

**Program/Project Purpose:** A historical divide exists between Western countries and their African counterparts in technical features of medical education and learning. With 15% of the world's population, Sub-Saharan Africa has a mere 7% of internet users [1, 2]. When such countries acquire technology, many healthcare professionals lack the training to capitalize on it [3]. The aim of this project is to determine the level of access, attitude, and training concerning meaningful use of electronic resources among medical trainees.

**Structure/Method/Design:** Mitigating the Digital Divide is a collaborative project between Western Connecticut Health Network (WCHN), and University of Zimbabwe College of Health Sciences (UZCHS), Harare, Zimbabwe. The needs assessment tool consisted of a 20-question voluntary and anonymous survey. After brief introduction regarding goals of the project, the investigator distributed the questionnaire among participants. Participants were mainly medical students undergoing clinical rotations in medicine, surgery, and pediatrics. Descriptive statistics were used for analysis. IRB approval of both institutions was obtained.

**Outcomes & Evaluation:** The response rate to the survey was 91% (64/70). Eighty-seven percent of responders had adequate access to a variety of digital medical resources, a finding that emphasizes access to electronic medical resources as not a major obstacle for medical students and trainees at UZCHS. The majority of responders were comfortable in the use of various online search engines, including Google (83%), Wikipedia (83%) and PubMed/Medline (72%). However, printed textbooks were still the most popular reference among the majority of 52%. Twenty-three percent of responders had training in evidence-based medicine though only 7% found it adequate. Ninety-three percent of participants did not receive formal training in journal club presentation and scientific reading skills, among which 77% showed interest in learning these necessary skills.

**Going Forward:** As a result of recent educational grants, including Medical Education Partnership Initiative (MEPI) and President's Emergency Plan for AIDS Relief (PEPFAR), medical education in countries such as Zimbabwe has enjoyed significant technical growth. However, while more than half of participants, 67% had free access to the internet, lack of training in evidence-based medicine, journal club presentation, and analytical reading skills have limited the impact of existing technology in enhancing the level of knowledge among healthcare trainees in Sub-Saharan countries. Future directions involve the creation of a curriculum centered on equipping healthcare trainees in Sub-Saharan countries with these necessary skills: devising a clinical question, reading medical literature with a critical eye in search of an answer, and utilizing available resources to build one's fund of knowledge.

**Funding:** Western Connecticut Health Network Global Health Program

**Abstract #:** 01ETC026

### Developing a successful program for global health in a medical school: Enhancing cultural and linguistic skills

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**Program/Project Purpose:** Global health education enhances students' interest in the care of underserved populations and the applied lessons may help improve USA health-care delivery systems. Our work in New Brunswick shows that local communities are becoming very diverse, and that a large number of primary care patients (over 60% in some clinics) are recent immigrants from nine

Latin American countries, a majority of whom speak only Spanish. Some of these populations are affected by existing health disparities that students will have to address during their clinical years. Thus, enhancing cultural and linguistic skills is an important goal in the education of our medical students.

**Structure/Method/Design:** We offer summer global fellowships to first year students and global health electives to third and fourth year students. These are widely advertised and include presentations at orientation and class meetings. We select more than 50 medical students for experiences abroad each year. Several sites are located in Spanish-speaking countries and this allows us to provide cultural and linguistic experience to the students (University-affiliated sites in Zaragoza, Spain, San Salvador de Jujuy, Argentina, Lima, Peru, Medellin, Colombia, Quito, Ecuador, and others). The objectives of these global experiences include enhancing core competencies, with particular emphasis on cultural sensitivity/competence, enhancement of linguistic skills, gaining knowledge about other health care systems, infectious or other unique local diseases in the host country. Before they go, students enroll in a Medical Spanish program offered by the school. They are provided information on the specific countries and connected to a local mentor or supervisor. Students review didactic materials throughout the rotation focusing on global health issues, work under the supervision of a local "mentor" and work collaboratively with other professionals in community settings and understand how health services are provided in other health care systems, some of them quite advanced (e.g., Spain) and others lacking resources.

**Outcomes & Evaluation:** During the past 4 years, 225 students have done global health rotations. Of these, 130 were first year students and 92 were third and fourth year students. Upon their return, students were briefed, evaluated their experience wrote a brief report and presented a poster at the annual global health event. 96 of these students went to Spanish-speaking countries. They were unanimous in expressing satisfaction with the experience (>95%), and >90% of those who were not primary Spanish-speakers reported a significant improvement in their Medical Spanish. According to personal interviews with the students, this experience significantly stimulated them to consider global health careers or practice in communities where there is a shortage of linguistically competent providers.

**Going Forward:** We will continue to enhance programs focusing only on a few selected sites and will carefully track outcomes.

**Funding:** No funding listed.

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### Nicaragua global health elective: An integrative and interprofessional education model

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**Program/Project Purpose:** Students of health care professions often seek global health experiences during their training. Educators need to facilitate these opportunities while emphasizing appropriate global health competencies and fostering interactions that are mutually beneficial with the host colleagues. The literature on student global health experiences focuses on burden of disease, travel medicine, healthcare disparities, primary care, cultural skills, and foreign systems. However, few sources describe the appropriate role of visiting

student health care providers and interprofessional collaboration. Our goal is to provide our students with an experience that integrates interprofessional education and cultural awareness amidst a short-term global health experience.

