EDUCATION/TRAINING/CAPACITY BUILDING

Peoples-uni - Online Public Health Capacity Building for Developing Countries

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Program/Project Purpose: The need for capacity building in Public Health in developing countries is well recognised. The People's Open Access Education Initiative (Peoples-uni -http://peoples-uni.org) was registered as a charity in 2007 to provide a high quality, low cost, educational programme aimed at health professionals in low and middle-income countries (LMICs).
Structure/Method/Design: In order not to deplete scarce manpower during the education, to ensure that skills learned can be applied immediately, and to ensure equality of access, the programme has been developed fully online. A set of 17 online modules, covering both the foundation sciences of Public Health, and Public Health problems facing developing world populations, has been developed. These are offered every semester, and available for continuing professional development, and for the award of a Masters in Public health (MPH) degree. Each module has a common format using Open Educational Resources, and small, online tutor-led discussion forums, delivered on an open-source educational platform. The use of volunteer tutors and open educational resources, and a small number of higher-fee paying students from developed countries, enable Peoples-uni to make education available to LMICs at very low, or no cost.
Outcomes & Evaluation: Peoples-uni has assembled a group of over 200 volunteer tutors from over 40 countries who develop, revise and deliver courses at Masters level. Tutors range from post-MPH specialist trainees, to specialist practitioners, and academics in Public Health. Students have come from more than 80 countries, and there are between 250 and 300 students each semester. So far, over 70 students have graduated with the MPH degree, awarded by a partner, Manchester Metropolitan University (who provide a quality assurance function). Student feedback is very positive. A number of exciting and relevant research projects have been planned during the dissertation phase of the programme. Some students have accomplished the studies after graduating, and some have successfully published their results. Graduates are enrolled in an Alumni group, which has published its first collaborative research paper. Collaboration with the Alumni on research, teaching and advocacy is a key development. A number of graduates have already joined as volunteer tutors or student support staff, thus demonstrating continued capacity building and sustainability of the approach.
Going Forward: This educational programme, aligned with, but developed outside the traditional higher educational system, is helping to build Public Health capacity in LMICs. It has proved to be feasible, appreciated by students and volunteer tutors, and sustainable. The partnership with our UK University partner is coming to an end, and we seek alternative methods of accreditation and external quality assurance. Collaboration and partnerships with individuals and organizations are most welcome.
Funding: Peoples-uni is funded through a social enterprise model.
Abstract #: *02ETC001*

Ending neglect: A collaborative training of healthcare workers in pediatric tuberculosis in Tanzania

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Background: Childhood tuberculosis has been a neglected area of tuberculosis control. Tanzania is one of few countries that has developed specialized childhood tuberculosis (TB) management guidelines and a training curriculum. We assessed the impact of one-week trainings on healthcare worker (HCW) knowledge and practices.
Methods: Using a standardized survey, we interviewed a convenience sample of 481 HCWs in the Arusha region.
Findings: September 16- 20, 2013, we interviewed 77 HCWs in TB, HIV, and maternal and child health clinics, and in pediatric inpatient wards at eight facilities. 65% (68% of nurses, 58% of physicians) reported having been trained. Scores were 82% on general TB knowledge, 75% on TB diagnosis, 92% on treatment and monitoring, and 93% on TB/HIV co-management. Trained HCWs scored on average 10% higher than untrained (p=0.04). HCWs regularly obtained chest radiographs, HIV testing, and history of TB contact (97%, 92%, 100%, respectively). Tuberculin skin tests and sputum cultures were less frequently obtained (approximately 50% of cases). Contact investigations were conducted for 60% of pediatric TB cases. Almost all (96%, 49/51) reported confidence in diagnosing adult TB, but fewer (88% [45/51]) reported confidence diagnosing pediatric TB. Only about half were confident interpreting sputum results or chest x-rays, and 56% expressed comfort prescribing isoniazid preventive therapy (IPT). Only 14 (36%) had ever prescribed IPT. There was no noticeable difference between comfort levels of HCWs who had attended training and those who had not.
Interpretation: The impact of trainings should be measured to inform resource allocation. In this population, impact appeared small but secondary knowledge transfer from those formally trained may have obscured the difference between the two groups. In general childhood TB knowledge was high and practices were in accordance with national guidance. Childhood TB diagnosis appears a domain in need of additional training.
Funding: No funding listed.
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HEAL Initiative

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Program/Project Purpose: Interest in global health among medical students and residents has skyrocketed in recent years. Never before has a generation of American health professionals been committed to tackling health disparities on such a global scale. Unfortunately, many current opportunities in global health are short-term, offer little mentorship, and fail to have lasting benefit for the populations they seek to serve. The Health, Equity, Action, Leadership (HEAL) Initiative aims to improve the health of vulnerable populations throughout the world with the following actions: Enhance the skill sets of health professionals in the United States and abroad to provide high quality care in resource-poor settings. Support career development and retention of local health professionals through continuing medical education and mentorship, Strengthen the capacity of the entire health system through long-term relationships between HEAL and our partner organizations.
Structure/Method/Design: The HEAL Initiative aims to build a health workforce for vulnerable populations at home and abroad through

the development of equitable, long-term partnerships with local health systems. During our two-year program, HEAL fellows provide clinical service while rotating between an underserved domestic site and an underserved international site in either Haiti, Liberia, India, or Mexico. At each location, fellows work closely with local counterparts selected by our partner organizations, engaging in a curriculum that teaches core components of global health delivery, including project management, leadership, diseases of poverty, social determinants of health, quality improvement, monitoring and evaluation, and faculty development. In addition, both fellows and their counterparts will obtain an online Master of Public Health (MPH) as part of their training.

