

academic and practice sectors at the centrally located country gained international, and local support.

Structure/Methods/Design: The University of South Florida established ten years ago a coordinating program at the City of Knowledge to develop international academic and community partnerships, student international field experiences, certificate programs, study abroad groups, research training and projects and implementation at the population level, international conferences, workshops, seminars, and continuing education of professionals provided an academic forum to reach the Americas as a hub for global health. The program provides local and international faculty and students an opportunity for knowledge exchange in research, public health topics, and specific clinical training. A key component of the program has been conducting hands-on training and population-based research in at-risk and vulnerable communities of Panama, including indigenous groups.

Outcome and Evaluation: Multiple academic and practice partnerships in Panama and other countries in the Region were formed, hundreds of students (>500) and thousands of health professionals trained (>1,000), new forums for health academia were formed, and research on chronic and infectious diseases implemented. Schools became an effective outlet to “spread the health”, providing access to communities for health education, outreach, and interventions, graduate student practice settings in public health research, and faculty research on HPV, violence, nutrition, hygiene, environment, tropical disease, and cancer among others.

Discussion and Future Directions: Growing globally in health academic and research for inter-professional development is a challenging endeavor. Gaining support from partners in other academic and practice (schools, hospitals, health centers, community agencies, international non-governmental institutions) provide the basis for successful training and research. Community settings provide an appropriate channel to conduct training, research, and community health interventions at international sites.

Abstract #: 1.015_HRW

Assessing barriers to accessing surgical care in Ethiopia: a provider perspective

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Purpose: Dessie Referral Hospital (DRH) is a public hospital serving 2 million people in the South Wollo Zone of Ethiopia. This study seeks to describe the volume of surgical procedures performed at DRH, characterize resources at mid-level health clinics, and assess barriers to surgical care experienced by providers.

Methods: The study had two components: a retrospective hospital records review and a provider survey. Surgical logbooks and patient records for all adult surgical cases in 2013 were reviewed at DRH. Data on patient characteristics, surgical procedure, and complications were recorded. Provider surveys were distributed to 21 community health centers within the catchment area of DRH assessing the

availability of diagnostic tools, procedural materials, and medications. Providers tracked surgical case referrals during a 30 day period in 2014 and identified reasons surgeries were not received.

Findings: Of the 3587 adult surgical procedures performed in 2013 at DRH, 250 charts were randomly selected for review (179 male, 71 female). The median age was 42 (range 18–86 years). Obstetric/gynecological procedures accounted for 37% of surgeries, 8% were orthopedic, 8% were laparotomies, 6% were appendectomies, and 6% were thyroidectomies. Documentation of complications and mortality was consistently absent. Of 21 surveys distributed 8 were returned, documenting 146 total surgical referral cases (92 male, 54 female). Of patients with a surgical diagnosis, 37.2% received surgery (48% female, 52% male). The most common barriers to surgery were family objections and financial ability. There was an average of 2.8 health officers, 10.3 nurses, and 18 total providers per center. Physicians and imaging were never available at any of the centers. Electricity, antibiotics, pain medications, and antipyretics were always available at all centers, but some centers had limited access to clean water, nasogastric tubes, rectal tubes, and suturing materials. Most or all centers reported difficulty diagnosing intraabdominal tumors, gallstones, cholecystitis and renal stones.

Interpretation: Data analysis was constrained due to incomplete record keeping and low survey responses. Familial objections, financial resources, and lack of imaging equipment constituted the largest barriers to surgical care.

Funding: Massachusetts Medical Society and Boston University School of Medicine funded this project.

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Global health competencies inclusion strategy in medical training in Mexico

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Background: Global health (GH) competencies for residency programs are a growing interest in medical education worldwide. However, GH and its inclusion in resident’s training is an isolated subject to faculty directors of medical schools and for the Ministry of Health (MoH) in Mexico, facing healthcare challenges translated as a mismatched between academic institutions, MoH and vulnerable communities.

Methods: A non-systematic literature review of GH training in medical residency was performed. Three questionnaires were developed for interviews using qualitative methods for professionals involved in GH. A PolicyMaker4 exercise was conducted in order to analyze the political arena in Mexico for the strategy.

Findings: 46-articles of interest were selected among 139 obtained according to authors’ criteria. 9-interviews were achieved with professionals working in the field. The final product obtained was a seven - objective strategy, with goals to complete and actions to fulfill. It provides a platform to introduce students, professors and different stakeholders that will make feasible the inclusion of GH in Mexico.

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.

Funding: None.

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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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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 bachelors-masters 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