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Findings: Only 23% of subjects had used an ultrasound before. Primary care providers comprised the largest subgroup of those with ultrasound exposure. 44% percent of all subjects believed that using POCUS in their clinic would change the delivery of patient care in 50% of cases. 100% of study participants indicated an interest in receiving more ultrasound training. Preliminary analysis did not show clinically significant differences between urban and rural subjects.

Interpretation: The present study demonstrates a lack of ultrasound training and a functional need for and interest in learning more about POCUS in rural and urban clinics in Nicaragua. A limitation of this study was the low number of medical professionals in rural clinics in Nicaragua, which makes it difficult to accurately compare the differences in ultrasound use in rural vs. urban health care settings.

Funding: Medical Student Research Funding Scholarship, UC Davis School of Medicine.

Abstract #: 2.008_HRW

Educational initiative in Myanmar training practicing physicians in emergency care

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Program/Project Purpose: The recent institution of Sustainable Development Goals (SDGs) has underscored the global priority to improve the provision of emergency medical services in developing countries. In Myanmar, patients often receive emergency treatment from medical providers without specialized training in treating emergency medical conditions. Compounding this problem, very few physicians in Myanmar are trained in emergency medicine, and fewer inhabit rural areas.

Fortunately, the advancement of emergency care in Myanmar has recently received increased attention from the country's Ministry of Health to improve the delivery of life-saving treatment to the citizens of Myanmar. In alignment with this focus, Golden Zaneka Public Company and Stanford University School of Medicine have partnered to develop and pilot the Emergency Medicine Diploma Course, a novel educational curriculum. The course is designed to be more comprehensive than short 'certificate' courses, yet more concentrated than a three-year residency program. This course aims to increase the public's access to trained emergency care providers by increasing the number of physicians in Myanmar with emergency medical skills training.

Structure/Method/Design: The Emergency Medicine Diploma Course covers an 18-month period with nine distinct training modules. Each module consists of two weeks of intensive class-room-based lectures, hands-on procedural workshops, simulation, and leadership training. During the intervening time between each module, trainees complete assignments, maintain procedure and patient encounter logs, and pursue clinical opportunities.

Outcome & Evaluation: To assess trainee competency and progress, Stanford faculty and clinicians at Golden Zaneka perform individual physician assessments. Multiple choice testing is used to assess content knowledge prior to and after each module. Trainees

are also assessed for competency in the management of simulated cases and performance of emergency medical procedures.

Going Forward: One ongoing challenge is ensuring that clinical experience at local hospitals provides the trainees with adequate exposure to patients with emergency medical conditions and allows for the performance of emergency skills in the areas of trauma, orthopedics, anesthesia, and critical care. If our program is successful, we hope to provide a scalable solution that may train future cadres of physicians in order to meet the country's growing need for emergency care providers.

Funding: Golden Zaneka.

Abstract #: 2.009_HRW

Advancing implementation science through global health education: A Mentored Peace Corps Master's International program

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Program/Project Purpose: Low- and middle-income country (LMIC) health systems increasingly rely on academic partnerships to address barriers to capacity development. Peace Corps Master's International (PCMI) programs (23 health-specific programs nationwide) provide graduate students the opportunity to apply academic training to a 27-month global health field experience as a Peace Corps Volunteer (PCV). In 2010, a partnership among Kedougou, Senegal regional Ministry of Health, the University of Illinois at Chicago (UIC) School of Public Health and College of Medicine, and Peace Corps Senegal collaboratively identified cervical cancer prevention as a major service gap. Through this partnership, PCVs have been integral to the advancement of the project. In 2014, UIC embarked on a three-year pilot project with the U.S. Peace Corps specifying interested UIC PCMI students as Senegalspecific PCVs as a means to enhance project continuity and impact. The pilot aims to explore the benefits and challenges of the Mentored PCMI program in order to inform future replication of the mentored PCMI approach at other institutions.

Structure/Method/Design: The proposed partnership consists of 1) a local community advisory board and health system leaders, 2) Peace Corps Master's International volunteers, and 3) a US-LMIC academic institutional collaboration. Within the proposed partnership approach, the contributions of each partner are as follows: the local community and health system leadership guides the work in consideration of local priorities and context; the Peace Corps provides logistical support, community expertise, local trust, and advocacy; and the academic institutions offer interdisciplinary technical resources and research support.

Outcome & Evaluation: The mentored PCMI approach shows potential to increase recruitment for PCMI programs, improve retention, provide structured, contextual mentored field experiences, strengthen community partnerships, and impact local populations in LMICs.

Going Forward: We are proposing this framework as a scalable model to facilitate the creation of or strengthen existing global health implementation research partnerships at institutions offering PCMI programs. Such an approach could facilitate collaboration, resource and knowledge sharing, and timely feedback to global

health implementers at multiple levels. This will empower program development and implementation of best practices through interdisciplinary education, research, service, and advocacy.

