May 8, 2011 was a landmark day in South Africa as the Faculty of Health Sciences at Walter Sisulu University celebrated the official graduation of the nation’s first group of Clinical Associates at its Mthatha Campus.

Similar to Physician Assistants in the United States, Clinical Associates are university-trained medical professionals who will work primarily at district hospitals in underserved areas of South Africa where there is often just one practicing physician per every 4,219 people.

Although many of the 23 graduates actually started working earlier in 2011 following an oath-taking ceremony conducted in December 2010, South Africa’s first Clinical Associates all proved eager to return to Walter Sisulu for the graduation ceremony last spring.

The group achieved a 100 percent success rate, each earning Bachelor of Clinical Medical Practice (B.CMP) degrees following their three years of rigorous, skills-based study — the bulk of which was performed in clinical settings where they gained invaluable first-hand experience working with skilled practitioners and patients.

“I began working as a Clinical Associate at Victoria Hospital in Alice on January 3, 2011. There are only eight doctors, so I know that they really appreciate the work we are doing here. I think the training I received at Walter Sisulu has prepared me to make a difference,” says Sihle Lawana.

“That is important to me because I want to be recognized as a skilled professional within the hospital. It’s also my goal to help improve the quality of care for people in the Eastern Cape, especially the elderly and those with chronic conditions like HIV,” she explains.

As Executive Dean of Walter Sisulu’s Faculty of Health Sciences, Prof. Khaya Mfenyana understands the critical shortage of skilled healthcare professionals in rural areas all too well.

“In the Eastern Cape where our Clinical Associates are working, patients often travel great distances to go to hospital because local healthcare clinics are so understaffed. The Clinical Associates will help doctors by relieving some of their workload. This will allow the physicians to focus on more complex cases,” he says. “It also means that patients will be treated sooner and closer to their homes, which will help reduce South Africa’s disease burden and help improve overall patient outcomes.”

Calling the graduation a step in the right direction for the country’s embattled health system, Deputy Health Minister Dr. Gwen Ramakgopa praised the group, noting, “We will now have mid-level health workers who are well-trained and who will be closer to where people live.”

Thanks to funding from PEPFAR and CDC/South Africa, AIHA’s HIV/AIDS Twinning Center has been supporting Walter Sisulu’s Clinical Associates program since 2010 through a partnership with the University of Colorado Denver, home to one of the oldest Physician Assistant programs in the United States.

The Twinning Center also supports similar partnerships linking the University of the Witwatersrand with Emory University and the University of Pretoria with Arcadia University.
Epidemiologist Helps Inform Healthcare Policies, Champions Evidence-based Medicine in Ethiopia

When Omar Abdulwadud left Ethiopia just before graduating from Gondar Public Health College in 1978, he had no way of knowing he would one day return to his homeland armed with the knowledge and skills to have a real impact on public health.

His first stop was Djibouti, where he spent 14 months as a refugee before winning a scholarship to the London School of Hygiene and Tropical Medicine where he earned his postgraduate degree in community health in developing countries. He then worked for six years as a public health specialist in Saudi Arabia before immigrating to Australia in 1991.

“My training in public health made it clear that so many devastating diseases are preventable,” Abdulwadud says. “I wanted to use my expertise to help — especially in developing countries where the need is greatest,” he continues, explaining that in 2000 he spent three months in Ethiopia volunteering in Harar. He then became a member of the Kentucky-based People 2 People, an international NGO that links Ethiopians in the Diaspora with opportunities to give back to their motherland.

That’s how he learned about AIHA’s Volunteer Healthcare Corps (VHC) and the Ethiopian Diaspora Initiative, which is supported by PEPFAR and CDC/Ethiopia.

“My first assignment — from September 2008 through August 2009 — was working with the Columbia University International Center for AIDS Care and Treatment (ICAP) at their Eastern Regional Office in Dire Dawa,” Abdulwadud says. “I worked in the monitoring and evaluation section in regional health bureaus and developed a training curriculum on data analysis, scientific writing, and research methods for staff,” he explains.

In Dire Dawa, Abdulwadud assisted with an urban survey of some 45,000 households, working to verify and analyze the data collected then produce a report to inform healthcare policies and decision-making in the region. He also focused on health promotion and disease prevention in the region, delivering school and community-based lectures and developing an HIV prevention curriculum based on Islamic teachings and values that he presented for use at local educational facilities.

