

## HIV/AIDS Twinning Center



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## Documentary Highlights Pioneering Efforts of AIHA's Emergency Medicine Partners in Ethiopia

Emergency medicine as a clinical sub-specialty is still in its infancy in Ethiopia, but an AIHA twinning partnership linking Addis Ababa University (AAU) School of Medicine with the University of Wisconsin at Madison has been working to spearhead the development of this urgently needed discipline in country since 2009.

Together, the Ethiopian and US partners opened the country's first Emergency Medicine Training Center.

To date, partners have trained more than 4,000 medical personnel and first responders on a broad range of life-saving skills, including emergency triage and treatment, basic life support and CPR, and advanced life support in obstetrics, at this innovative, skills-based learning center.

"We are triaging patients more efficiently now and critical patients are being managed properly in the ER, so the quality of care has improved," says Dr. Biruk Girma, an emergency medicine physician at Tikur Anbessa and assistant professor at AAU's School of Medicine.

Partners also created fellowship programs for both adult and pediatric emergency medicine physicians and established the country's first emergency medicine

residency program, which is the second of its kind in Africa (the first is in South Africa).

They have also been working to improve the capacity of Addis Ababa University's MSc Nursing program and Tikur Anbessa's nursing department by creating a new cadre of master-level emergency medicine nurses through curriculum development and expanded clinical training.

In their new leadership roles, these graduate nurses are now supporting the MSc Nursing program by delivering lectures and conducting trainings on their own. To date, 58 MSc emergency medicine nurses have graduated from this new program and been placed at the Ministry of Health, Tikur Anbessa, and various universities and hospitals in Addis Ababa and across Ethiopia.

Although this partnership recently graduated, AIHA is continuing to provide direct support to the Ethiopian partners so they can continue targeted activities, including postgraduate residency and nurse training programs, short-term trainings, and advocacy efforts for expanding emergency medicine across the country.

During World Health Worker Week April 6-10, AIHA



AIHA's emergency medicine partners are pioneers of this critical clinical sub-specialty in Ethiopia .

honored the dedicated team of medical professionals who, with help from their counterparts at the University of Wisconsin at Madison, have been true pioneering emergency medicine as a clinical sub-specialty in Ethiopia, by showcasing a video documentary that highlights the work of this dynamic partnership as they helped usher in many positive changes over the past five years with support from PEPFAR and CDC/ Ethiopia.

The documentary can be viewed on AIHA's YouTube channel at <https://www.youtube.com/watch?v=g0Nlmk92rIE>.

## Behind the Scenes, Biomedical Technicians Play Critical Role in Health Service Delivery



At Jimma University Teaching Hospital in Ethiopia, Biomedical Service Engineer Abreham Haddis Abreha (front) works behind the scenes with a small team of technicians to ensure critical medical equipment is operational and available when needed.

**AIHA's Biomedical Technology Program is helping countries meet the demands of today's technology-driven healthcare systems, particularly in the context of providing high quality HIV/AIDS-related diagnostic, treatment, and care services.**

In Ethiopia, like many other low-income countries around the world, nearly all of the medical equipment found in hospitals is imported. Sadly, much of it is out of service, but could be easily repaired at minimal cost by trained professionals.

"Problems with medical equipment are very common in most places," admits Abreham Haddis Abreha, a 29-year-old Biomedical Service Engineer at Jimma University Teaching Hospital in Ethiopia.

To a great extent, biomedical engineers and equipment technicians in low-income countries are affected by the same challenges that doctors and nurses face, including inadequate numbers of qualified personnel to meet existing needs, limited educational opportunities, lack of on the job training, absence of regulatory bodies, brain drain to higher-income countries, and competition with the private sector for the limited pool of skilled professionals.

Jimma University Institute of Technology (JIT), where Abreha graduated with a BS in biomedical engineering in June 2014, established Ethiopia's first biomedical engineering degree program in 2008, while Tegbare-id Polytechnic College in Addis Ababa has been home to one of the country's only diploma-level biomedical technician vocational training programs since 2006.

