

outcomes according to the UN Millennium Development Goals cannot be achieved without appropriate surgical services¹. The Lancet Commission on Global Surgery recognizes surgical training as a cost effective intervention equivalent to vaccination and antiretroviral public health initiatives². Yet the number of adequately trained physicians to perform basic surgical procedures, especially in women's health, is severely lacking³. Combining the delivery of surplus medical equipment and ongoing surgical teaching will improve women's health globally. Surgical Training and Research (STAR) International and Danbury Hospital/Western Connecticut Health Network (WCHN) have a collaborative relationship with the Ugandan national referral center, Mulago Hospital, to improve supervision and training for OB/GYN physicians.

Structure/Method/Design: Danbury Hospital/WCHN established an innovative global health (GH) program, which includes weekly lectures, journal clubs, and monthly GH seminars. Residents are funded for a six-week elective rotation abroad. Faculty from partner institutions are invited to participate in a 4-week observership at WCHN. The OB/GYN department dedicates resources to enhance collaboration with Mulago Hospital. In one year, STAR International was created and raised twenty thousand dollars to donate four complete sets of surgical instruments necessary to perform gynecologic surgery. Additional equipment and medications including suction, cautery, antibiotics, and anesthetic agents were also donated, and a surgical teaching camp was organized. In June 2014, two gynecologic surgeons, two OB/GYN residents, an anesthesiologist, and a nurse traveled to Mulago Hospital to increase exposure, supervision, and surgical skills of Ugandan OB/GYN residents.

Outcomes & Evaluation: Over the one week surgical camp, 23 procedures were performed: 6 total abdominal hysterectomies, 8 ovarian cystectomies or salpingoopherectomies, 5 ectopic pregnancies, and debridement of 4 pelvic abscesses. Ugandan residents also received advanced training on LEEP's with a new cautery machine and supplies. All cases involved one attending gynecologist, one Ugandan resident and one Danbury Hospital resident. Seven Ugandan residents participated. The attending anesthesiologist also taught 4 Ugandan anesthesiology residents.

Going Forward: The first surgical training camp at Mulago Hospital was a successful introduction of a long-term partnership that focuses on building capacity of Ugandan physicians. Both Mulago faculty and residents received the camp well, as both parties identified teaching and supervision to be lacking at Uganda's national referral hospital. With the collaboration of academic partners, STAR International plans to hold camps several times a year and provide continuity of surgical training. The mission of STAR International is to increase the number of women treated effectively for their diseases, and to enhance the surgical skill of Ugandan physicians, allowing them to provide necessary gynecologic surgical therapies to Ugandan women.

Funding: Funds for the Surgical Training camp were recruited from crowd-sourced funding and from WCHN.

Abstract #: 01ETC064

Preparing medical students for field experiences in low-resource settings: Development and evaluation of a pre-travel trigger video and large group discussion module

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Background: Medical students increasingly seek opportunities for field experience in low-resource international and domestic settings. Participating students have been shown to care for medically

underserved populations. However, programs infrequently provide anticipatory guidance that meaningfully engages students in anticipating and preparing for predictable challenges.¹ This study sought to evaluate the impact of a trigger film, featuring medical students who had completed fieldwork in low-resource settings, on students' preparedness for their field experience.

Methods: Development and evaluation of a 30-minute trigger video and discussion guide for first-year medical students planning field experiences in low-resource settings, in international and domestic settings, to prepare students for complex decision-making and cultural awareness. The trigger tape featured medical students describing unexpected dilemmas they experienced in their field experiences in projects intended to ameliorate health care disparities, both domestically and internationally. Faculty-facilitated discussion, guided by a discussion guide, followed each student-narrated dilemma. The intended learning outcomes focused on students' ability to anticipate and identify strategies for dealing with: death or injury of collaborating community members; respect for patients in the setting; precautions for students' own exposure to infectious agents, risks to physical safety, and harassment; cultural sensitivity and humility; and managing cultural isolation. The curriculum was implemented at two points in time, to promote students' planning and reflection for anticipated field experiences in the succeeding six months. Evaluation included post-session anonymized reviews of the relevance and impact of the educational intervention.

Findings: Of the 45 M1 students who planned domestic or international disparities-focused field experience, most (over 90%) characterized their behavioral intentions following the video tape trigger and follow-up discussion as "very likely" to: anticipate and deal with potential risks to their personal safety, exposure to infectious diseases, and sexual harassment; plan for potential challenges to cross-cultural communication and cultural isolation; complete prophylactic immunizations prior to travel; and manage differences in respect demonstrated for patients. Almost all (98%) of students characterized the program as helpful for their planning and would recommend the video and discussion to other students planning field experiences in settings with low-resources and medically underserved populations. Students who disagreed characterized the session as "making them uncomfortable about challenges" or indicated the information could have been condensed into an e-mail summarizing key points.

Interpretation: Conclusions: A focused, engaging educational intervention featuring medical students' challenges in working in medically underserved populations can promote students' preparation.

Funding: No funding listed.

Abstract #: 01ETC065

Reference

1. Crump JA, Sugarman J, and the Working group on ethics guidelines for global health training. Global health training: ethics and best practice guidelines for training experiences in global health. *Am J Trop Med Hyg* 2010;83(6):1178–82.

