Annals of Global Health, VOL. 83, NO. 1, 2017
January–February 2017: 117–155

Program/Project Purpose: Global health is a collaborative field; one that requires diverse professionals to address the clinical, biological, social, environmental, and political factors that contribute to the health of communities and nations. The interprofessional nature of global health education presents a distinct challenge, namely ensuring that students learn to collaborate with other professionals to address complex global health needs. While much work has been done to define the field of global health and discipline-specific competencies, less has been done in the area of interdisciplinary or interprofessional global health education.

Broadly, the educational concept of global health teams is often difficult for students to envision. However, framing the concept through the lens of a specific health issue offers cogent examples from which broader global health team based frameworks can be identified.

Structure/Method/Design: Two universities that are part of a state public university system collaborated to deliver an interprofessional, teamed based global health course drawing on the lessons of the Ebola epidemic. This on-line, six-week MOOC models the broad team approach both in the breadth of faculty discipline and experience – from law, to medicine, to management – to the more than 800 students from over 100 countries representing every area of health care, research, management, training, and the globe. The presentations, readings, and videos are drawn from disciplines representing the breath of the global health field. Student discussion questions, written interactions, and presentations encourage a common forum to share diverse health, geography, cultural and education experiences.

Outcome & Evaluation: Using Ebola as a global health example, faculty and students discuss the team interplay among medical (patient care), social (burial practices), environmental (disease spread), legal (quarantines and travel), managerial (structuring local responses), and psychological (loss, not touching family members) to name a few. These examples Using are interwoven into the six course modules:

o Perspectives on Global Health/ National & International Approaches
o Women & Children's Health
o Infectious Disease Epidemiology
o Global Health Law and Ethics
o Mass Violence and Civil Unrest
o Management of Global Health Service

Going Forward: Students take the course without cost, and if they complete knowledge assessments and discussions are awarded a certificate of participation.

Source of Funding: None.

Abstract #: *2.023_HHR*

Improving and Sustaining ICT Skills of Health Researchers in Kenya Through a Three-Tiered Approach of Online Learning, Hands-On Workshops, and Personalized Mentoring

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Background: Despite the recent growth in health informatics, the use of information, communication and technology (ICT) by health researchers in resource-limited settings has been slow and inequitable. Further, many local institutions that have excellent ICT capacity do not routinely provide such services to the health researchers. innovative delivery of ICT skills to health researchers may improve the quality and impact of research outcomes.

Methods: This is an implementation science study conducted at the University of Nairobi (UoN) School of Computing and Information Science (SCI) in Nairobi, Kenya. In this Fogarty-funded program performed in collaboration with the University of Washington, Kenyan health researchers interested in ICT were invited for three tiers of training involving an online module open to hundreds of students nationally, a face-to-face workshop at UoN SCI for 30 students, and one-on-one mentoring for 10 students. Participants who successfully completed each stage were competitively selected for the subsequent tier. The online module comprised 6-8 weeks of weekly recorded lectures accompanied by quizzes and a discussion board. Five day face-to-face workshops took place at UoN SCI. In the mentoring tier, students were selected based on their workshop proposal score and assigned one mentor to guide them through their ICT based research projects, writing of manuscripts and abstracts for conference presentations.

Findings: Between January 2015 and October 2016, the following courses were conducted in Kenya: Geographical Information System (GIS) for Health Researchers, Principles and Practice of Research (PPR) Data Management and Collection, and Research Management and Communication Tools. Overall, 978 applicants applied for the online tier of these three courses. Of these, 673 (69%) were accepted and participated, 559 (83%) completed, and 369 (66%) passed. Of the 222 students who had passed the first online tier, about half (122) were invited to the second workshop tier, and nearly all (119) participated. Of the two completed mentored programs, 17 were selected and successfully mentored.

Interpretation: There is great interest in ICT for health researchers in resource-constrained settings. Structured multi-tier training is highly acceptable and effectively reaches more health care researchers while offering more in-depth training for those with greater research experience and skills. International partnerships increase educational experience and build capacity in resource-constrained settings.

Source of Funding: Fogarty (1R25TW009692).