Both institutions have been partnering with Rice University and Texas Children's Hospital since January 2013 to strengthen Ethiopia's capacity to locally train enough biomedical technology specialists to meet the country's very high demands.

Funded by CDC/Ethiopia, this was the first PEPFAR-supported biomedical technology partnership ever established in sub-Saharan Africa.

"It's not unusual for half or more of a facility's equipment to malfunction at any given time due to a lack of spare parts, a proper plan for routine servicing, and limited technical skills," Abreha explains, stressing, "Without proper medical equipment, it is really hard to provide quality care to patients."

While enrolled at JIT, he also worked as a technician at Jimma University Teaching Hospital. His degree helped him earn a promotion to the engineer level.

"I'd say that my training at JIT has helped me a lot in my professional career because it really made me understand key processes and gain the technical skills I need to solve the problems I encounter every day at the hospital," Abreha says.

Thanks to this training, he was able to work with his colleagues at Jimma University Teaching Hospital to create a proper equipment inventory and history, so that they could establish a preventive maintenance schedule.

"Now that we have this documentation in order, I've been able to put my knowledge and skills to good use," he continues, noting that that includes providing onsite training for technicians.

This knowledge sharing is critical as Ethiopia strives to bolster this important health workforce cadre in the midst of acute shortage of qualified biomedical engineering instructors and professional development opportunities.

JIT, Tegbar-Id, and other biomedical training facilities face other challenges, such as lack of access to well equipped skills labs and design workshops, and a dearth of strong problem-based curricula and teaching methodologies.

For professionals in the field, the fact that most Ethiopian healthcare facilities do not adhere to evidence-based international standards for the management of biomedical equipment often hinders professional development and growth opportunities for new biomedical engineers and technicians.

Despite these obstacles, Abreha is optimistic.

"Biomedical engineering and technology is a very crucial part of the health system. Safe, standardized equipment is needed to help prevent, diagnose, and treat illnesses," Abreha points out.

When most people think of health workers, they might first think of doctors and nurses rather than "behind the scenes" workers such as lab technicians or biomedical engineers, he admits.

"But it is clear that we all have to work together to help patients recover from their illness, or to prevent a disease or diagnose it at an early stage," Abreha concludes. "When one part of the team is absent or lacking, the health system cannot meet its objectives."

## South-South Partnership Trains Health Workers to Combat Gender-based Violence in Botswana

A 2011 study released by Gender-Links in Botswana revealed that 67 percent of women in the country have experienced violence in their lifetime, either at the hand of a partner or otherwise.

The intersection between HIV and gender-based violence (GBV) is widely acknowledged. GBV fosters gender inequality and creates barriers to HIV services for women and girls.

Healthcare providers, particularly front line caregivers such

as nurses, community health workers, social workers, and counselors, are often the earliest point of contact for women and girls who experiencing GBV. As such, they can play an important role not only in care and treatment, but also in education, outreach, and prevention of GBV.

AIHA partners at the Ministry of Health of Botswana worked with the South Africa-based Foundation of Professional Development (FPD) to develop a GBV training

program for health workers.

From March to September, they trained 187 healthcare providers, including 68 trainers from various locations who will be able to provide the course throughout Botswana.

The training is contributing to Botswana's goal of providing an appropriate response to all those who suffer from GBV.



Sinah Phiri, Kelebogile Motlhanka, and Veronica Leburu from Botswana's Ministry of Health try out the fitness centre at the IkhayaIethemba Centre, where clients can improve their fitness and manage stress, during a study tour of GBV programs in South Africa.

## Ob/Gyn Partnership Launches Cervical Cancer Program in Addis Ababa

Ethiopia, like many developing countries, is burdened with a high prevalence of gynecological cancers.

