



Ben Robbins

A TEAM EFFORT IN TANZANIA

A BOY'S HOPE TO IMPROVE LIVES TAKES HOLD,
WITH AN ASSIST FROM GEISEL

BY ISAAC MARO, MD, MPH ('09)

AS SOON AS YOU GET PAST DAR ES SALAAM'S JULIUS KAMBARAGE NYERERE INTERNATIONAL AIRPORT AND INTO THE STREETS OF THE CITY, you will start experiencing a difference. Hot temperatures bring almost uncomfortable humidity, but the warmth of the people you meet will amaze you. Almost everywhere you go, you will be greeted with open arms and a smile.

Tanzania's welcoming spirit and its "we're all in this together" ideals have helped my home country make great progress in many areas in recent years. But it does not take much time here to realize that serious challenges remain, especially in the health sector.

Like many African countries, Tanzania provides universal health coverage. Tanzanians are supposed to access free or low-cost health care through a cost-sharing approach with the government subsidizing the costs of health-care services. This system had been in place since the country gained independence in 1961. But in recent years, things have not been so

Dar es Salaam, a city of about 4.5 million people, is Tanzania's wealthiest city, but many residents live in poverty, and gaining access to health care can be difficult. Below, physician Isaac Maro demonstrates how to administer an auditory brainstem response test to a group of teachers.

straightforward, because of both worldwide political changes and the government's financial status. Over the years we have witnessed a change in practice from purely universal health-care coverage to insurance-based coverage. The government is no longer capable of covering the health-care costs of all Tanzanians.

Since I was a young boy, I knew I wanted to become a doctor so that I could help my people and society at large. Most Tanzanians, because of their financial situations, faced huge challenges in trying to access health-care services. I just knew that there was something I could do to help my fellow Tanzanians.

After completing my secondary education, I was selected to join Muhimbili Medical School at Muhimbili University of Health and Allied Sciences. There I knew I would become a physician and finally be able to help those who were struggling in my country.

But there was one additional challenge: I hoped to specialize in infectious diseases, but that was not one of the specialties offered at Muhimbili. As a medical student, I started looking for programs that offered a course in infectious diseases. Fortunately, when I was in my third year of medical school, I was awarded a scholarship to attend Dartmouth Medical School (now the Geisel School of Medicine) as a beneficiary of a medical student exchange program. I spent eight weeks at DHMC, where I was supervised by Ford von Reyn, MD, a professor of medicine at Geisel and director of the DarDar Health Study (a collaboration between Muhimbili and Dartmouth), and Richard Waddell, MD, a Geisel assistant professor of medicine and associate director of the DarDar programs.

At Dartmouth, I was trained in infectious diseases, an area that was missing from my previous training in medical school. During my

time at Dartmouth, I attended various courses on infectious diseases and was provided with a rare opportunity to witness firsthand how infectious were controlled. It was an eye-opening experience, and I knew for the first time that my dreams could someday be a reality.

That was the beginning of my relationship with Dartmouth. The exchange program not only introduced me to colleagues at Dartmouth and to their wonderful work on infectious diseases, but it also provided me with an

opportunity to learn about their collaborative research project in Dar es Salaam, Tanzania, known as the DarDar Health Study. My time in New Hampshire further cemented my vision of becoming an infectious disease doctor as well as a clinical researcher. I completed medical school and immediately applied to join the DarDar study. I liked the project's focus on infectious disease research—and the specific focus on HIV/AIDS and tuberculosis, two diseases that affect many people in Tanzania. I

“I wanted to be part of a team that was making a real difference in Tanzanian communities, and DarDar was doing exactly that.”



Abby Fellows

Top photo: A nurse with the DarDar clinic removes earwax from a patient enrolled in a clinical study. Bottom photo: Isaac Maro examines a young patient at an orphanage.

Abby Fellows



Ben Robbins



wanted to be part of a team that was making a real difference in Tanzanian communities, and DarDar was doing exactly that.

