A light in the darkness

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"You can never be quite the same again after a visit to Africa": Dr. James Strickler, dean emeritus of DMS, told me this before a recent trip that I made to Dar es Salaam, Tanzania.

I had traveled extensively in Eastern and Western Europe, in Japan and Korea, and in the Middle East. Before my trip, I had reviewed data from the World Health Organization and UNICEF, as well as health status reports from the Tanzanian Ministry of Health. I had talked in depth with colleagues who had been to Tanzania many times. And I had met Dr. Kisali Pallangyo, principal of Muhimbili University College of Health Sciences (MUCHS), Dartmouth's partner in several Tanzania-based projects.

Dr. Pallangyo said that when there's a job opening in Dar es Salaam you hire two people, because one will soon die of AIDS.

Profound: But Dr. Strickler was right—nothing can prepare you for your first visit to Africa. I am still flooded with so many memories of the trip that it is hard for me to be dispassionate. It was such an intense experience that I found myself writing poetry on the flight home, unable to summarize in prose what I had seen—this by someone who had never before written a poem.

Tanzania has a population of about 36 million people. About 75% live in rural areas. It is a deeply poor country. Per capita income is $290, compared to $37,600 in the U.S. There are only about 800 doctors in the whole country—the Dartmouth-Hitchcock system has nearly that many!—and just 52 are pediatricians. By U.S. or Canadian standards, there would be 5,000 pediatricians in Tanzania. I say "would" instead of "should" because we don't know the optimum ratio of pediatricians to children, but that hundredfold difference is stark. Childhood mortality (deaths under age 5) was 165/1,000 in 2003, compared to 8/1,000 in the U.S. The childhood death rate had been improving until the advent of HIV; 1999 was the best-ever year, at 141/1,000. The HIV infection rate in Tanzania is 10% in adults and 30% in pregnant women; 7% to 9% of newborns are infected. In the U.S., thanks in part to the availability of anti-retroviral drugs, perhaps 100 children a year are born with HIV—while 1,600 children a *day* are born with HIV in sub-Saharan Africa. On the plus side, immunization rates have risen and diseases such as tetanus, measles, and polio have declined. But Tanzanian children continue to face a high risk of death from complications of labor and delivery, while malaria and other infectious diseases still take a huge toll. And nearly a million children in Tanzania have been orphaned by HIV.

Daunting: Going on rounds at Muhimbili Hospital is daunting. There are huge wards, few nurses, few housestaff, little equipment or aging equipment, and overwhelming disease. One sees both resignation (coffin shops at the hospital entrance) and remarkable dedication and resilience among the medical, nursing, and pharmacy personnel. Life expectancy at birth had risen to about 55 in the mid-1990s but has now declined to 43, mostly due to HIV. (Life expectancy in the U.S. continues to increase and is now 77.) The most productive segment of the society, those from 18 to 40, is being decimated. Dr. Pallangyo told me that when there's a job opening in Dar you hire two people, because one will soon die of AIDS.

The problems seem so overwhelming. What role could Dartmouth, half a world away, possibly play? Yet through the remarkable work of Drs. Ford von Reyn and Richard Waddell and their colleagues, we have forged a truly bilateral partnership. MUCHS was founded in 1963, about the same time DMS was being refounded. There are 100 students per class in Dar—making MUCHS slightly larger than DMS. Starting as a joint research endeavor, our interactions have grown and now include educational exchanges funded by the Fogarty Foundation and pediatric initiatives funded in part by the Foundation for Treatment of Children with AIDS. Many U.S. institutions, government and nongovernment organizations, schools of public health, and medical schools are working in Tanzania. Some do research, some establish clinics. One unique thing DMS can do is form a long-term, sustainable partnership with MUCHS, beginning with our students. We already have ongoing student exchanges; several DMS students were in Dar during my visit, and the first Tanzanian student to travel to DMS will soon arrive for an elective in infectious diseases.

Alliances: But if we are to really effect change, we need to bring many more DMS and MUCHS students together. We plan to do this electronically. I believe that together, our students can form alliances that will lead to innovative solutions to this sprawling challenge.

We also recognize—as do many others in the Dartmouth community—that health is not the domain only of doctors and other healthcare workers. During our visit, we met with faculty in engineering, business, languages, and the social sciences, seeking additional ways Dartmouth can work with the University of Dar es Salaam. To this end, a Dartmouth-wide collaborative—under the leadership of the John Sloan Dickey Center for International Understanding; the faculties of DMS, the Tuck School of Business, and the Thayer School of Engineering; and the Arts and Sciences faculty—has launched a Global Health Initiative. We intend to bring together Dartmouth expertise, across disciplines, to confront these complex global health issues in partnership with our colleagues in Tanzania.

These are very small steps in the face of overwhelming problems. Yet we must take and are taking these steps. I hope and trust that the growing partnership between Dartmouth and Dar es Salaam will be a model for others. That what began as a single research program will ignite a light in the seemingly impenetrable darkness. ■

"For the Record" offers timely commentary from the dean of Dartmouth Medical School. Spielberg, a pediatrician and a pharmacologist, is in his third year as DMS's dean.