Women living with HIV or AIDS are at an especially high risk, with cervical cancer being one of the most common cancers associated with the virus.

AIHA partners at St. Paul Hospital Millennium Medical College (SPHMMC) in Addis Ababa are working to more effectively address this problem through early screening and comprehensive prevention and care.

SPHMMC ob/gyn faculty Dr. Tadesse Urgie worked closely with experts from the University of Michigan in Ann Arbor, gaining much-needed practical experience on the diagnosis and management of cervical cancer and other gynecological cancers.

He trained in Michigan's radiology and chemotherapy units, as well as in outpatient, cancer screening, and

colposcopy clinics. In addition, he learned about various surgical supplies, instruments, and organization needed to deliver high-quality patient care.

Even with SPHMMC's limited resources, Dr. Tadesse has been able to spearhead the launch of a weekly cervical cancer screening clinic, which has greatly lessened waiting times for patients.

SPHMMC has also established a stand-alone ureo-gynecology clinic in the ob/gyn department, which focuses on women whose pregnancies are complicated by urological problems.

This is just one of the many remarkable transformation ushered in at SPHMMC thanks to a PEPFAR-supported twinning partnership linking the institution with the University of Michigan.

With funding from CDC/Ethiopia, this partnership joined AIHA's HIV/AIDS Twinning Center portfolio in 2013 with the goal of

expanding training opportunities that prepare medical professionals to provide high quality obstetric and gynecological care at all levels.

Based on a 2011 Ethiopian Demographic and Health Survey, the country's maternal mortality was 676 per 100,000 live births, making it 200 times more likely that a woman in Ethiopia will die from pregnancy-related causes than her counterparts in developed countries.

Maternal death and disability is also closely linked to newborn deaths, often as a result of poorly managed pregnancies and deliveries. The risk is compounded by Ethiopia's high HIV burden and a PMTCT uptake rate of less than 10 percent.

With technical support from the US partners, SPHMMC is providing postgraduate pre- and in-service training programs — including an Ob/Gyn residency program that will graduate its first cohort of seven specialists this year.



Dr. Tadesse Urgie with Dr. Anthony Opipari of the University of Michigan Health System.



## Conferences and Opportunities



**7th SA AIDS Conference**  
Durban, South Africa  
June 9-12, 2015

**International Conference on Mental Health and Social Work Practice Conference**  
Washington, DC, USA  
June 11, 2015

**IAS 2015**  
July 19-22, 2015  
Vancouver, Canada

**10th International Conference on e-Learning (ICEL 2015)**  
July 25-26, 2015  
Nassau, Bahamas

**2015 Rural Health Conference (RUDASA)**  
September 23-26, 2015  
Dullstroom, Mpumalanga, South Africa

**39th IHF World Hospital Congress**  
April 6-8, 2015  
Chicago, Illinois, USA

**2015 Public Health Association of South Africa Conference**  
October 7-9, 2015  
Durban, South Africa

**2015 Connected Health Symposium**  
October 29-30, 2015  
Boston, Massachusetts, USA

**ICASA 2015**  
Nov. 29-Dec. 4, 2015  
Harare, Zimbabwe

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The HIV/AIDS Twinning Center mobilizes and coordinates the resources of healthcare and allied professionals in the United States and abroad to effectively build capacity to reduce HIV infection rates and provide care to those infected with, or affected by, HIV/AIDS in support of the President's Emergency Plan for AIDS Relief (PEPFAR).

Funded by PEPFAR through a cooperative agreement with the US Department of Health and Human Services, Health Resources and Services Administration, the Twinning Center is a project of the American International Health Alliance, a US-based nonprofit dedicated to helping limited-resource communities make positive, sustainable changes that improve accessibility to a broad range of high-quality healthcare services and preventive programs.

The contents of this newsletter are the responsibility of AIHA and the Twinning Center and do not necessarily reflect the views of the United States government or other funding agencies.