Frequencies of illnesses presenting to the emergency department in puerto plata, dominican republic

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Program/Project Purpose: Context: The study took place in Centro Medico Bournigal (CMB) and Hospital Ricardo Limardo (HRL) in Puerto Plata (POP), Dominican Republic. CMB is a privately run hospital, and HRL is a publicly funded hospital. Project Period: The project was conducted May 2014 – June 2014. Why the program/project is in place: The project took place in POP because no

etiological research has been done in CMB or HRL Emergency Medicine (EM) departments, which both contributed to the initiation of a new EM residency program in 2010. Aim: To determine the type and frequency of illnesses presenting to the EM department from 2009-2013 in POP, Dominican Republic.

Structure/Method/Design: Project Goals, Desired Outcomes: The desired outcome was to quantify the most frequent illnesses in the ER from 2009 to 2013 to determine where the EM departments should allocate their resources and training. Participants and Stakeholders: How were they selected, recruited? Data were collected through General Administrative Information System (GAIS), Informix, and the HDRL database at CMB and HRL in POP from 2009-2013. The top forty causes of EM visits were found in the HRL database, and these illnesses were searched for in the CMB database. Capacity Building / Sustainability: No patient identifiers were used on the data obtained from the different hospital databases. This project was affiliated with UTMB global health tract.

Outcomes & Evaluation: To date, what are the successes and outcomes achieved? We determined the etiologies of HRL 2011-2013 and CMB 2009-2013 EM departments. Monitoring & Evaluation Results: In CMB, the top 3 etiologies were headache, bronchospasm crisis, and trauma in 2009-2011 and 2013. In 2012, trauma was replaced by Asthmatic Crisis. Data for HRL was not available from 2009-2010. From 2011-2013 at HRL, the top 2 causes were fever and headache. In 2011, the third cause was bronchospasm crisis. In 2012 and 2013, the third cause was tonsillitis and lumbar pain respectively.

Going Forward: What are the ongoing challenges? The CMB and HRL EM departments should take this information and integrate it into their EM residency curriculum. Are there any unmet goals? The etiologies could not be determined in 2009 and 2010 in HRL due to a change in database and hospital staff. How are/may future program activities change as a result? The EM Residency program directors should focus their resources and training heavily on headache, bronchospasm crisis, trauma, asthmatic crisis, tonsillitis, and lumbar pain in order to best care for the most frequent causes of emergencies.

Funding: No sources of funding.

Abstract #: 01ETC066

Mentoring for sustainable in-country academic leadership in resource-limited settings

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Background: With increasing diversity of training opportunities in Africa, there is an ever-increasing number of individuals that obtain initial training (bachelors and masters-level) locally, and more advance training (doctoral and post-doctoral) at international academic institutions. Re-entry and retention of the internationally-trained experts is faced with variable challenges that affect trainees' productivity and impact on health care outcomes. In the quest to maximize the return on investment, by both local and international partners in training, we set out to evaluate in-country factors that influence academic careers at Makerere University College of Health Sciences (MaKCHS), and generate locally appropriate interventions.

Methods: A series of focus group discussion (FGD) were held with four departments, in the school of medicine, that have at least nine teaching faculty (Medicine, obstetrics and Gynecology, pediatrics and anesthesia). Using a FGD guide, we conducted 60-minute-long FGDs, that comprised of at least 8 faculty per FGD, including junior

and senior faculty (male and female). Qualitative data was recorded by a note-taker, audio-recorded and analyzed manually under themes that were pre-determined by a career development interest group.

Findings: Overall, 5 FGD were conducted, and a total of 72 staff participated, of whom 57 were junior faculty [19(33%) female] and 15 were senior faculty [7(47%) female]. Highlighted in-country challenges to advancement of an academic career included: a) Lack of effective in-country mentoring to navigate through common challenges. 'It has been difficult for me to find a local mentor. I need to travel abroad to work with my mentor, which is expensive' said one junior faculty. b) Lack of protected time for academic activities due to overriding clinical and administrative demands. 'When faculty leave the ward to pursue academic activities, there is not enough left to take care of the patients', said one senior faculty. 'I need to travel abroad, away from the heavy clinical schedules, to complete my manuscripts', said one mid-level faculty. c) Socio-economic factors and family responsibilities. 'Everyone needs to strike a balance between academic activities and family responsibilities, which can be quite engaging socially and financially', said one senior faculty. d) Limited use of personal development plan. 'What is the average period a faculty should stay at one academic position before promotion?' one mid-level faculty asked. e) Need for collaborative research teams. 'How do I get involved in collaborative research at an international level?' said one mid-level faculty?

Interpretation: Strategic investment in strengthening of in-country mentoring and networking activities was recommended to develop locally-relevant academic career opportunities to absorb post-training scientists and utilize acquired expertise to improve training, research and clinical care. An institutional career development structure was proposed to spearhead regular mentoring and personal development planning activities for junior and mid-career faculty.

Funding: No funding listed.

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'Essential clinical global health': A multi-national collaboration develops a pioneering new 2015 textbook for global health trainees and clinicians working in resource-limited settings

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Program/Project Purpose: As participation in global health continues to grow among students, trainees, and clinicians, the need continues for a clinical global health textbook to prepare individuals for their experiences abroad. In 2010, the Global Health Education Consortium (GHEC) reviewed existing global health textbooks, finding several excellent books but with a dearth of clinical emphasis. We, therefore, set out to develop a clinically focused textbook that includes contributions from renowned global health experts from across the globe and that provides the essential information required by clinicians and clinicians-in-training for effective and rewarding international experiences. The resulting Essential Clinical Global Health, we believe, fills this need.