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a wide range of LMIC and HIC settings, with the caveat that more information regarding GH training in LMIC medical schools is needed. Next steps include engaging with other GH educational groups and disseminating findings worldwide through online blog posts, conference presentations, and peer-reviewed publications.

Source of Funding: Funding for the initial meeting of BGHEI was provided by the Rockefeller Foundation.

Abstract #: *1.072_HHR*

Medical Brain Drain in Uganda: Causes and Potential Remedies

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Program/Project Purpose: Sub-saharan Africa currently bears 24% of the global disease burden, yet is home to just 3% of the global health workforce (Anyangwe 2007). Despite this crippling disease burden, nearly 30% of graduating physicians in Uganda choose to emigrate each year (Soucat 2013). Medical brain drain refers to this human resource crisis that plagues the healthcare systems of many developing countries, where newly graduated physicians choose to leave the country after receiving their formal medical education. For over a decade, public health leaders have attempted to meet this critical human resource shortage through an increase in the availability and efficacy of medical education (Akuffo 2014).

Structure/Method/Design: Through in-depth interviews with 3rd, 4th, and 5th year medical students at Makerere University in Kampala, Uganda, my research attempts to uncover the complex push and pull factors that affect the emigration decisions of Ugandan medical students. While past research has pointed to low pay and overburden as the impetus of the brain drain, my project focuses on sociocultural factors associated with emigration like social ties, national pride, socioeconomic background, as well as lived experience in the health system.

Outcome & Evaluation: My findings point to key policy changes that can be utilized by Ugandan medical schools in order to better retain its students. Expanding the diversity of medical students in terms of educational and socioeconomic background, by targeting low income parts of the country in the admissions process will generate doctors more likely to stay in the country and more connected with their home. In addition, strengthening and building upon the community healthcare programs already utilized will allow medical students to appreciate their role in the Ugandan health system. Finally, allocating medical supplies efficiently and appropriately, so students and doctors have what they need to do their job is paramount to overall physician satisfaction.

Going Forward: In order to provide for the needs of its own country, Uganda must act quickly to end the high rates of medical brain drain. Through a collaboration of physicians, healthcare policy makers, as well as government officials, Uganda can empower its doctors to provide their patients with the best possible care.

Source of Funding: University of Notre Dame, Kellogg Institute for International Studies.

Abstract #: *1.073_HHR*

Results of a Global Collaboration First Responder Course in Trauma Skills Training in New Delhi, India

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Program/Project Purpose: In both developed and developing countries, most morbidity due to trauma occurs in the prehospital period. This increase in morbidity and mortality is partly due to a lack of appropriate critical care education of first responders in rural settings. Multiple studies have shown that prompt, well-executed pre-hospital care by first responders can lead to a reduction in mortality.

Structure/Method/Design: The First Responder Trauma and Emergency Care Program aims to educate lay people through implementation of a four-tiered trauma education program, which incorporates high-fidelity simulation, video-recorded debriefing, and retraining. Simulation has previously been shown to be a useful tool in training of trauma-related clinical skills. The study compared comfort in assessing and managing trauma situations among four different groups: students, educators, nurses and physicians.

Outcome & Evaluation: A total of 57 individuals were trained with the First Responder Trauma and Emergency Care Program as part of a breakout session with the World Trauma Congress in Delhi, India. Prior to training, 37% (n=19) felt at least moderately comfortable to assess and manage a trauma situation. Following the training program, 73% (n=41) felt at least moderately comfortable. The highest confidence prior to training was exhibited by the staff nurses where 89% (n=8) reported some level of past experience with trauma assessment and care. Of the educators, nurses and physicians, 29% (n=6) felt at least moderately comfortable to manage trauma situations prior to training; 81% (n=10) felt at least moderately comfortable after training. In students, 19% (n=6) felt at least moderately comfortable prior to training whereas 63% (n=19) felt at least moderately comfortable following training.

Going Forward: Of the 57 individuals, overall confidence handling traumatic situations increased. A great increase was seen with students. This highlights the course's ability to target the lay population. The increase in self-assessment of confidence among educators, nurses, and physicians may indicate the course as a beneficial source for continuing medical education and highlights the courses ability to target the skilled medical workforce. With a goal of targeting 8 million students in the next 10 years within schools, we feel this program would strongly reduce morbidity and mortality in prehospital settings.

Source of Funding: "None".

