Patients and Public Systems. Each module consists of a set of 3-7 minute core videos featuring a guided conversation between course faculty and guest experts. Videos are augmented by readings, assessment and survey questions, discussion forums and additional interactive activities, such as live question and answer sessions, with the aim of eliciting student-generated information and feedback. Registration for the course is open and there are no prerequisites to participate.

Outcomes & Evaluation: As of October 2014, 15,695 students had enrolled in the course from 141 countries. A plurality (44%) of students were between the ages of 21 and 30 and the majority were female (55%). One third of the students had a master's degree. Nearly eight in ten students reported working in the healthcare field and nearly four in ten were healthcare providers. While students provide feedback through discussion forums in real-time, structured feedback will be captured in a post-course survey and follow up interviews with a randomized sample of participants. Additional metrics of success include: weekly engagement (a composite indicator developed by edX), completion of survey questions (which provide data on perceptions of quality and local context) and total number of students receiving course certificates (which requires a grade of over 60%).

Going Forward: The course seeks to continuously improve both engagement and content. This is being done through four primary strategies: First, diversifying presentation of content to improve accessibility in low-bandwidth settings, such as through audio and printed mat

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Abstract #: *02ETC094*

Identifying disparity to improve outcomes: Diabetes-related knowledge assessment among primary health care providers in Armenia

H.Z. Wright[1], E. Leishman[2], D. Chapman[3], M. Hovhannisyan[4], T. Jiao[5]; [1]Division of Public Health, University of Utah, Salt Lake City, UT/US, [2]University of Utah, College of Pharmacy, Salt Lake City, UT/US, [3]University of Utah, Salt Lake City, UT/US, [4]Yerevan State Medical University, Yerevan, Armenia, [5]Department of Pharmacotherapy L.S. Skaggs Pharmacy Institute, Salt Lake City, UT/US

Background: Context: No national guidelines exist for treatment of some disease states in Armenia. Officials in Armenia have established diabetes as a priority target. Due to projected increases in diabetes morbidity by the International Diabetes Federation (0.9% annually), it is estimated that by 2030 one out of ten Armenians will have diabetes and diabetes will become the 7th leading cause of death in Armenia. Why the study was done: Provider diabetes-related knowledge in Armenia is currently unknown. Baseline knowledge must be assessed in order to develop effective training protocols and improve education for providers. Aim: To determine diabetes-related knowledge in five categories based on IDF guidelines: diagnosis, pathophysiology, treatment, pharmacology, and complications. Assessment of these key indicators will determine target areas for development and improvement of diabetes outcomes.

Methods: Study design: A cross-sectional descriptive study of primary health care providers from two urban and three rural settings in Armenia. The study questionnaire was composed of 20 questions covering the five major areas suggested by the IDF. Participants: The study included 131 participants from urban (41%) and rural (59%) settings. Participants were family physicians (39.7%), nurses (26.7%), pediatricians (6.1%), endocrinologists (3.8%), and other specialists (23.7%). Participants were recruited using convenience sampling from clinics recommended by the Ministry of Health of Armenia. Analysis: The primary outcome was correct answers. Chi-squared and Fisher's exact tests were used to identify any relationships between demographics and each question or aggregate score. P-values reported indicate a relationship between specific demographics and performance. Consent was obtained by return of completed questionnaire after verbal and written explanation of consent. The study was approved by the University of Utah IRB (IRB_00072919) and Yerevan State Medical University Ethics Committee (N_8/14-15). 3

Findings: The mean comprehensive knowledge score was 6.85 out of 20 (SD 3.18). 45.80% of subjects were unable to answer any diagnosis question correctly. Only 6.87% were able to correctly identify three out of four treatment approaches, while 37.40% knew at least three pharmacology answers. 35.88% were aware of at least three pathophysiology signs, yet only 2.29% identified all four complications listed. There were statistically significant differences between rural and urban providers regarding diagnosis ($p = 0.003$) and pathophysiology ($p = 0.003$), and also amongst specialties regarding pharmacology ($p < 0.0005$), treatment ($p = 0.044$), pathophysiology ($p = 0.039$), complications ($p < 0.0005$), and overall knowledge ($p < 0.0005$).

