

use and usefulness predict attitudes, behavioral intentions, and subsequently actual use of the technology.

Structure/Method/Design: Learning Management System (LMS) logon data and online surveys administered to first-year medical (MD1) students were analyzed. Mann-Whitney U tests and separate linear regression analyses were conducted to test the effect of TAM main elements.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): 72% (n = 116) of the MD1 students responded to the online survey (73.3% males). Mann-Whitney U and linear regression analyses indicated that perceived usefulness and attitude had a significant effect on intention to use ($P < 0.05$). Female gender and older age (>25 years) were factors that significantly lowered intention to use and perceived usefulness of LMS. To ascertain actual use of the system, trend data on LMS logons for 6 consecutive months were assessed. The average registered number of logons was 5,268, with minimum and maximum of 1,058 and 11,127 respectively over this period. Similar trends were witnessed in the previous two periods.

Summary/Conclusion: Deployment of eLearning in institutions of higher learning does not guarantee the acceptability and sustainability. As institutions in sub-Saharan Africa embrace eLearning, careful evaluation of technology fit and actual use has potential to assess implementation effectiveness and impact sustainability. Our study reveals that age and gender are significant factors that may negatively affect technology acceptance.

Training emergency care practitioners and creating access to acute care services in Uganda: The pilot phase

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Background: Acutely ill or injured patients require urgent treatment to avoid morbidity and mortality. Given current physician density in Sub-Saharan Africa (SSA), very few patients are seen by a physician promptly on presentation to a health unit. A novel task-shifting program training non-physician clinicians was initiated in rural Uganda to create access to high-quality emergency care. The Emergency Care Practitioner (ECP) program is a 2-year program incorporating semi-weekly didactics using a symptom-based approach, simulation/procedure labs, and graded clinical responsibility (40 hours of clinical time per week). The initial data on patients cared for by the student ECPs at Karoli Lwanga Hospital are described here.

Structure/Method/Design: For the inaugural year, emergency physicians supervised and taught the ECPs. Curriculum content was based on a needs assessment and international consensus documents. Core competencies were adopted from Ugandan and US medical education. Data on all patients seen in the ED were entered into a quality assurance database prospectively. Attempts were made to contact each patient beginning 72 hours after ED discharge to determine vital status. Data are presented as proportions.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): A total of 2636 patients were seen from November 2009 to March 2010, with 1778 having follow up (67.5%). Most

common diagnoses were malaria (33.0%), trauma (10.4%) and pneumonia (7.2%). Overall mortality for patients presenting to the ED was 4.1% and 2.5% for children under 5 years of age. Case fatality rates (CFRs) for children under 5 with malaria and pneumonia were 2.3% and 2.6%, respectively. CFR for all trauma patients was 2.9%.

Summary/Conclusion: Data from this initial pilot suggest that emergency care provided by these non-physician clinicians improves patient outcomes. Reported CFRs are considerably lower than other published CFRs for SSA. Outcomes need to be monitored as ECPs assume more fully independent practice to ensure continued quality care.

In-service training of midlevel providers in emergency care in Ghana: Challenges, successes, and lessons learned

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Background: Provision of emergency medical care is an increasingly important aspect of health care delivery in resource-limited settings. To meet the greater demand for skilled personnel in emergency medicine in Ghana, we developed an in-service course in basic emergency care for midlevel providers (physician assistants and nurse practitioners) working in district hospitals. Midlevels were specifically targeted as this group cares for the majority of the rural population in Ghana.

Structure/Method/Design: We held an initial "training of trainers" course for 22 physician assistants from district and subdistrict hospitals within three regions of the country. From this initial cadre of participants, 10 were selected as senior trainers who then received a refresher training course and continue to train colleagues within their respective regions. The course is organized in three parts: didactic lectures, structured case discussions with simulations, and skills stations. Evaluation methods include knowledge-based pre- and post-tests, direct observation, case review, and simulation stations.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Stephan Brenner, MD, MPH; Barbra Villona, MD, MPH & TM, DTM & H; SueLin Hilbert, MD, MPH; Beth Rubenstein, MPH, MBA; Rachel Moresky, MD, MPH

Summary/Conclusion: All groups showed improvement in knowledge with average pre-test scores of 56% (SD 14.5%) and post-tests scores of 84% (SD 9.5%). Simulation cases indicate that the majority of the trained midlevel providers learned information sequentially, inconsistently used physical examinations for diagnosis, and rarely reassessed following interventions. Practical skills such as splinting and suturing were more easily acquired than skills in clinical decision making. Most participants felt that case discussions and simulations were the most helpful learning tools and identified symptom-based algorithms as useful reference tools for daily practice and teaching colleagues.

The greatest successes of this program are increased awareness, knowledge and advocacy of emergency medicine, more confidence in basic lifesaving skills, and the development of a focused introductory curriculum targeted to midlevel providers. For continued successful implementation of this program, facilitators must take ownership of teaching materials, knowledge gaps within the senior trainer group must be bridged, and appropriate long-term evaluation methods must be developed.

