Bringing New Technology to a **Nursing School in Tanzania**



Nursing students in Tanzania used to take field notes by hand, slowing down the impact of care—but a Montefiore pediatrician decided to change that.

LAST YEAR, a student from the Dareda School of Nursing in Tanzania spent four weeks living in a remote village some distance from Dareda Mission Hospital. As part of a community fieldwork project, she visited homes, churches, farms and schools. She discovered that many local people did not boil their drinking water and, as a result, some were suffering from dysentery. She also observed cases of malaria, yet a number of families were not utilizing their insecticide-treated mosquito nets. In meetings with villagers, she demonstrated safe methods of boiling and storing drinking water and explained the importance of sleeping under mosquito nets. On a return visit to the village, she found that many of the families were following her advice.

Nursing students used to document their fieldwork reports by hand—a painstaking task. Now, for the first time, they're using older laptops donated by Montefiore to collect and analyze their data and write about their research and outreach activities. Andrew D. Racine, MD, PhD, Chief, General Pediatrics, The Children's Hospital at Montefiore (CHAM), and Professor of Clinical Pediatrics, Einstein, reached out to Jack Wolf, Vice President and Chief Information Officer, who offered six used IBM laptops the medical center no longer needed. With the laptops, students can more efficiently and effectively gather data on the most common diseases, including malaria, pneumonia, gastroenteritis and tuberculosis; compare the prevalence of the

diseases in the village with district, regional and national prevalence rates; conduct needs assessments; and develop interventions to address health problems in the community.

"We're very pleased to see that these recycled laptops can serve as tools to a community in need," says Mr. Wolf. "The computers get additional shelf life and will facilitate field research and make documentation and tracking of information much easier."

Dr. Racine's relationship with Dareda Mission Hospital dates back to the 1970s when he was a volunteering student about to enter medical school. "It was a transformative experience," he says. "When working in a resource-poor environment, you depend more on your ability to ask the right questions, but it also helps to have the tools to track the answers you receive to those questions."

He kept in touch with Dareda Mission Hospital staff and joined the board of OMPACO, a U.S.-based nonprofit that provides medical supplies to institutions in the developing world. During a 2007 visit to Dareda Mission Hospital, Dr. Racine brought along his daughter Sophie, then 16 years old, who noticed that the 120 students at the hospital's nursing school were sharing five desktop computers from the 1980s and didn't have access to the Internet. "Sophie identified the need for better equipment that could help the students' education, which would then benefit local communities," he says.

Dr. Racine hopes to create more opportunities for Montefiore to partner with Dareda Mission Hospital. "We'd like to set up a series of exchanges of equipment and expertise," he says. He notes Montefiore residents have expressed interest in doing a rotation at Dareda Mission Hospital. He is also exploring the possibility of donating an endoscope to Dareda Mission Hospital and training physicians there on how to use it for ear, nose, throat and gastrointestinal procedures. "Promoting health and teaching others how to do the same is being true to the Montefiore name," Dr. Racine adds.



TANZANIA, located in southeastern Africa, is home to 44 million people. The life expectancy for Tanzanians is age 53 for males, and 58 for females. Malaria and pneumonia each account for 16 percent of deaths among children under age 5. The prevalence

Source: World Health Organization



Visit www.montefiore.org/inspiredassociates to view a video about Dr. Racine's visit to Tanzania.

of HIV among adolescents and adults ages 15 to 49 is 56 per 1,000