Interpretation: Armenian primary health care providers lack diabetes knowledge. There are also differences based on location of practice and provider types. These results suggest the need for provider educational programs based on International Diabetes Federation guidelines to improve diabetes-related clinical outcomes in Armenia.

Funding: None.

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The partnership between Mount Kenya University and the University of Cincinnati: A case of interdependent academic innovation

V.W. Wulsin; Mount Kenya University, Thika, KE

Program/Project Purpose: To increase the positive impact of higher education in a replicable paradigm of collaboration between Mount Kenya University [MKU] and the University of Cincinnati [UC]. Context UC is an Ohio public university, educating over 40,000 students per year. The US News and World Report ranked UC in Tier One of Best Colleges rankings and number 3 of "Up-and-Coming" National Universities. Its College of Medicine accounts for most of UC's $500,000,000 external funding. MKU is the 2nd largest of Kenya's 52 public and private universities, with 12 campuses, 10 schools, including medicine, and over 40,000 students. Program/Project Period 2007 - present Why the program/project is in place, in one or two sentences To globalize UC in teaching, research, service, clinical care, community development, and corporate social responsibility. To ensure MKU meets internationally accepted academic standards. Aim To enhance education in their own institutions [MKU & UC] and the wider world.

Structure/Method/Design: Desired Outcomes Improved institutional Impact through Capacity Building, Research Collaboration, Corporate Social Responsibility, and Ensuring Sustainability. Participants and Stakeholders: How were they selected, recruited? Commitment to providing human, technical, material resources. Competence in teaching, research, clinical care, and community corporate responsibility. Capacity to handle the load and complexities of implementation. Positive relationship with community. Geographic convenience. * Capacity Building / Sustainability: What is the plan, structure in place to encourage viability? * A formal liaison (0.5 FTE) begins Nov 1st.

Outcomes & Evaluation: To date, what are the successes and outcomes achieved? Idea sharing & building coalitions, 2007-present. Memo of Understanding [MoU] signed by UC and MKU, 2011. "The MKU-UC Summit," Thika, Kenya: MKU and UC faculty met to discuss ways to share human, technical, material, and networking resources, 2012. Activities as listed below, 2007-present. Monitoring & Evaluation Results (if conducted) Faculty MKU to UC = 5 exchanges. Faculty UC to MKU = 7. Students UC to MKU = 2. Research = Three proposals written & submitted. Community = Hosting the national Water Summit at MKU Lodwar.
Going Forward: What are the ongoing challenges? Complex and conflicting bureaucracies; Consistent communications. Long-term goals: joint curricula, programming, degrees. How are/may future program activities change as a result? We will expand our current initiatives, li
Funding: Internal: Start-up support from MKU, UC. External: Grants from public (e.g., UNICEF), private (e.g., Rockefeller Foundation) sources.
Abstract #: *02ETC096*

"Empowering rural women: An investment for the future"

