

- Social determinants of health
- Professional development, e.g. PowerPoint, abstract writing, conference participation, literature searches
- Workplace skill building, e.g. conducting performance reviews, advancement and recognition, conducting quality improvement programs
- Advanced clinical skill building, e.g. midwifery, pediatrics, HIV

**Outcome & Evaluation:** Ongoing mentoring through video and e-mail will be used to reinforce content. Evaluation of outcomes will be measured by participant retention and mobility within own system; requests from the Ministry of Health to continue the course; and expansion of the course into other countries. Additional measures of success include tracking of US-based nurse participants who decide to pursue a career in global health.

**Going Forward:** The course will be customized and offered to low resource settings around the world where nurses are responsible for delivering health care. The goal is to offer the course two times per year in low resource settings where health outcomes are poor and nursing shortages and lack of leadership inhibit improvement of health outcomes.

**Source of Funding:** Center for Global Health.

**Abstract #:** 1.012\_HHR

### Stronger Training Programs for Better Transitions and Improved Retention: The Experience of a Bridging Program to Facilitate the Transition from Medical School to Internship Training in Botswana

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**Program/Project Purpose:** A focus on improving existing training programs in Botswana is seen as key to addressing the challenge of retaining medical doctors and preventing the attrition of medical graduates trained at considerable cost both in-country and abroad. Establishment of the national Medical Internship Training Programme (MIT) in 2014 represented a first step; here we review the addition of a dedicated bridging program for foreign and locally trained medical graduates in August 2016. The program aimed to facilitate medical graduates' return and transition into internship training in the context of considerable baseline variability in

knowledge, experience, clinical skills, and familiarity with Botswana's healthcare system.

**Structure/Method/Design:** We conducted a national, intensive, two-week program designed to facilitate the transition from medical student to intern and "bridge the gap" between foreign and local medical graduates. Formats included lectures, workshops, simulations, discussions, and reflection-oriented activities. All interns entering in August 2016 participated. The program was evaluated using the Kellogg Foundation Outcomes Logic Model and participants were assessed with paired questionnaires before and after participation.

**Outcome & Evaluation:** Paired data were available for 48/54 participants (89%). Participants reported a high degree of satisfaction with the program (mean 4.2/5). Self-rated preparedness improved after participation (mean 3.2 versus 3.7,  $p < 0.001$ ), as did confidence across 18/19 knowledge/skill domains, suggesting the program prepared participants, particularly those who initially felt unprepared. 20/25 participants (80%) reporting either no or a negative effect following participation had rated themselves "extremely" or "quite" prepared beforehand, suggesting the program grounded expectations for interns who initially were overconfident. Interns commented on the benefits of learning about roles/responsibilities, interacting with clinicians from Botswana's healthcare sectors, and the sense of community the program engendered.

**Going Forward:** This program prepared medical graduates of varying backgrounds to begin internship with a common set of knowledge, skills, and expectations about their role in Botswana's health system. Gathering retrospective feedback at a later point may add insight regarding impact on internship outcomes and decisions on professional migration. Our results may be of interest to educators dedicated to training, professional transitions, and career pathways in similar settings in the region and beyond.

**Source of Funding:** Botswana Ministry of Health, University of Botswana Faculty of Medicine, Botswana Medical Education Partnership Initiative.

**Abstract #:** 1.013\_HHR

### Creating a New OSCE Program at One Medical School in Turkey

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**Program/Project Purpose:** Teaching medicine in English in non-English-speaking countries is increasingly common. IMGs receive less communication skills training and tend to perform less well on communication skills assessments. This project's purpose was to create the first Objective Structured Clinical Examination (OSCE) program in English with standardized patients at one medical school in Turkey.

**Structure/Method/Design:** All 48 medical students in the fourth year M.D. class (of six years) at Koç University School of Medicine, Istanbul, Turkey, were separated into two internal medicine blocks

in 2015–16, and were given a single station, pass/fail, end-of-block OSCE in English. Palpitations and abdominal pain OSCE cases were adapted with permission from New York University. Six American teachers from the KU English Learning Center and five faculty from KUSOM were recruited and trained as SPs and faculty assessors, respectively, in 3 training sessions per OSCE. NYU's competency-based assessment checklists were used. To prepare students, specific bedside teaching sessions were delivered during the clinical block. Data was analyzed in REDCap and ethical approval was obtained at KUSOM.