Abstract #: *1.074_HHR*

Validation of Smart Monitoring System for Mobile Facility Deployed for Emergency Crisis and Post-Disaster Situations

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Program/Project Purpose: Recent epidemics in Africa and natural disasters across the world have shown the challenging aspects of handling additional burdens on health care facilities in a resource-constrained environment. There is a need for technology innovation to address global health infrastructure limitations. The implementation of a mobile facility engineered with a smart monitoring system allows for rapid augmentation of medical resources to meet increased medical needs in these settings.

Structure/Method/Design: In conjunction with custom-developed patient tracking software and a video interfacing system, we conducted a proof of concept study validating a smart monitoring system in the emergency smart pod in Houston, Texas. The system also incorporated wireless, multiparametric patient sensors that allowed continuous vital sign monitoring and transmission connected to the wireless patient monitoring system. The patient cohort participated in three different scenarios (emergency response, critical care, and triage) and were monitored for different time spans according to their needs. Incremental data analytic assessment was used to provide onsite staff with enhanced clinical educational support and ensure efficient use of the wireless smart pod system.

Outcome & Evaluation: During the 3-week study period, all eligible subjects (n=20) admitted to the emergency smart pod were enrolled in the study, generating a total of 21.7 hours (1.08 hours/patient) of periodic vital sign data (including heart rate, blood pressure, and respiratory rate), heart rate variability monitoring, and heart waveform analysis. Remote communication with off-site physicians allowed for expanded care and real-time feedback. All patients tolerated the sensor monitoring without problems, with manually determined and automated vital signs well correlated with one another. This study showed that a smart monitoring system in a mobile facility is instrumental in addressing patient needs in a range of emergency crisis and disaster situations. Feedback was provided to collaborators to support smart monitoring system improvement.

Going Forward: Additional validation phases will incorporate modeling of interactions of multiple mobile facility units and field testing in a health care resource-constrained location to be determined.

Source of Funding: Paul G. Allen Family Foundation USAID Ebola Grand Challenge.

Abstract #: *1.075_HHR*

An Assessment Toolkit for Measuring Outcomes in Nursing Study Abroad Programs

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Background: International experiences and study abroad have become a common type of experiental learning in higher education, including nursing.However, a lack of outcomes measures in nursing study abroad programs, particularly from validated and reliable tools, has been identified in the literature. This poster is the result of a Doctor of Nursing Practice project to develop a toolkit that may be used to measure outcomes in nursing study abroad.

Methods: Outcomes from nursing study abroad programs were identified in the literature. Validated, reliable tools to measure these outcomes were identified through further search, and through an online survey sent to study abroad directors at randomly selected colleges of nursing that have membership in CUGH.

Findings: Tools were identified for many of the identified outcomes. Those that are available for use along with cost, means of obtaining permission, and psychometric data were incorporated into a toolkit for use by nursing study abroad directors.

Interpretation: Validated and reliable tools are available for many of the identified outcomes in nursing study abroad. These may be utilized to meet the identified need for outcomes measures in nursing study abroad programs.

Source of Funding: None.

Abstract #: *1.076_HHR*

Factors Influencing Retention, Job Satisfaction, and Motivation among Jordanian Health Workers

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Program/Project Purpose: In Jordan, about 3.78 million people, including refugees and marginalized populations, living in remote areas rely on Ministry of Health (MoH) services. The MoH's 2013-2017 strategic plan lists retention of staff and attracting new talent into the public health system as two of its biggest challenges. USAID's HRH2030 program performed a national level research study to identify factors influencing retention, job satisfaction, and motivation among doctors, nurses, and midwives within MoH health facilities and to provide evidenced-based recommendations to support the MoH in formulating policies to improve staff retention and recruitment.

Structure/Method/Design: HRH2030 used an exploratory, mixed methods design combining both quantitative (questionnaires and a validated tool) and qualitative (semi-structured interviews and focus group discussions) data collection techniques. The study approached 1,565 health workers in 67 primary health centers, 31 comprehensive health centers, and five hospitals across the four governorates of Irbid, Ma'an, Zarqa, and Amman.

Quantitative data analysis: Responses to individual questions were described and analyzed using frequency distributions, mean, and median scores. Multivariate regression analysis was performed to test the association and contribution of different factors to motivation and satisfaction. Data were disaggregated by cadre, facility type, governorate, and gender.

Qualitative data analysis: Responses were analyzed per group of respondents and by research question, using a framework approach based on the research questions and leading issues in the topic guides. We added new items emerging from the interviews and focus group discussions. Answers between and within groups were compared and contrasted, paying particular attention to differences between cadres and genders.

Outcome & Evaluation: The study found that the top satisfaction factors were patient appreciation, interpersonal relations with colleagues and manager, and working arrangements. The most frequently dissatisfying element was insufficient financial incentives,