Abstract #: *2.024_HHR*

The Impact of a Triage System Designed to Reduce Waiting Time and Prioritize Care for High-Risk Obstetric Patients in a Ghanaian Regional Hospital

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Program/Project Purpose: Delay in receiving care in hospitals contributes to maternal and newborn mortality in low resource

settings. Ridge Regional Hospital (RRH) is a high volume obstetric referral center in Accra with 8,000-9,000 annual births. Approximately 70% of the women referred are high-risk and many are in labor. Conducting midwife-led obstetric triage in referral facilities is new as most have utilized a first-come, first-serve approach irrespective of patient risk. An obstetric triage training program that modified patient flow was developed, and a job aid involving red, yellow, and green color-coded wristbands to identify high, medium and low risk patients, respectively, was introduced in 2013-2014 for 62 midwives at RRH. A novel, free-standing triage pavilion with an emergency bay was then locally sourced and staffed with designated nurses in 2015. This study measured wait time among pregnant patients at RRH before and after training and the opening of the triage pavilion.

Structure/Method/Design: Before and after wait time data from arrival until assessment was collected from September 9-November 11, 2012 and September 15-November 19, 2015, respectively. Patient and labor characteristics, referral patterns and timeliness of care were assessed and wristband compliance was measured. Median time before and after was compared using a Mann-Whitney U test.

Outcome & Evaluation: Waiting time was measured for 926 (69%) of the 1351 patients presenting to RRH for obstetric care before the triage pavilion opening and 794 (54%) of 1465 patients afterwards. The median [IQR] wait from arrival until assessment decreased from 40 [15-100] min in 2012 to 7 [2-19] min in 2015 ($p<0.0001$). In the "after" group, 98% of patients had a banding code applied.

Going Forward: The novel obstetric triage system implemented at RRH resulted in dramatic clinical care improvements. Waiting time has markedly reduced and approximates the internationally recommended standard that triage assessment begins within 10 minutes of arrival to a facility. Further analysis of patient outcome based on risk assessment will be conducted.

Source of Funding: Funding was provided by Kybele and PATH.

Abstract #: *2.025_HHR*

Improving Continuing Education in a Hospital System in Ecuador

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Program/Project Purpose: Many times in developing countries hospitals struggle to maintain properly trained medical personnel. A successful project for continuing education in a hospital system in Ecuador was initiated with cooperation from a nursing college in the United States. The education program was to help improve outcomes in patient care. In addition, health care workers morale and satisfaction was low due to staffing shortages and high patient load.

To spark a renewed interest in their careers, and foster a sense of comradery within the hospital the decision was made to start implementing education classes. Project objectives included up-to-date skills and basic life support. It was hoped this increased education, as well as improved satisfaction, could then trickle down to improved patient outcomes.

It was also imperative to study the effects and outcomes of the classes that were taught as much of the concepts were new to Ecuadorians. Furthermore, it is essential to determine education outcomes to provide direction for further teaching in subsequent years.

Structure/Method/Design: Basic life-saving (BLS) courses were taught for the neonatal, pediatric and adult care nurses and ancillary personnel. Technical skill classes also were taught which were identified by the hospital organization. Over 900 hospital personnel attended classes over a 3 week period. Excitement over the classes and new knowledge was phenomenal. The hospitals were very cooperative in providing transportation, time, and access for their employees to attend the classes.

A year later, questionnaires and interviews were conducted to determine recall of skills and concepts that were previously taught.

Outcome & Evaluation: Results from the follow up survey varied. The highest retention was from the BLS class that was taught, with at least 85% attendees remembering at least two or more steps (from the four steps taught). However, it was a concern to see only 50% of attendees remembered the right order. Other results will be shown.

Going Forward: When teaching new skills, planned repetition of continuing education should be an important part of health care worker development. The following year, we were able to train local leaders to carry on efforts for continuing education.

Source of Funding: None.

Abstract #: *2.026_HHR*

Effects of Public Health Insurance on Labor Supply in Rural China

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Background: Since the implementation of the New Cooperative Medical Scheme (NCMS) in 2003, there has been a proliferation of research about the effects of public health insurance, healthcare resource utilization, and its associated clinical outcomes. However, there is little evidence regarding the association between the NCMS and labor force supply behaviors in rural China. The aim of this paper is to contribute substantively to the literature by examining the effect of the NCMS on these behaviors, specifically hours of farm work, the likelihood of not working, and the likelihood of off-farm labor force participation.

Methods: Using data from three waves (1997, 2000, and 2006) of the China Health and Nutrition Survey (CHNS), we employ a difference-in-difference approach to compare the labor supply outcomes of individuals in NCMS and non-NCMS households before and after implementation to estimate the average treatment effect of NCMS on those treated populations. As effects of the NCMS on labor supply may vary by individual characteristics, further analyses stratified by gender, age, and per capita household income were performed.