

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

**Funding:** Unfunded.

**Abstract #:** 2.010\_HRW

### **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.

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### **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 utilize our findings to encourage integration of mission trips into PA curricula.

**Funding:** Trips are funded via tuition.

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### **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 Palajunuj Valley of Guatemala. Along with factors such as

location, resources, and affordability, cultural beliefs present an additional barrier to healthcare access. Little is known about culturally-specific illnesses in which clinical treatment is often not sought. The aim of this investigation was to identify barriers to healthcare in the communities of Palajunoj and understand how individuals mediate between different health beliefs in treatment and education. We explored how illness and treatment are described by community members and identified how these health beliefs are transmitted and propagated throughout each community.

**Methods:** We conducted 30 interviews with women from 3 communities. Interviewees included participants in the Primeros Pasos Nutrition Program and other non-affiliated individuals in these communities.

**Outcomes:** We found that individuals distinguish between biomedicine and natural medicine. There are illnesses curable by clinical medicine and those that require the attention of a natural healer. The latter are considered unexplainable by biological causes and incurable by biomedicine. These culturally-specific illnesses include, but are not limited to, *mal de ojo*, its more advanced version *el chipe*, their relative *lombrices*, and *susto*. Community members do not seek clinical health services for various reasons. Many believe that clinical healthcare workers do not recognize culturally-specific illnesses and that they are unable to provide adequate treatment or may cause further harm. In addition, location and affordability often play a role in how community members decide between natural and biomedical treatment. Health beliefs surrounding these topics are transmitted through multiple systems: family and friends, schools, and outreach programs by aid organizations such as Primeros Pasos. We also found that amongst different communities there is wide variation in cultural health beliefs.

**Going Forward:** These results demonstrate a greater need for addressing existing cultural health beliefs and other non-biomedical health factors. We suggest communication with community healers as a starting point for generating greater collaboration between communities and aid organizations such as Primeros Pasos in order to augment clinical treatment and improve education programs.

**Abstract #:** 2.013\_HRW

**Investing in the future of Nigeria's health work force: Strengthening human resources for health through sustainable pre service HIV/AIDS training systems at nursing, midwifery & health technology training schools in SE Nigeria: A case study**

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**Program Purpose:** Center for Clinical Care and Clinical Research Nigeria (CCCRN), in collaboration with local teaching institutions in Nigeria, sought to more closely align USG-funded HIV/AIDS efforts with the national programs through a program called Partnership for Medical Education and Training. The goal was to enhance capacity at the pre service training level in the management of HIV disease, by revising the HIV training curriculum to emphasize role specific core competencies that in turn ensure “practice ready” graduates.

**Structure/Method:** Multiple advocacy and consensus building meetings for stakeholders were held, followed by a comprehensive training needs assessment of five schools of nursing and 4 schools of midwifery, 3 schools of health technology in the South East of Nigeria.

Pre service faculty were assessed for teaching/mentoring knowledge and skills to identify capacity gaps as well as presence or absence of ongoing HIV related education for faculty and students using structured questionnaires and key informant interviews. The required infrastructure for effective implementation of these trainings in the institutions was also assessed.

This resulted in the following interventions-Curriculum review, Training of Trainers for faculty, refurbishing of the identified training halls and libraries, provision of teaching and training materials and books.

**Outcomes:** The completed documents from the curriculum review were formally submitted to the respective regulatory bodies for adoption and provisional concurrence for their implementation was sought. A total of 37 faculty received training to implement the new curriculum, 28 participants trained on training of trainers on managerial competence for health care providers and a total of 3,108 undergraduate students from the 12 institutions benefitted from the revised curriculum between 2013 to 2014. Pre and post test results indicated a significant increase in knowledge (65% mean pre-test to 89% mean post test score). Regular quarterly technical assistance visits to the institutions further strengthened the programme.

**Going Forward:** Strengthening pre-service education in tertiary level schools helps to provide a “practice ready” workforce that can assist in bringing the HIV/AIDS pandemic under control. The success of the program can be attributed to collaborative and participatory nature of the process with clear understanding and cooperation by all stakeholders.

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**Understanding barriers to vaccination in an urban slum of Karachi, Pakistan**

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**Background:** Immunization is one of the most cost-effective public health initiatives regarding disease control and is an indicator of health-seeking behavior. Despite freely available vaccinations provided by GAVI and the national EPI program, Pakistan is one of two countries in the world with wild polio virus circulating. Has a vaccination rate of only 54% according to the Demographic Survey (2012–2013). Urban slums with poor sanitation and housing density pose the highest risk of disease spread, yet few studies have surveyed this population.

The objective was to determine the vaccination status amongst the population of 50,000 in an urban slum in Karachi, Pakistan and to analyze the knowledge, attitudes and practices towards immunization, which may be limiting vaccine acceptance and uptake.