As part of the DarDar study, I served as a physician and was responsible for all research participants. I learned how to set up clinical research and how to carry out a successful clinical study. The DarDar health study conducted a phase III clinical trial on a tuberculosis vaccine for those living with HIV/AIDS. The trial was very successful, enabling the project to help a lot of Tanzanians getting their treatment at our clinic.

The research trial was also responsible for the life-changing idea to create a pediatric HIV clinic. Under the leadership of Lisa Adams, MD, the associate dean for global health at Geisel, and Paul Palumbo, MD, a professor of medicine and of pediatrics at Geisel, the pediatric clinic has provided excellent services to children with HIV from all corners of Dar es Salaam, and it is one of the only clinics designed specifically for children in all of Tanzania.

After completion of the vaccine research, two more studies were started. One was the nutrition study under von Reyn which focused on finding the role of protein calorie supplements on HIV outcomes among women. A second study centers on finding the effects of HIV/AIDS on hearing, and is being directed by Geisel Professor of Medicine Jay Buckey, MD. The nutrition study has been very successful and has helped many women who were participating in the study. The hearing study is still ongoing but has been producing much-needed information, which contributes toward the overall effort to find a cure for HIV/AIDS. These studies are very important to the welfare of Tanzanians because of the high prevalence of HIV/AIDS. I am honored to be part of a project that is making a real difference in the lives of Tanzanians.

After working with the DarDar study for a year, I was awarded a scholarship to pursue a master's degree in public health at The Dartmouth Institute for Health Policy and Clinical Practice (TDI) at Geisel. After spending a year at TDI and earning my degree, I returned to Tanzania as a Dartmouth fellow and rejoined the DarDar Health Study, where I was later appointed a director of clinical services.

As a public health specialist I appear regularly on radio and television. One radio program I am on is called Crossroads (Njiapanda) and focuses on social welfare. I also appear on a television program called AfyaCheck (Health check) which promotes health education. Some of the programs can be seen on www.youtube.com/AfyaCheckOnline. Working with Dartmouth and earning my MPH there has provided me with opportunities to do this work.

My friends and I also conduct community health programs through a group we call Health Care Ambassadors (HeCA). We started this group after visiting one orphanage

“MY PARTNERSHIP WITH DARTMOUTH HAS GIVEN ME THE OPPORTUNITY TO HELP MY PEOPLE AS I DREAMED OF DOING BACK IN MY YOUNGER DAYS.”

in Tanzania called Bibi Jann Orphanage Center. Bibi Jann was discovered by colleagues from Dartmouth, and we were asked to help provide health care services there by Benjamin Robbins, a Dartmouth College graduate. Since then, HeCA has grown, and we now provide free health-care services to patients at 34 orphanage centers.

My partnership with Dartmouth has given me the opportunity to help my people as I dreamed of doing back in my younger days. Through DarDar I have attended various courses on health communication and have conducted clinical research. DarDar also provided me with a platform to publish scientific papers and attend major health conferences. Through my training and the media, I have educated my fellow Tanzanians on how to both prevent and treat disease. I have been able to help Tanzanians access health education and services, regardless of their financial situation.

I strongly believe that it is only because of my association with Dartmouth that I have been able to see my dreams become a reality. Tanzanians are much healthier today because of the relationship between Geisel and the Muhimbili University of Health and Allied Sciences.

“Harambee” in the East African Kiswahili language means “all for one” or “pulling together for progress.” I am honored to be part of a team with such a strong spirit of harambee that is making a real difference.

ISAAC MARO IS A PHYSICIAN IN DAR ES SALAAM, TANZANIA AND DIRECTOR OF CLINICAL SERVICES FOR THE DARDAR HEALTH STUDY. HE RECEIVED HIS MPH FROM GEISEL IN 2009.



Resources for more information

- Watch AfyaCheck at www.youtube.com/AfyaCheckonline
- Follow Isaac Maro's work on **Facebook and Twitter:**
 - www.facebook.com/Njiapandatz
 - www.facebook.com/AfyaCheck
 - www.facebook.com/DrIsaacMaro
 - www.twitter.com/AfyaCheckonline
 - www.twitter.com/DrIsaacMaro
- Learn more about Bibi Jann Orphanage: salamatanzania.org