“After these presentations, so many of the students would approach me saying that no one had ever talked openly to them about HIV,” he says. “How can they prevent something they don’t even know about?”

When his assignment with ICAP concluded in August 2009, Abdulwadud accepted another placement — a 24-month stint working at the Federal Ministry of Health in Addis Ababa.

Assigned to the Health Promotion and Disease Prevention Directorate, he has been working with staff to strengthen the Ministry’s capacity to track, monitor, analyze, evaluate, and report on diseases, treatment programs, and a plethora of other health-related issues.

All the while, Abdulwadud has taken every opportunity to advocate for the use of evidence-based medicine as a way to improve clinical practices and patient outcomes.

“Evidence-based medicine improves the safety, efficacy, and efficiency of healthcare interventions because it is based on reliable and up-to-date clinical research,” Abdulwadud says.

“Policymakers the world over are looking to this practice as a way to make the most rational use of scarce resources while at the same time improving patient outcomes,” he continues, explaining that the international nonprofit Cochrane Collaboration plays a leading role in promoting evidence-based medicine on a global level.

“Currently, though, I am the only Cochrane review author in Ethiopia and there are just a few institutions that support the dissemination of evidence-based practice,” he admits.

That’s why he began working closely with the Twinning Center to expand the practice not only in Ethiopia, but also through its Learning Resource Centers at partner sites in Namibia, Nigeria, Tanzania, and Zambia.

Evidence-based medicine — the systematic application of best practices based on scientific research — helps improve quality of care and patient outcomes.

Dr. Abdulwadud has a strong relationship with the Cochrane Centre in South Africa and he has dedicated a significant portion of his time promoting the practice in Africa, conducting workshops and collaborating with the Twinning Center to expand the practice not only in Ethiopia, but also through its Learning Resource Centers at partner sites in Namibia, Nigeria, Tanzania, and Zambia.
The VHC Experience: Finding a Way to Provide Safe Drinking Water for Iringa Pediatric Ward

From November 2007 to May 2010, pediatrician Clare Sheehan Hamer served as a clinical preceptor through AIHA’s Volunteer Healthcare Corps (VHC), providing onsite technical assistance to Family Health International’s PEPFAR-supported HIV Care and Treatment project at Iringa Regional Hospital, a Government referral hospital in Tanzania’s Iringa Municipality. Here, Clare writes about how she helped find a simple, sustainable solution to a serious problem.

We all know that safe drinking water is an essential for health. Drinking water that has not been purified commonly results in illnesses such as gastroenteritis that may lead on to malnutrition.

When I first started working on in Iringa Regional Hospital’s pediatric ward, there was no safe water supply provided to patients and caregivers.

If a child was admitted with dehydration, the caregiver was sent to buy a bottle of water from the nearby shop to use to make an oral rehydration solution. For many people, this cost was the equivalent of half a day’s wage, so it’s not surprising that many people would then just refill the bottle from the tap, which was known to be an unsafe source of water.

Water can be purified in many ways, including boiling for 10 minutes, adding chemicals, and filtering. Another method is a process called Sodis, which uses a synergistic reaction of UV light and heat to deactivate pathogens in the water. The importance of this method has been recognized by WHO, UNICEF, and the Red Cross.

The method is very simple. Clear plastic (PET) bottles can be filled with water and left out in sunlight for six hours. The UV-A rays in sunlight kill germs, viruses, bacteria, and parasites like giardia and cryptosporidia, resulting in water that is safe to drink.

We invited Andy Hart, an expert from Neema Crafts Centre (a charity founded in 2003 by the Diocese of Ruaha to provide handicraft training and much-needed employment opportunities for people with disabilities in the Iringa region) to come to the hospital to teach healthcare workers about Sodis. They decided to introduce the process in the pediatric ward.

Hospital management agreed to pay for a cage to be built for the bottles and a tank in which to wrap the project, and she in turn nominated a couple of mothers to empty bottles of the purified water into a large tank, refill them with tap water, and return them to the cage in the sun for the purification process. The process has been in use for more than two years.

There have been challenges; at one stage, patients from other wards were helping themselves to the sun-warmed water and using to wash. A lock on the cage and an invitation to neighboring wards to use the cage has helped make safe drinking water more readily available. Another challenge has been the handing on of responsibility if the lead nurse is away. Supervising the process over a long period has made a difference, as has putting the instructions in picture form with Kiswahili subtitles on the wall.

