

### Rural rotation of medical students: Move towards reducing health care disparities in Tanzania

G.E. Kapanda<sup>1</sup>, C. Muiruri<sup>2</sup>, A. Kulanga<sup>1</sup>, C.N. Tarimo<sup>3</sup>, E. Lisasi<sup>4</sup>, L. Mimano<sup>1</sup>, J. Bartlett<sup>2</sup>; <sup>1</sup>Kilimanjaro Christian Medical Centre-MEPI, Durham, NC/US, <sup>2</sup>Duke University, Durham, NC/US, <sup>3</sup>Kilimanjaro Christian Medical University College (KCMUCo)-MEPI, Durham, NC/US, <sup>4</sup>Kilimanjaro Christian Medical Centre (KCMC)-MEPI, Durham, NC/US

**Program/Project Purpose:** Maldistribution of health care workers is a global health challenge that exacerbates health disparities especially in resource-limited settings. Interventions to assuage the problem have targeted qualified personnel with little focus on medical students. However, studies have demonstrated that rural rotations positively influence students to practice in rural settings upon graduation. Within this context, the Kilimanjaro Christian Medical University College introduced a 13-week clerkship rotation in rural hospitals for third-year medical (MD3) students in 2012. To assess students' perceptions, and attitudes toward rural practice after graduation, we surveyed them after their rural rotation.

**Structure/Method/Design:** Anonymous questionnaires were administered to MD 3 students in April 2014. The questions assessed perceptions of the experience, and attitudes towards rural practice upon graduation. The perceptions were assessed using strength of consensus measures (sCns). The effect of the experience on likelihood for rural practice was assessed using Crude Odds Ratio (COR) at 95% Confidence Interval (CI), and 5% level of significance. Binary logistic regression analysis was used to determine predictors accepting rural practice after graduation with Adjusted Odds Ratio (AOR) at 95% CI, and variation assessed with Nagelkerke R<sup>2</sup>.

**Outcomes & Evaluation:** One hundred and eleven MD3 students participated; 62% male; 62% < 25 years; and 72% direct from secondary school students. Overall, 81% MD3 students were satisfied with rural rotations (sCns = 83%). Likelihood of accepting to be deployed in rural practice after graduation was predicted by being satisfied with the rural rotation program (AOR, 4.32; 95% CI, 1.44-12.96; p, 0.009) and being male (AOR, 2.73; 95% CI, 1.09-6.84; p, 0.032). Also, being an in-service student increased the likelihood of accepting rural practice after graduation by 300% compared to enrolment direct from school, although the difference was not significant (AOR, 4.99; 95% CI, 0.88-28.41; p, 0.070). 29% of variation was explained these variables (Nagelkerke R<sup>2</sup>, 0.289). However, students who joined school after health-related practice were almost 3X more likely to be satisfied than students direct from school, with no significant difference (COR, 2.6; 95% CI, 0.7-9.4; p, 0.310). Likewise, in-service students were more 2X more likely to be satisfied than direct from school students with insignificant difference (COR, 2.4; 95% CI, 0.9-6.4; p, 0.073). No significant difference was exhibited for students born in rural or urban areas.

**Going Forward:** The rural rotation program increased the likelihood of rural practice after graduation. More effort should be undertaken to further improve the program to increase student satisfaction with rural rotations, and hence likelihood for rural practice after graduation.

**Funding:** HRSA

**Abstract #:** 01ETC048

### Equitable access to global health internships: A pilot programme at the World Health Organization Headquarters (WHO-HQ)

T. Kedia<sup>1</sup>, J.D. Jarvis<sup>2</sup>, K. Ragins<sup>3</sup>, A. Barnett-Vanes<sup>4</sup>; <sup>1</sup>Geisel School of Medicine at Dartmouth, Hanover, NH/US, <sup>2</sup>Young Professionals

Chronic Disease Network, Boston, MA/US, <sup>3</sup>Yale University, Torrance, CA/US, <sup>4</sup>Imperial College London, London, UK

**Program/Project Purpose:** The World Health Organization Headquarters (WHO-HQ) office in Geneva, Switzerland, runs a competitive unpaid internship programme accepting over 400 interns per year, that can help launch careers in global health. However, access to these internships is not equitable. The vast majority of interns come from countries with a Very High Human Development Index - 72% of interns in 2011 and 80% in 2013. The high cost of living in Geneva and lack of salary are likely among the factors preventing those from low- and middle-income countries (LMICs) from completing internships at WHO-HQ. This inequitable representation squanders a valuable opportunity to build human resources for health in LMICs through experiential education. The Network of WHO Intern Alumni (NWIA), an organization of former WHO interns, is piloting a programme to promote equitable access to WHO-HQ internships by financially supporting interns from LMICs and advocating within the wider international community.

