



HEALING ZAMBÉZIA

**Thinking Outside the Clinic
To Make A World of Difference**

by ANDREW MOE

Imagine a place where one physician is responsible for the care and well being of nearly 200,000 people. Where the countryside consists mostly of small villages or towns, food and money are scarce, and life expectancy does not reach 45 years of age. Where one out of five people are HIV-positive in a region of more than 4 million.

Welcome to Zambézia, the second most populous province in Mozambique, where over 50 Vanderbilt healthcare professionals are stationed. As part of the Institute for Global Health (IGH) at Vanderbilt, faculty, staff, and students are supporting the Ministry of Health clinics in the provision of HIV care and treatment in rural districts of Zambézia.

The province, approximately the size of Tennessee in area, is in one of the world's poorest nations, according to the 2005 Human Development Index. Additionally, Mozambique has one of the worst doctor-to-patient and nurse-to-patient ratios, and only one city has a population of over 100,000, creating steep obstacles in providing patient care and treatment to a largely rural area.

The Vanderbilt Institute for Global Health, a three-year old, multidisciplinary “center-without-walls,” currently supports twelve government primary care clinics in the province and intends to grow its support to 24 sites covering more than 1.2 million of the provincial population. Dr. Sten Vermund, Amos Christie Professor of Global Health and Professor of Pediatrics, leads the institute to address health issues that transcend national boundaries.

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“It is essential that the U.S. attend to the global HIV crisis,” Vermund explains. “In Africa, statistics of human devastation are reminiscent of those from fourteenth-century Europe when the bubonic plague is thought to have killed one in four persons.”

For this reason and many others, Vanderbilt is helping to prevent HIV prevalence in Zambézia, as well as care for and treat those already infected. Through an \$8 million grant provided in 2008 by the President’s Emergency Plan for AIDS Relief (PEPFAR), Vanderbilt is playing a crucial role in a region devastated by AIDS.

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Sten Vermund

In Zambézia today, a host of medical practitioners from Vanderbilt, including nurses, physician’s assistants, medical students, and community educators live and work in the country’s most rural villages where clean water and electricity are unavailable in many health clinics and mobile phone access has been a mere thought for years.

Besides providing preventative care and treatment, medical professionals are working on ways to sustain their efforts long after they leave. Vanderbilt staff use a holistic approach, developing a model for rural healthcare and treatment that integrates health services, social services, and human resource constraints. They are training and mentoring Mozambican health workers, building laboratory and medical records infrastructure, and ensuring clean water and electricity are accessible.

Dr. Troy Moon, a pediatric infectious disease specialist, lives in Quelimane, the provincial capital. There he directs medical operations for the Friends in Global Health, LLC, an organization affiliated with Vanderbilt that partners with developing

CLOSER EXAMINATION: INSTITUTE FOR GLOBAL HEALTH (IGH)

- Founded in 2005, the Institute for Global Health aims to provide service and capacity building, training of Vanderbilt and in-country health professionals, and pragmatic research of public health importance in resource-limited settings of the developing world.
- Three years following the launch of this initiative, the Institute for Global Health is involved in projects and partnerships with more than two dozen nations around the globe.
- IGH faculty specializations encompass infectious and chronic diseases, women and children’s health, epidemiology, nutrition, mental health, and behavioral science and technology.
- More than half of the IGH core faculty and staff are living full-time in one of the three nations where the largest extramurally funded work is supported: India, China, and Mozambique.
- A relationship between IGH and the Vanderbilt International Office has facilitated collaborative approaches to global development between VUMC and faculty from diverse areas of the university, including Blair School of Music, Peabody College of Education and Human Development, Owen Graduate School of Management, the Divinity School, the Center for the Americas, and the Cal Turner Center for Leadership in the Professions.
- Faculty members at IGH serve as mentors for students choosing international research projects within the Emphasis and Medical Scholars Programs, and AIDS International Training and Research Program.
- Together with the American Association of Medical Colleges, IGH is the National Support Center for the Fogarty International Clinical Research Scholars (ICRS) and International Clinical Research Scholars Fellows (ICRF) Programs, and provides support to over 100 research fellows and scholars worldwide.
- A new certificate program in global health is available to medical and public health students; it provides a strong background and understanding of the issues in the field for those interested in pursuing careers in global health.
- IGH is compiling a database of organizations and individuals throughout Middle Tennessee engaged in global health initiatives that will serve as a resource for local organizations seeking partnerships or to pool resources and knowledge with others.



countries, foundations, and institutions to develop a comprehensive, sustainable model for rural health care.

“We look forward to the day when our services are no longer needed,” Moon says. In the midst of providing care and treatment, staff members initiate the clinic improvements and training needed to transition responsibility to the Mozambicans themselves, in the context of much improved infrastructures.

Additionally, IGH is developing a partnership to address long-term concerns of sustainability with the Owen Graduate School of Management, the Center for Latin American Studies, and the School of Business Administration at the University of São Paulo in Brazil—one of Vanderbilt’s Core Partner institutions. The goal of this partnership is to address social and economic development in key areas identified as barriers to rural healthcare in Mozambique, such as agricultural production, nutrition, and transportation.

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“Through new partnerships, we will expand the reach of our HIV programs to include such activities as micro-loans, nutritional support, improvements in farm practices, and improving overall primary health care,” IGH Deputy Director Dr. Alfredo Vergara says. After living in Mozambique for six years, Vergara founded Mozambique’s first office for the U.S. Centers for Disease Control and Prevention. Another partnership Vergara notes is with the Real Medicine Foundation in California. The organization arranged the donation of a mobile clinic that will be used to reach rural villages until a permanent clinic can be established.

Moon concludes that, in many ways, Global Health and its partners are helping Zambézia achieve what it could not do alone. “I think the Vanderbilt community can be proud of what its faculty, staff, and students are doing here in rural Africa. We welcome our alumni and friends to get involved with this work.”

For more information on the Institute for Global Health, visit www.mc.vanderbilt.edu/medschool/globalhealth