There have been many Benefits, though. Mothers and other caregivers are particularly positive and comment that the cost of staying in hospital has been reduced. Although no formal study has been possible, fewer children seem to be developing diarrhea while on the ward.

Another benefit has been the dissemination of the method. Mr. Hart said that solar purification is already in use in some of the villages he has visited and he noted that the families learned how to do it while their children were in-patients at the hospital.

For me, this is one of the most powerful results of introducing Sodis to the pediatric ward. A health institution that promotes safe water in theory but not in practice is sending out mixed messages to the community. However the practice of this simple method authenticates it and has far-reaching results.

The VHC Experience: Finding a Way to Provide Safe Drinking Water for Iringa Pediatric Ward

A pediatric patient’s mother collects bottles of solar-purified water and brings them to a holding tank in the ward, where children and their caregivers now have easy access to safe drinking water.

Solar water disinfection - the SODIS method - is a simple procedure to disinfect drinking water. Contaminated water is filled in a transparent PET-bottle or glass bottle and exposed to the sun for six hours. During this time, the UV-radiation of the sun kills diarrhea generating pathogens. The SODIS-method helps to prevent diarrhea and thereby is saving lives of people. This is urgently necessary as still more than 4,000 children die every day from the consequences of diarrhea. SODIS is an initiative of Eawag, the Swiss Federal Institute of Aquatic Sciences and Technology. You can learn more at www.sodis.ch.
Changing Lives through Community Radio Journalism: Radio Lyambai in Mongu, Zambia

Every morning before going to work, Priscilla Tepa Likezo ponders on the three news ideas she will present to her editor at Radio Lyambai, a station that serves the local community of Mongu, the provincial capital of Zambia’s Western Province.

As a journalist, Likezo has a huge responsibility on her shoulders — she must communicate messages that will interest her community while at the same time providing information that can make a real difference in their lives.

In light of the HIV/AIDS pandemic that continues to affect people in the prime of their lives, health is a subject of great importance and Likezo knows that, as a Reporter, she can contribute to positive change in the community through her stories.

“I have always struggled to develop and package a good story on HIV and AIDS,” Likezo admits, explaining the difficulty of convincing her editor that these stories are timely and significant, as well as the challenge of getting credible sources of information.

Her breakthrough came in July 2010 when management at her station appointed her to attend a training on HIV and AIDS reporting using the Community Correspondents Corps model. Held in Livingstone, the training was conducted by Twinning Center partners at the Zambia Institute of Mass Communication Educational Trust (ZAMCOM) and the University of Kentucky School of Journalism and Telecommunications.

“The training opened my eyes to a completely new way of reporting on HIV and AIDS,” Likezo says. “I learned how to cultivate new sources and the value of letting my community members share their own life stories. I also learned new formats of radio presentation as well as different editing techniques,” she told ZAMCOM staff during a follow up evaluation visit.

Because of this new approach, Likezo says she that she and community volunteer Daisy Mwilima have cultivated a working relationship with Lewanika General Hospital, the biggest hospital in the province. People living with HIV who receive treatment and support at Lewanika now routinely share their personal experiences on the radio, providing listeners with unique insight and valuable information.

Patra Yambe Nuyimuyi, an HIV/AIDS counselor at the Lewanika General Hospital, says, “Since I started sharing my experience living with HIV and the work that we do at the hospital’s ART Center, I have seen an increase in the number of people coming forward to seek counseling and treatment. This proves it is important to develop close relationships with journalists as it helps us health workers reach out to more people.”

Likezo agrees. “I would like to see more work done in rural areas where a lot of people still do not understand that HIV/AIDS can be treated,” she concludes.

The Twinning Center’s partnership linking ZAMCOM and the University of Kentucky uses a citizen journalism approach to train and encourage community members from towns and villages in Zambia to produce radio programs related to HIV and AIDS.

Workshop participants receive in-class and field-based training in interviewing and news-gathering techniques, script development, use of digital audio recorders, and audio editing.

Supported by PEPFAR and USAID/Zambia, the partnership also empowers the stations with digital recording and editing equipment, which allows them to put their new skills into practice by sharing much-needed health information with their communities.