Organization and optimization of global health resources for US medical trainees: The Global Health Hub Resource Page Project

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Background: Now more than ever, US medical trainees have taken an interest in incorporating global health into their training. By 2004, 22.3% of graduating medical students had participated in an international health experience compared to 5.9% in 1978 (1-2). Opportunities available range from short 4-week culture and language immersion experiences, to yearlong research programs, or formal training programs in epidemiology or subspecialties in locations scattered throughout the globe.

Despite the rapidly growing number of opportunities, students and residents often find themselves lost in a sea of rich, but scattered resources. A brief review of most medical school global health websites indicates that information to help trainees find and prepare for global health experiences abroad is scattered, incomplete, and not current.

To address this organizational and structural problem, we sought to organize the currently available global health educational resources for medical students and residents, and present them in a single, open-access, volunteer-run web portal (globalhealthhub.org), that can be collectively maintained by the global health community.

(1) Association of American Medical Colleges. 2003 Medical School Graduation Questionnaire All Schools Report. Washington, DC: Association of American Medical Colleges; 2003

(2) Association of American Medical Colleges. 1978 Medical School Graduation Questionnaire Summary Report for All Schools. Washington, DC: Association of American Medical Colleges; 1978.

Structure/Method/Design: Our methodology can be divided into three sections: 1) creating a catalogue of global health resources with which we were already familiar, and forming categories to divide those resources; 2) performing a Google World Wide Web search to expand on those resources, and refining categories into eight sections including events, reference, travel, career, online education, journal watch, funding, and online community, as displayed on “Resources” page on globalhealthhub.org; 3) receiving feedback from users via email for future iterations.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Global Health Hub

Summary/Conclusion: We found that there was an overwhelming number of free resources available online for medical students and residents. Initially, 360 unique links were generated from approximately 180 websites, including over 40 academic institutions.

We quickly realized that many of these resources can be used by the broader global health community, beyond just trainees. Certain categories, such education and references, may be of particular use among global health practitioners in low-resource settings. Prototype feedback from our peers and colleagues has been optimistic, confirming the lack of similar databases and the need for such within the global health community. Our resource database is still early in its release; we are just beginning to receive feedback from users, which so far has been positive.

A doctor of my own: A documentary on medical education in Sub-Saharan Africa

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Background: The need to capacitate the health care workforce in Sub-Saharan Africa has been the subject of avid interest in view of the rampant AIDS epidemic and continued health disparities. The role of

effective media in drawing attention to the plight of medical education on the subcontinent has not previously been examined. Using the University of Namibia School of Medicine as an illustrative example, the objective of this project was to record the challenges of establishing a new medical school in a low- to middle-income country in Sub-Saharan Africa by filming an investigative documentary.

Structure/Method/Design: A small film crew traveled to Namibia to capture firsthand accounts and field experiences of the day-to-day challenges of health care delivery in the context of the recent opening of the country’s first medical school. The film crew, under the guidance of clinical and medical education faculty members from Vanderbilt University and University of Namibia School of Medicine, immersed themselves for 8 weeks in rural clinics in Namibia and conducted interviews with leadership, students, and allied health workers in the field.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Not applicable

Summary/Conclusion: The documentary investigated three themes of relevance to current medical education in Africa:

(1) Innovations in teaching doctors within resource-limited settings, including a unique “community excursion program” in the students’ third year of training. The program, which was designed to inform students of the needs of poorly funded rural communities in their own country, provides a hands-on approach to learning medicine. After working in such an environment, many students who had previously desired a career in private practice, wanted instead to work rural clinics after graduation.

(2) The importance of developing context-specific medical competency training. Because of the immense shortage of health care workers, the documentary furthermore highlights interprofessional learning as a valuable teaching aid. Interacting with patients alongside skilled nurses, medical students work as an integral part of the health care team in areas where no doctors exist.

(3) Initiatives aimed to stem the “brain drain” of physician graduates from Sub-Saharan Africa. Interviews of health care workers and students in village clinics indicate that, despite adequate monetary compensation, poor lifestyle, and a dearth of medical resources are significant disincentives to remain working in the villages. The admission policy’s “regional quota system” is an effort to recruit and retain more students from the communities that the school eventually wants its graduates to serve.

We have documented several limitations and strategies involved in the ongoing establishment of the University of Namibia School of Medicine. Anticipation of these challenges may assist other medical schools in Sub-Saharan Africa currently in the development process.

American Heart Association (AHA) Basic Cardiac Life Support (BCLS) course and introduction to emergency medicine module taught by American medical students to Haitian medical students improves fund of knowledge performance and self-efficacy scores through

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Background: The Medical Students for Haiti (MS4H) chapter at Icahn School of Medicine at Mount Sinai recently combined near-peer teaching and academic twinning paradigms in collaboration with