**Interpretation:** Results obtained show and demonstrate us that in fact GH is an unknown science in Mexico, there is a high support of different key actors from international to local level. This position will convert obstacles in opportunities, promote more research on medical education and innovation in Mexican workforce agenda. The strategy could shift the paradigm of regular training, drive the connection between academia and health systems and prioritize healthcare of the most vulnerable in Mexico by improving human resources during their specialization.

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Abstract #: 1.017\_HRW

# Kuskaya: an interdisciplinary training program for innovation in global health

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**Program Purpose:** Globalization has produced a heightened awareness of problems affecting public health that require the expertise and collaboration of multiple disciplines to effectively implement change. KUSKAYA: An Interdisciplinary Training Program for Innovation in Global Health, is led by the University Peruana Cayetano Heredia (UPCH), Lima, Peru and the University of Washington (UW), Seattle, USA, supported by the Fogarty International Center, which aims to provide terminal degree students from different disciplines with training and practical research experience to develop and evaluate innovative policies, products and processes in global health. Kuskaya means "working together" in Quechua, a Peruvian language.

**Structure:** KUSKAYA pairs US and Peruvian Fellows from diverse fields (including architecture, anthropology, health sciences, economics, policy and engineering) to conduct multidisciplinary research projects, guided by US and Peruvian mentors. They receive training in leadership, research ethics and integrity, implementation science, and key skills related to the research life cycle while conducting a 1-year pilot global health research project.

**Outcome & Evaluation:** In the first year of the program, we chose eight Fellows from 46 applications which formed three research teams: 1) One health; 2) Climate change and health, and 3) Pharmacies, TB and Information and Communication Technologies. Fellows participated in key activities during their training, including the COP 20 in December 2013 in Lima, Peru, various symposiums and conferences, and won several awards for abstracts and oral presentations. In the second year of the program, we have received 72 applications, and chose 12 Fellows and 3 Senior Fellows to form 8 research teams.

**Going Forward:** Young professionals in disciplines not historically integrated in health research are seeking opportunities to make a positive impact in public health. KUSKAYA's strategy of selecting outstanding students from varied disciplines, and training them in health research, is an effective and novel approach to global health training, allowing Fellows to gain experience

in international collaboration and inspire innovative projects that are expected to have a positive impact on public health in Peru.

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Abstract #: 1.018 HRW

# An environmental survey of existing undergraduate global health programs

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**Program/Project Purpose:** We reviewed, critically analyzed and compared all existing Bachelor's-level global health programs offered in English to inform the development of an undergraduate curriculum that is innovative, student-centered, and poised to create future global health leaders.

Structure/Method/Design: The identification of existing undergraduate global health programs was conducted in February 2015 by searching the Consortium of Universities for Global Health Database and official university websites. We identified fourteen suitable undergraduate programs that focus on global health, are majors towards a bachelor's or joint bachelorsmasters degree, and are offered in English. We compiled data from publicly available information published online by the universities.

Outcome & Evaluation: There are substantial differences in the oversight, structure, accreditation and teaching methods in global health undergraduate programs. Each school addresses its mission by providing graduates with core competencies to facilitate their entry into the workforce or continuing studies. By comparing commonalities between the fourteen curricula, we identified six areas of taught competency, including epidemiology, statistics, secondary language, dissertation, field experience and study abroad programs. We identified several overarching themes, including a strong practicum requirement, basic epidemiology, statistics, and research methods training, interdisciplinary courses, a final year thesis project, a tendency of the program to attract pre-medical students, opportunities for international experience, and recommendation of further academic training. Our analysis also included commonalities and differences related to the taught content, methodology, use of technology, philosophy of curricula, student career trajectories and key deliverables.

**Going Forward:** This study serves to outline existing curricula and contribute to developing a standardized degree for undergraduate global health education. These programs have the potential to engage students, practitioners and faculty in innovative and interdisciplinary approaches, such as out-of-the-classroom learning and inter-professional collaboration. This survey also demonstrates that there is a lack of standardization for undergraduate global health education. Thus, there is an urgent need for conversations regarding

what exactly constitutes as "global health" and a comprehensive "global health education".