“Since I started sharing my experience living with HIV and the work that we do at the hospital’s ART Center, I have seen an increase in the number of people coming forward to seek counseling and treatment. This proves it is important to develop close relationships with journalists as it helps us health workers reach out to more people.”

— Patra Yambe Nuyimuyi, an HIV/AIDS counselor at the Lewanika General Hospital.
Partners at University Teaching Hospital in Lusaka Open New Learning Resource Center

Twinning Center partners at University Teaching Hospital in Lusaka, Zambia, marked the official opening of a new Learning Resource Center (LRC) and Drug Information Center (DIC) on March 16 with a gala ceremony and technology demonstration attended by over 40 hospital staff and other stakeholders.

The LRC/DIC will help support access to a vast wealth of evidence-based information resources, both virtual and in hard-copy, that will serve the needs of pharmacists and other health professionals at University Teaching Hospital, as well as the broader healthcare community in Zambia.

Outfitted with computers with internet connectivity, scanners, printers, and key software, as well as text books and other reference materials, the LRC/DIC offers basic training in online health research, information retrieval, and evidence-based practice.

Lexi-Comp, a specialized database that provides access to the most up-to-date drug information, is one of the key resources available in the LRC/DIC. Pharmacists can consult the database to learn more about medicines, laboratory and diagnostic procedures, and how to best treat various diseases and conditions. Other resources include WHO’s HINARI and The Cochrane Library’s systematic reviews.

Speaking at the opening ceremony, Alan Weinstein, a member of AIHA’s Board of Directors, told the crowd, “Using Lexi-Comp, a pharmacist will be able to input a specific drug into the system and retrieve critical information on potential side-effects, correct dosage based on age and gender, and warn of adverse reactions that may occur if taken simultaneously with other medications. This will allow pharmacists to ensure more effective use of drugs, while at the same time helping to protect the safety of patients.”

The LRC/DIC will also serve as a crucial vehicle for promoting the adoption of evidence-based practice, not only at the University Teaching Hospital, but elsewhere in Zambia as well.

Martin Kampamba, who heads the satellite pharmacy in the Hospital’s internal medicine department, experienced this first-hand even before the LRC/DIC was officially launched.

“A patient recently presented with a rare and complicated condition [which turned out to be trypanosomiasis - African sleeping sickness]. This was only the second case of this in the history of the Hospital,” Kampamba said, noting that he was tasked with researching treatment options.

“I went to the LRC/DIC and was able to find the information necessary to diagnose trypanosomiasis, as well as a step-by-step course of treatment. I shared this with the doctors and the patient was cured,” he explains.

Plans are to organize a working group of various healthcare professionals, who would identify a clinical policy or intervention then search for the latest evidence-based research on that practice as a way of improving patient care and making the best possible use of scarce resources. Being involved in this process will help health professionals gain critical appraisal skills that can then be applied to their daily practice. It will also help reinforce integration of pharmacists into clinical care teams at the Hospital.

Explaining how the LRC/DIC will help improve care outside the Hospital’s walls, Bwalya Simunyola, the pharmacist who serves as the center’s Information Coordinator and is responsible for the day-to-day management of the center, says, “With the rural pharmacy training roll out program set to start next month, we need to let people know about the LRC, so they seek our advice on drug safety, HIV medicine, toxicology, and drug interactions.”

According to Simunyola, Hospital staff are working with Twinning Center partners at the Zambia Institute of Mass Communication Educational Trust (ZAMCOM) to develop an effective outreach strategy to optimize the flow of information from the LRC/DIC to public hospitals, health centers, and medical mission facilities in rural parts of the country.

“Through this center, pharmacists, physicians, nurses, and other health workers who utilize this resource will consolidate and continue acquiring new knowledge on medical and pharmaceutical advancements, including antiretroviral therapy,” Dr. Isaac Zulu, Chief of CDC/Zambia’s Prevention, Care, and Treatment Branch, told participants.

“This should lead to better management of patients and better management of ARVs and other drug stocks in Zambia,” Zulu concluded. “I urge the health workers at University Teaching Hospital to fully utilize this center, look after it well, and to translate the knowledge and skills acquired from this valuable resource.”

The new LRC/DIC features hard-copy textbooks and clinical reference resources, as well as computers with internet access to a wide range of evidence-based databases, including Lexi-Comp, HINARI, and Cochrane Library.
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.