Outcomes & Evaluation: Since the HEAL Initiative will launch in July of 2015, we do not yet have outcomes for the fellowship. However, we plan to implement a rigorous evaluation structure to assess the skill sets of our fellows and the impact the program's retention of quality health care professionals within resource-limited settings.

Going Forward: As with all innovative educational programs, there are unanswered questions about the ideal structure and content of our curriculum. We anticipate a learning curve with our first cohort of fellows. Given our goal of training an interprofessional cohort, we plan on expanding recruitment in the future to include nurses and pharmacists in addition to physicians.

Funding: Funding will come from partner site contributions and philanthropy. Our model is designed to be financially sustainable in three years.

Abstract #: *02ETC003*

Evolution of a training program in use of electronic medical records: Towards efficiency and quality scale-up

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Program/Project Purpose: International Training and Education Center for Health (I-TECH) is a global network housed in the University of Washington (UW) that supports the development of a skilled health work force to provide effective prevention, care, and treatment of infectious disease in the developing world I-TECH provides technical assistance to the Kenyan Ministry of Health (MOH) for implementation of an open-source electronic medical record (EMR) system, called KenyaEMR (hosted on Open MRS platform) within 315 public health facilities in four regions of Kenya. Before implementation, I-TECH carried out a training needs assessment among personnel in 23 facilities. Distinct training needs for health managers and front-line health care workers identified

Structure/Method/Design: I-TECH implemented three different strategies in delivering KenyaEMR trainings to users. Trainings were delivered by three different groups (training institutions, centrally located facilitators, county facilitators). Training location transitioned from off site (hotel-based) trainings to on-site (facility-based) trainings in a bid to train more health care workers (HCW). Lenght and content of trainings was adjusted in response to curriculum evaluation and strategy changes to incorporate mentorship sessions. Strategy #1: Five-day off site user training, Delivered by facilitators from training institutions. Strategy #2: Three-day off site user training, Delivered by master facilitators. Strategy #3: Four-day on-site end-user + mentor training, Delivered by MOH county-level facilitators, 1-2 Champion Mentors per site cascade training to other health care workers.

Outcomes & Evaluation: January-March 2013: Strategy 1
Cost per participant $2,345
121 managers attended Health Manager Orientations
67 Health care workers attended KenyaEMR User Training

April — September 2013: Strategy 2
Cost per participant $577
165 managers attended Health Manager Orientations
131 Health care workers attended KenyaEMR User Training

October 2013 — September 2014: Strategy 3
Cost per participant $325
216 managers attended Health Manager Orientations
1123 Health care workers attended KenyaEMR User Training
120 Champion mentors involved in mentorship

Going Forward: The evolution of I-TECH's training strategy has resulted in a lower-cost training model, with greater availability of on-site support for system users and realization of a robust training with ability to track and account for all mentees. However transfer

Funding: Centre of Disease Control (CDC) Pepfar

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Results of a five year program review for the first US-based masters of science in global health at UC San Francisco

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Program/Project Purpose: Context: As the first masters of science degree in global health in the country, the GHS MS is a one-year, 4-quarter degree comprising 36 course units and a capstone product. It was conceived as an academic program with a comprehensive core curriculum and a multidisciplinary approach to public health in a globalized world, with particular emphasis on low-income, marginalized and underserved populations. Program Period: In 2008, the MS in Global Health Sciences admitted its inaugural class of seven. We are currently in the seventh year of our program. Why: The surging academic interest in global health has created demand for improved program collaboration and oversight, including a consensus framework for global health education at the master's level. Aim: To train students or practitioners in a health science profession or related field who wish to acquire expertise and leadership in the field of global health.

Structure/Method/Design: Program Goals: 1) To train students in the key concepts in global health 2) To train students in scholarship and scientific writing 3) To provide an enganging, interactive learning environment that faciliates leadership development 4) To prepare students for careers in global health Participants: Applications are received online and eligible candidates are interviewed. We examine academic transcripts, letters of recommendation, a resume, and personal statement for evidence of academic accomplishment, global health experience, motivation, leadership potential, and program "fit." Sustainability: The program is self-supporting and entirely based on student tuition. It does not receive any funding from the University or the State of California.

Outcomes & Evaluation: Successes: The program is a completely self-supporting program. Increase in applications to about 180 per year. Our class size has grown from 7 to 44 in the current class. M&E Results: By all measures, including student evaluations, faculty evaluations, institutional discussions, increased applications, and the formal five-year program review, the MS in Global Health has had overwhelming success. We have successfully recruited highly diverse and well qualified students and the majority have gone on to careers or further educational related to global health. 79% of 89 graduates reported paid employment following graduation. The majority of graduates (66%) who have held paid employment since graduation