**Structure/Method/Design:** The NWIA is collaborating with the WHO Intern Board, an organization of current WHO-HQ interns, to develop this initiative. In the pilot phase in summer 2015, the NWIA aims to support 3 interns from LMICs, with the aim of expanding to support 15 interns per year. Funds for the pilot will be raised through online crowd-sourced platforms and publicized amongst former WHO interns. This initiative benefits from interaction with stakeholders at WHO-HQ, the support of the UK-based Royal Society for the Arts, and advisors affiliated with WHO and other global health agencies. Our objective is to advocate for all major global health agencies to provide more equal training opportunities for students from LMICs as part of their mandates for health systems strengthening through capacity building.

**Outcomes & Evaluation:** The pilot programme will be evaluated qualitatively and quantitatively. Supported interns will write an essay following their internship to discuss the impact of their experience. Additionally, they will be required to share their learnings from their internship upon return to their home country. Finally, the demographics of current WHO-HQ interns will be surveyed annually. Such surveys have been conducted in 2011 and 2013 in partnership with the WHO Intern Board.

**Going Forward:** This initiative's success is highly dependent upon the funds that can be raised for the pilot programme. An additional challenge is maintaining communication with current WHO-HQ interns, as the pool of interns is in constant turnover. To ensure long-term success, the NWIA is seeking support from additional partners who may play a longitudinal role in the initiative. We hope to build stronger relationships with organizations with similar aims to our own and with global health agencies, to raise awareness of equitable internship access as a critical method of investing in human resources for health in LMICs.

**Funding:** None.

**Abstract #:** 01ETC049

### Evaluating the global health service partnership: Year one and future directions

V.B. Kerry<sup>1</sup>, P. Daoust<sup>1</sup>, F. May<sup>2</sup>, E. Cunningham<sup>1</sup>, F. Mullan<sup>3</sup>, J. Scott<sup>4</sup>, J. Anathan<sup>1</sup>, K. Mitha<sup>1</sup>, L. Foradori<sup>5</sup>, S. Sayeed<sup>6</sup>; <sup>1</sup>Seed Global Health, Boston, MA/US, <sup>2</sup>Department of Medicine, David Geffen School of Medicine at UCLA, Los Angeles USA, Los Angeles, CA/US, <sup>3</sup>The George Washington University School of Public Health and The George Washington University School of Medicine, Washington, DC/US,

<sup>4</sup>Department of Emergency Medicine, The George Washington University School of Medicine and Health Sciences, Washington, DC/US, <sup>5</sup>Peace Corps, Washington, DC/US, <sup>6</sup>Seed Global Health and Harvard Medical School, Boston, MA/US

**Program/Project Purpose:** There is a critical shortage of health-care professionals in 57 countries around the globe. To address this shortage, the Peace Corps, the President's Emergency Plan for AIDS Relief (PEPFAR), and Seed Global Health launched the Global Health Service Partnership (GHSP), an innovative public-private partnership to place nurses and physicians as faculty in medical or nursing schools in resource-limited countries. In its inaugural year, GHSP sent 30 US doctors, nurses and midwives to serve for one year as faculty in training schools in Uganda, Tanzania and Malawi.

**Structure/Method/Design:** GHSP instituted a comprehensive monitoring, reporting and evaluation plan to understand outcomes and assess early impact. The primary quantitative tool was a quarterly volunteer reporting form, collecting data on volunteer activities, hours, number of trainees and deliverables. Qualitative data was collected at the end of year one through 68 interviews (individual and small group) with 110 stakeholders, including Volunteers, institutional leadership, faculty, and students. Ongoing process evaluation was conducted through post-event feedback surveys and analysis of the volunteer and site application database.

**Outcomes & Evaluation:** One hundred and seventy applications were received for the first GHSP cohort: 70 physicians and 100 nurses. Physician applicants were largely divided between early and late career while most nurse applicants were mid to late career. Eleven African

institutions requested volunteers. The most common physician specialties requested were internal medicine, OB/GYN and pediatrics; the most common nursing specialties requested were medicine/surgery, intensive care, and midwifery. In July 2013, 30 Volunteers were placed at the 11 institutions. Volunteers taught 85 courses/workshops to over 2,800 trainees, including faculty, staff, postgraduates, and students, with over 35,000 activity-hours during a one-year period. Volunteers introduced new educational methods, procured new resources, and modeled professional behavior for faculty and students. The most cited impact of GHSP was on students' education through the provision of high quality clinical supervision and increased student confidence after working with volunteers. The most cited challenges for volunteers included unfamiliarity with clinical decision-making in a resource-poor setting and difficulty framing lectures.

**Going Forward:** Early outcomes indicate GHSP had an initial positive impact on training at its partner sites. Next steps for the evaluation of GHSP include further development of standardized tools to evaluate impact and processes on five different levels, including: 1) country-level status of human resources for health and the impact of GHSP, particularly related to recruitment, retention, and migration; 2) institutional impact and experience with GHSP; 3) student and faculty impact and experience; 4) volume, scope and quality of volunteer teaching and capacity building activities; and 5) management and operations of GHSP.

**Funding:** PEPFAR, Covidien, Draper Richards Kaplan Foundation, Exxon Mobil Foundation, the Engelhard Foundation, FedEx Foundation, GE Foundation, and Pfizer Foundation.

**Abstract #:** 01ETC050