while working in health posts, universities, and public health institutions nationwide. Every country needs some version of such a service, and the whole world would benefit from this. Year after year, we struggle with the consequences of not having such services. Disease surveillance, control, and eradication in Chile, China, and Chad is the world's business, not just a national concern. Microbes recognize our common humanity even if we don't.

We need greatly increased, sustained First World assistance, combined with Third World political will, and a mutual insistence on measuring success or failure by reductions in disease in villages and towns around the world. We need a grand alliance against disease, a sustained war on microbes, including continued research, and real progress in strengthening primary health care for rural and urban populations everywhere.

Mozart almost died of smallpox as a child. How much poorer would the world be if Nelson Mandela had died of measles as a boy? The world is losing potential scientists, statesmen, and artists every day, and we are all the poorer for it.

The microbes have already declared war on us. We need to come together to declare war on them and on other barriers to better health for us all. It's not charity. It's common sense.