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**Abstract #:** 1.019\_HRW

### Village health worker-delivered health literacy home talks successfully transfer knowledge

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**Background:** Village health workers (VHWs) are key to building health literacy in low resource areas. Basic knowledge acquisition is a prerequisite for making health-related decisions about chronic disease, cancer screening, family planning, and diarrhea. In partnership with Kisoro District Hospital, Doctors for Global Health staff designed health literacy talks to be given by VHWs to individuals at home ("home talks") regarding these four healthcare topics. We evaluated the benefits of home talks through administration of pre and post tests.

**Methods:** VHWs in twelve villages visited approximately 20 homes with an evaluator who conducted pre and post tests in Rufumbira. Four available topics were listed and the subject was asked to choose two topics that appealed to her. The first chosen topic was given as a home talk ("index"), and the second chosen topic was treated as a control topic ("control") with no talk given. A pretest was performed for both index and control topics. A posttest was administered immediately after the talk for the index but not the control topic. A delayed posttest was carried out two to five months after the talk for both index and control topics. Pretest and immediate posttest data were available for 156 subjects and pretest and long-term posttest data were available for 62 subjects. A paired sample t-test was used to compare pretests to immediate posttests and delayed posttests, respectively. Significance was determined at α=0.05.

**Results:** Long-term knowledge regarding chronic disease increased on average by 22.6±15.7 points (p=<0.0001) from baseline. Furthermore, long-term knowledge regarding diarrhea increased on average by 23.529±20.377 points (p=0.0033). Additionally, long-term knowledge regarding family planning and women's cancer increased on average by 36.04±17.42 and 34.62±32.96, respectively (p=0.0026 and p<0.0001, respectively). There was a percent increase observed for all categories including chronic disease (163%), diarrhea (147%), family planning (150%), and women's cancer (900%). Analysis of the control pre/post questions did not indicate a significant difference in any category tested.

**Conclusion:** Through delivering home talks, VHWs increased health literacy in this rural Ugandan population with low levels of education.

Abstract #: 1.020\_HRW

# Knowledge and attitudes of out-of-hospital emergency nurses in Yerevan, Armenia

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**Background:** Emergency care in Armenia is in the early stages of development. The Emergency Medical System (EMS) in the capital

city, Yerevan, comprises a network of ambulance stations staffed by out-of-hospital physicians and nurses who respond to emergency calls. We designed a study to evaluate the knowledge and attitudes of EMS nurses regarding pediatric rapid assessment and resuscitation, as well as to identify specific areas for improvement in pediatric emergency nursing education.

**Methods:** We distributed a cross-sectional, anonymous, self-administered knowledge and attitudes survey regarding pediatric rapid assessment and resuscitation to all EMS nurses in Yerevan in July 2015. The IRB at Virginia Commonwealth University qualified this study for exemption.

**Findings:** The survey response rate was 87.5%. Of the 175 nurses who completed the 10-question knowledge test, 52% failed. The passing score was 7, and the mean score was  $6.03 \pm 2.36 \mathrm{SD}$ . Training in pediatric nursing and participation in pediatric continuing medical education (CME) were associated with significantly higher test scores (t-test: p = 0.039, p = 0.001). The number of years as a practicing nurse and number of years working in the EMS system also had positive effects on test score (one-way ANOVA: p = 0.003, p = 0.003). Questions regarding recognition of shock and initiation of neonatal and pediatric CPR were most frequently missed. Nurses who had pediatric-specific training were more likely to correctly identify shock signs and symptoms and know when to initiate neonatal CPR (chi-squared: p <0.001, p = 0.003). Of the clinical skills assessed, nurses felt least comfortable with enteral tube placement, specimen collection, and spine stabilization. Nurses reported being least confident in their ability to care for neonates and infants. 79.4% of nurses indicated that they would benefit from further pediatric emergency training, and 86.1% agreed that knowledge from the Anglo/American Emergency Medicine system could improve pediatric emergency care in Yerevan.

**Interpretation:** There is a demonstrated need for additional pediatric emergency care training and CME for EMS nurses in Yerevan. Training EMS nurses along with out-of-hospital physicians would improve first-responder awareness of pediatric acute illness and patient care.

**Funding:** Virginia Commonwealth University, Children's Hospital Foundation.

Abstract #: 1.021\_HRW

#### Factors that increase medical and nursing students' interest in global health

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**Background:** The World Health Organization reported in 2013 that there is a growing shortage of healthcare workers involved in global health. Efforts to address this need will benefit from knowledge of which factors affect medical and nursing students' level of interest in global health.

**Methods:** We submitted an online survey with 5-point Likert scale and multiple-choice responses to all medical and nursing students