Funding: Unfunded.

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Social responsibility of the global health researcher: A research ethics video training module

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Project Purpose: For 20 years, the National Institutes of Health (NIH) and Office of Research Integrity (ORI) have developed best practices for Research Ethics (RE), Research Integrity (RI), and Responsible Conduct of Research (RCR) training. Since 2009, RE and RCR training is mandatory for universities receiving NIH funding. However, there is broad agreement that RE, RI, and RCR need to include locally relevant, culturally competent content. Locally responsive RCR training is particularly relevant following the success of the Medical Education Partnership Initiative (MEPI) program in Africa. Duke Global Health Institute (DGHI) has partnered with Kilimanjaro Christian Medical University College (KCMUCo) in Tanzania to produce a five-part series of RCR training videos.

Structure/Method/Design: To create locally relevant content, we surveyed RCR knowledge, attitudes and perceptions of KCMUCo faculty, researchers, administrative staff and students. We also conducted in-depth interviews with community advisory board (CAB) members, local leaders and research participants. Finally, we held focus group discussions with CABs and local community members. We analysed transcripts for key themes to develop into story lines. Using an enhanced web connection between Duke and KCMUCo, students and faculty collaborated to write and finalize scripts. A team of Duke students joined members of the KCMUCo medical student organization, "Communication Skills Club," in Tanzania for filming. Each module is approximately five minutes long, in Kiswahili with English subtitles. A website hosts the videos, facilitation guide, RCR materials, evaluation survey, and website traffic analytics.

Outcome & Evaluation: KCMUCo staff screened the modules for KCMUCo Institutional Review Board (IRB) members, administrators, and students. DVDs and facilitator guides will be distributed to East African research administrators and educators with plans to roll-out a training program for KCMUCo post-graduate and Duke MSc-GH students over the next year. Ongoing feedback will be evaluated from classroom and web users.

Going Forward: This product joins a larger initiative to develop an internationally recognized website for researchers seeking innovative, well-tested, and culturally competent RE and RCR materials. Next steps are to develop additional materials for KCMUCo and produce similar materials for other DGHI priority sites, such as China and Haiti.

Funding: Duke Global Health Institute.

Abstract #: 2.011_HRW

Effect of medical mission trips on PA students

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Purpose: Approximately 47% of PA programs offer international experiences (Nelson, 2015), but data is limited as to the effect of these experiences. Surveys of medical students/residents indicate educational value with respect to cultural competency and communication skills (Simms-Cendan, 2013). Our purpose is to examine the effect of mission trips, as short-term immersion learning experiences, on the development of PA students. The goal is to assess cultural competencies, clinical thought processes, social responsibility and willingness to volunteer with underserved populations.

Design: This study will survey students (n = 50) pre-and post-participation in medical mission trips organized by the Wagner College PA Program (Belize, Guatemala). Surveys will include demographics (age, gender, professional status, and location and date of trip) and twenty 5-point Likert statements reflecting on social and cultural perspectives, future behaviors, and clinical skills.

Outcomes: Data collected from past mission trips indicated participants believed medical mission trips increased cultural competencies and social awareness (mean = 4.63, range = 4.48-4.74), willingness to continue volunteering with underserved populations (mean = 4.61, range = 4.43-4.77) and improved clinical skills (mean = 4.28, range = 4.17-4.43) with no significant differences in responses based on gender, age, location or date of experience. Missing was pre-experience baseline data thereby limiting our ability to extrapolate degree of effectiveness of mission trips. This study will compare pre- and post-experience data from trips to Belize (12/2015) and Guatemala (1/2016). The goal is to assess overall efficacy of mission trips as immersion learning experiences while taking into account students' baseline cultural competencies and clinical abilities. This would help ascertain which students benefit most from these experiences and help determine the value of integrating mission trips into PA curricula.

Implications: Immersion learning medical mission trips serve to provide clinical knowledge, raise social consciousness and enhance cultural diversity. They encourage active learning and optimize development of clinical thought processes and use of acquired knowledge. Most importantly, they encourage cultural appreciation which, in turn, helps students better manage diverse patient encounters while promoting future commitments to global outreach activities. Should the results demonstrate statistical significance, our goal is to utilities our findings to encourage integration of mission trips into PA curricula.

Funding: Trips are funded via tuition.

Abstract #: 2.012_HRW

Mothers as diagnosticians: Healthcare access and treatment in the western highlands of Guatemala

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Purpose: Primeros Pasos is a grassroots organization that provides health and education services to indigenous K'iche' Maya communities of the Palajunoj Valley of Guatemala. Along with factors such as