**Outcome & Evaluation:** For each block, 58–100% students passed the OSCE. SPs gave well done marks to 50–88% for eliciting the story with appropriate questions, 8–20% for providing clear explanations about diagnosis and treatment, 58–76% for managing the physical exam respectfully, 66–80% for using clear and easy to understand English, and 50–64% of students would be recommended or highly recommended to a friend, respectively (N=48 divided into two blocks). Students who failed scored poorly on medical English anchors (N=10). Students most strongly agreed that the OSCE helped them identify strengths and weaknesses and stimulated them to learn more (3.24 and 2.96 averages, Likert scale 1=strongly disagree, 4=strongly agree).

**Going Forward:** KUSOM's OSCE pilot program exceeded expectations. Education and counseling was more challenging than information gathering or conducting physical examination. The second block performed better than the first block. The large increase in performance between blocks is likely explained by better attendance at bedside sessions. Offering OSCEs in both English and Turkish next year will help clarify whether their performance reflected clinical skills or English language alone. These findings inform expansion of curriculum and faculty development in bedside teaching at KUSOM.

**Source of Funding:** Koç University School of Medicine.

**Abstract #:** 1.014\_HHR

### Effect of Ethiopia's Health Development Army on maternal and newborn health care practices: A multi-level cross-sectional analysis

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**Background:** Addressing the shortfall in human resources for health, Ethiopia launched the community health extension program (HEP) in 2004 by establishing a health post and deploying two female health extension workers (HEWs) in every kebele (i.e., community) of the country to ensure universal access to primary health care. In October 2010 the HEP incorporated the health development army (HDA) strategy. The strategy was adopted based on the experience that using a network of the community health volunteers increased the efficiency of the HEWs in reaching households with actionable health messages. The strategy involves women from every 30 households led by one HDA team leader with

subgroups of six households each led by one HDA member, empowered to learn about the HEP from each other's experience. This study assesses the effectiveness of the HDA strategy in improving maternal and newborn health (MNH) care behaviors and practices.

**Methods:** Using cross-sectional survey of 4,246 women with children 0 to 11 months from 354 communities representing 140 rural districts, i.e., about 20 million people, of four regions of Ethiopia; an internal comparison group study design is applied to assess whether household-level MNH care practices were comparatively better in communities with comparatively higher level of HDA team leader to household density. Multi-level regression models, adjusted for possible confounders, were used for the purpose.

**Findings:** The average numbers of households per HDA team leader in the 25th, 50th and 75th percentiles of the communities under study were respectively 39, 49 and 71. HDA density was significantly associated with nine of the 16 MNH indicators considered. Communities with one HDA team leader for at least every 40 households were associated with 12.4, 10.0, 8.4 and 7.9 percentage-points higher ( $p < 0.05$ ) coverage of antenatal care, institutional deliveries, clean cord care and thermal care than those in communities with one HDA team leader for every 60 or more households.

**Interpretation:** We conclude that the HDA strategy effectively engaged communities to improve the efficiency of the HEP to deliver MNH services. Fostering community engagement through a network of voluntary community is a promising strategy to improve the efficiency of community-based health programs in resource poor settings.

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**Abstract #:** 1.015\_HHR

### Effectiveness of Using Community Mental Health Workers in a Community Mental Health Programme of a Rural Health Center in a Lower Middle Income Country

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**Background:** This paper highlights the experiences of a rural community based mental health programme (Maanasi Project) in providing essential mental health services to rural populations through community based health workers (CBHWs). The role of CBHWs in rendering psychiatric care is the bedrock for stymying a plethora of myths, misconceptions and stigma associated with mental illnesses. In this study we assessed their effectiveness in providing primary mental health services in a rural area.

**Methods:** Four literate, multilingual women from the rural field practice area of the study institution who were active members of women's self-help groups and were acceptable to the local communities were chosen.

CBHWs were trained for three weeks in the medical college hospital under the aegis of the department of community health and psychiatry. Post this training a mental health survey was conducted followed by once a week mental health clinics.