M. Zhou[1], N. Reddy[2]; [1]Northwestern University, Evanston, IL/US, [2]Northwestern University, Beaverton, OR/US

Program/Project Purpose: The objective of our project was to educate and connect forty rural, impoverished women in the district of Janamora, Amhara, Ethiopia through a series of reproductive health workshops that would serve to counter harmful, prevalent local practices such as early marriage, unsafe sex, and sexual violence/pressure. These practices preclude women from having a safe space to discuss the implications of these topics in their own lives. Our curriculum covered topics including puberty, female reproduction, menstruation, pregnancy, healthy relationships, sexual decision-making, sexual violence, STDs, and harmful traditional practices such as early marriage. In addition to the workshops, each participating woman received two sheep in a micro-investment scheme in the hopes that she would return to her own community with greater economic self-sufficiency and to act as a reproductive health educator and change-maker in her own right.
Structure/Method/Design: Our project took place over a two-week period in July 2014. We received support from the NGO ActionAid Ethiopia in recruiting our participants and purchasing sheep. Requirements for participation for the women included: literacy up to grade five, residency in one of the five adjacent villages in the district of Janamora, active participation, marital status, and membership within the lowest 10% of women in the government census' socio-economic records. Our program is sustainable in motivating women to continue dialogues on female health and gendered rights as they are eligible to join ActionAid women's watch groups, enabling them to serve as representatives and liaisons for their communities.
Outcomes & Evaluation: Post-program metrics confirmed high degrees of information retention, typically around 80-85% across the workshop units, through evaluation activities and post-lesson quizzes. To ensure the sustainability of the micro-investment component of our project in generating regular income for the women, the Janamora local government has promised its assistance in tracking the success of the program as a means of monitoring and evaluation. To date, each participating woman has received two sheep and a certificate that attests to her participation. ActionAid reports on the successes of the women's watch groups and micro-investment scheme will be available in the coming year.
Going Forward: Due to the physical distance between us and the women, it is difficult to conduct frequent evaluation studies to measure program impact. We are reliant on local organizations to conduct studies and relay information to us, which ActionAid has promised to
Funding: Primary funding came from the Davis Projects for Peace Fellowship and secondary funding from the Northwestern University African Research Leadership Award.
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The effect of simulation education in teaching senior medical students advanced cardiovascular life support at a public teaching hospital in Guatemala city, Guatemala

L. Zickuhr[1], A. Bery[1], J.A. Rivera-Pineda[2], M. Wallendorf[3], D. Murray[1], A. Zajarias[1]; [1]Washington University in St. Louis School of Medicine, St. Louis, MO/US, [2]Hospital Roosevelt, Guatemala City, Guatemala, [3]Washington University in St. Louis, St. Louis, MO/US

Program/Project Purpose: In the Latin American medical system, medical students function as a combination of student, nurse, and intern. Hospital Roosevelt in Guatemala City, Guatemala, is a public teaching hospital that treats a variety of chronic degenerative illnesses that are accompanied by cardiovascular complications. Quality Advanced Cardiovascular Life Support (ACLS) has been shown to save lives when appropriately administered, yet Roosevelt's medical students are not trained in ACLS algorithms. Previous research demonstrates that high-fidelity simulation education is effective when teaching resident physicians ACLS and improves patient outcomes. We investigated its effect in teaching senior medical students ACLS in a resource-poor environment through written materials and low-fidelity simulated workshops translated into their native language.
Structure/Method/Design: In this prospective, cohort study, medical students first taught themselves ACLS from documents written in Spanish. During the intervention, a certified ACLS instructor taught the general approach to an unstable patient, how to secure an airway, and ACLS algorithms in their native language using low-fidelity simulation. Participants completed pre- and post-intervention simulated code scenarios graded against a global three-by-three score and an itemized checklist. Two evaluators graded each scenario twice, at a one month interval. Students subjectively ranked their confidence with ACLS protocols pre- and post-intervention on Likert surveys.
Outcomes & Evaluation: Random effects linear model identified a statistically significant mean increase of 3.833 (p=0.0037) in global three-by-three scores and of 3.833 (p=0.0014) in total checklist scores after simulation education. Intra-rater and inter-rater scores correlated well for global scores (r 0.965, 95% lower bound 0.921 and r=0.914, 95% lower bound 0.715, respectively) and for total checklist scores (r=0.956, 95% lower bound 0.900 and r=0.896, 95% lower bound 0.666, respectively). Students demonstrated significant increase in their comfort with ACLS protocols after simulation education on Likert scale responses. Outcomes: This study demonstrates that simulation education translated into participants' native language is an effective medium for teaching medical students ACLS in a resource-poor environment. It also improves their confidence with ACLS algorithms.
Going Forward: This was a pilot study. The next step would be to make it a mandatory course for all junior and senior medical students and measure the change in their ability to apply ACLS algorithms in simulated scenarios. A long-term post-intervention simulated code s
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