**Structure/Method/Design:** We designed a Global Health elective for nursing and medical students at Vanderbilt University that would allow students to: Develop cultural humility and informed engagement. Describe and demonstrate appropriate roles of visiting health care providers through participation in sustainable, ethical, and mutually beneficial relationships with the host institutions. Acquire knowledge and skills in the management and education of chronic diseases in resource-limited settings. Learn from and demonstrate interprofessional collaboration. Students were selected through a competitive application process.

**Outcomes & Evaluation:** The elective included a twelve-week didactic component including medical Spanish, global health ethics, Nicaraguan geopolitical history, health systems, chronic disease education, interprofessional collaboration, and cultural awareness. Each student was assigned to two different interprofessional teams for a patient education and service project. Education teams developed interactive patient education materials in diabetes, obesity, or hypertension- topics chosen by our Nicaraguan colleagues. Service teams coordinated medical supplies, eyeglasses, or the preparation of a journal club event in Nicaragua. The course included an experiential component consisting of a trip to Nicaragua with many opportunities that allowed students to engage in a meaningful global health experience with local providers and patients. Students participated in patient education, health screenings, and supervised patient interaction while learning about the local health care system. The Journal Club facilitated a time for local providers and students to discuss the approach to management of diabetes in resource-limited settings. The experience concluded with a student led poster presentation and discussion with other Vanderbilt students, faculty, and staff.

**Going Forward:** Initial evaluation has included surveys of students and local providers. We can improve the course by incorporating interprofessional competencies and milestone-based evaluations for students. We also aim to broaden this experience to a longitudinal program incorporating former students to aid in design, implementation, and evaluation of the course.

**Funding:** The Vanderbilt School of Medicine, Vanderbilt School of Nursing, Vanderbilt Diabetes Center, and student fundraising have funded this program.

**Abstract #:** 01ETC028

### The Afya Bora Fellowship in Global Health Leadership: dual mentorship to strengthen the next generation of African health leaders

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**Program/Project Purpose:** Mentorship is critical to develop effective leaders. The Afya Bora Fellowship in Global Health Leadership

program, a consortium of four African and four U.S. universities formed in 2008, has incorporated a robust dual mentorship component into its training of over 70 fellows. Each Fellow was assigned two mentors to guide professional growth over the fellowship period. Here, we evaluate 39 Fellows' experiences with their mentors between 2012 and 2014, and identify how these relationships prepare Fellows to lead major health programs in Botswana, Kenya, Tanzania, and Uganda.

**Structure/Method/Design:** As part of their 12-month training, Afya Bora Fellows participate in two 4.5 month experiential learning attachments in the African countries. The attachments take place at pre-accredited "attachment sites", which include governmental (Ministries of Health) and non-governmental organizations (NGOs). Fellows were assigned a Primary Mentor, who is an academic member of the Fellowship Working Group, and a Site Mentor, who is a senior supervisor at the Fellow's attachment site. Mentors assist in providing support to each Fellow to achieve Fellowship objectives and personal goals, and to gain insight into the realities of building a successful career. Evaluations from the Fellows on both mentors were collected once after the first attachment site rotation (January) and again after the second rotation (June).

**Outcomes & Evaluation:** Content analysis of Fellow interview and journal data showed Fellows were positively impacted by their relationships with mentors. Key domains of mentor influence included relationship attributes ("friendship and support"), scientific knowledge and skills ("teaching/guiding me on how to conduct official research"), provision of feedback ("he gives constructive feedback to my work every time we meet"), career or other guidance ("she advised me to apply for a job...luckily I was taken for that position"), and professionalism ("keeps his word and time despite busy schedule"). Fellows reported some differences between Site and Primary Mentors. Primary Mentors were better able to provide emotional support for professional issues ("discussed culture shock/adjustment") and encouragement for Fellows to go outside their comfort zone ("urged me to work tall and take up distinctive tasks...without fear/hesitation"). Site Mentors were better able to serve as an advocate for attachment site assignments ("prepared the ground for orientation, information, and technical assistance from her and other staff").

**Going Forward:** Dual mentorship can provide a rich range of complementary skills and expertise that is valuable to Fellows, including modeling professional behaviors and teaching specific skills. This aspect of the Afya Bora Fellowship is of great value to participants and will continue for future cohorts.

**Funding:** The President's Emergency Program for AIDS Relief, Office of AIDS Research, and US Health Resources and Services Administration.

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### Let's talk: Intercultural dialogue on sexual orientation in global health

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**Program/Project Purpose:** The ability to dialogue with individuals with whom one disagrees is integral to working across difference and building partnerships in global health. In Uganda, the subject of sexual orientation offers a controversial subject for such skill building. In Uganda and abroad, this issue raises raw emotion, religious rhetoric, childhood stories, human rights-based talk, activism, and animated debate. SocMed - a non-profit committed to transformative