

**Quality of nurse-prescribing for pain relief in Uganda**

Abstract Opted Out of Publication

**Abstract #:** 2.078\_HRW**Introducing and integrating mid-level cadres in low or middle income countries: A multi-pillar approach for strengthening human resources for health***Elizabeth Arend<sup>1</sup>, Kathryn Utan<sup>1</sup>, John Capati<sup>2</sup>; <sup>1</sup>American International Health Alliance, Washington, DC, <sup>2</sup>American International Health Alliance, Pretoria, South Africa*

**Program Purpose:** South Africa suffers from critical physician shortages, particularly in rural areas with high HIV prevalence. In 2008, South Africa's National Department of Health (NDOH) established a new mid-level cadre called Clinical Associates (ClinAs) to fill critical human resource gaps at rural district hospitals, enable task sharing, and increase efficiency while maintaining a high standard of care.

**Structure/Design:** To support the introduction and sustainable integration of ClinAs into South Africa's healthcare system, the American International Health Alliance (AIHA) applied its multi-pillar approach to the development of the ClinA cadre. AIHA worked closely with the NDOH and regulatory bodies, and established a professional association to represent the new profession. AIHA also worked closely with three pre-service training institutions — University of Pretoria, University of the Witwatersrand, and Walter Sisulu University — which AIHA partnered with three US universities with extensive experience training physician assistants, the US equivalent of ClinAs.

**Outcomes & Evaluation:** the South African universities have graduated 516 ClinAs to date, most of whom are now employed at rural district hospitals. Initial small-scale studies show ClinAs produce comparable clinical outcomes to doctors; the majority of ClinA graduates seek employment in rural areas; and ClinAs can save costs when appropriately utilized as part of an interdisciplinary clinical team.

**Going Forward:** ClinA feedback and small-scale research studies have identified several challenges to the successful introduction and integration of this new cadre to hospital clinical teams. These include an inadequate number of ClinA posts, and insufficient awareness of the new cadre. AIHA continues to work closely with national authorities and regulatory bodies to enhance the ClinA scope of practice, and support the new Professional Association of Clinical Associates of South Africa to raise awareness and advocate for the profession.

**Funding:** President's Emergency Plan for AIDS Relief, Health Resources Services Administration, and Centers for Disease Control and Prevention/South Africa.

**Abstract #:** 2.079\_HRW**Transitioning into democracy: what contextual barriers and facilitators do auxiliary midwives perceive in Myanmar's first point-of-care mHealth project?***R. van der Wal<sup>1,2</sup>, M. Hatem<sup>1,3</sup>, Z.K.K. Lynn<sup>4</sup>, C. Zarowsky<sup>1,2</sup>; <sup>1</sup>ESPUM (École de santé publique de l'Université de Montréal) Montreal, Canada, <sup>2</sup>CRCHUM (Centre de Recherche du Centre**Hospitalier de l'Université de Montréal), Montreal, Canada, <sup>3</sup>CRCHUSJ (Centre de Recherche Hospitalier Universitaire de Saint Justine), Montreal, Canada, <sup>4</sup>PU-AMI (Première Urgence –Aide Médicale Internationale), Yangon, Myanmar*

**Background:** The lack of midwives in Myanmar led to shifting of pre- and postnatal care tasks to auxiliary midwives (AMWs). AMWs receive limited training and supportive supervision, negatively impacting the quality of pre-/postnatal services. To improve performance, behavioral theories suggest that algorithm-based clinical decision-support modeling increase quality of care. An NGO uses this rationale to develop a pre-/postnatal Smartphone application for AMWs, which is piloted in South Yangon District (2014), but it wants to know what barriers and facilitators AMWs perceive in this context affected by 50 years of military rule.

**Methods:** In a qualitative explorative design, perceptions of all AMWs participating in the pilot (n=20) are explored through semi-structured interviews (19) and focus groups (3), and analyzed with thematic analysis and Nvivo. All AMWs gave informed consent. Myanmar's Ethical Review Committee and l'Université de Montréal granted ethics approval.

**Findings:** Technical barriers are found in problems with the application and in design flaws. Internet network problems represent the main environmental barrier. Lack of electricity does not affect phone charging. Dramatically reduced communication costs lead to the perception that electronic reporting is cheaper than paper. Social barriers are found in lack of supervisor support to use the application for supportive supervision. AMWs perceive contextual facilitators in organizational support provided by the NGO (technical, material, and financial support, and training), and in social support, with patients supporting the use of the application. Due to socioeconomic improvements, villagers increasingly own cellular phones. Myanmar's Ministry of Health announcing that health registration/reporting will be electronic in the future is considered an important political facilitator.

**Interpretation:** Unexpected socioeconomic and political facilitators in the implementation context of a transitioning Myanmar positively affect its first point-of-care mHealth project. Internet network problems remain the main barrier. Technical problems require continued support and training. The lack of supervisor support suggests that increased efforts to include supervisory echelons in the project are needed. Despite the barriers, AMWs embrace the pre-/postnatal application, as they believe it to be the future norm and in their community's best interest. Results of this study inform the project's further scale-out.

**Funding:** Maison Internationale (Université de Montréal).

**Abstract #:** 2.080\_HRW**Diaspora-driven efforts to build biomedical research capacity in low and middle-income countries: A pilot program in India***V. Varadaraj<sup>1</sup>, A. Ranjit<sup>2</sup>, J. Nwadiuko<sup>1</sup>, J. Canner<sup>1</sup>, E. Schneider<sup>2</sup>, M. Diener-West<sup>3</sup>, N. Nagarajan<sup>1</sup>; <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, USA, <sup>2</sup>Center for Surgery and Public Health – Brigham and Women's Hospital, Boston, MA, USA, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA*

**Purpose:** The vast majority of biomedical research is carried out in high-income countries and the lack of high-quality evidence from low and middle-income countries (LMICs) has widespread negative implications at the individual, community, and national levels. Diaspora health professionals are uniquely poised to address this issue and contribute to decreasing this gap. A new program, consisting of a comprehensive research seminar and workshop, and utilizing diaspora networks to help build research capacity in LMICs, was created and pilot-tested.

**Design:** The program aims to recruit diaspora health professionals, with extensive academic and professional networks in their countries of origin and their adopted countries, to encourage research endeavors, introduce research methods and provide support/mentorship for biomedical students in LMICs. The two-day event consists of five components in-person biomedical research short course, video presentations, panel discussions, a workshop helping students develop a research proposal, and a pre- and post-seminar survey.

**Outcome:** The pilot program was tested in Chennai, India at Sri Ramachandra University (SRU) on August 18<sup>th</sup>-19<sup>th</sup> 2015 with participation from 65 medical/dental residents. Postdoctoral fellows, residents, and faculty at Johns Hopkins University (JHU) and Brigham and Women's Hospital (BWH) developed the curriculum. The course instructors were two diaspora physicians, both alumni of SRU and JHU, with panelists from leading institutions in India and the United States. The video presentations featured talks from 20 faculty members from JHU and BWH. Workshop participants worked in teams of 5-7 to create research proposals that were presented at the end of the seminar. The surveys provided baseline information about local attitudes about research, and the associated facilitators and barriers, as well as a needs assessment for further program development.

**Going Forward:** Given the success of the pilot, there are plans to continue introductory seminars for new cohorts, and extend the program for the initial SRU cohort to include higher-level courses. The program also will be implemented in Nepal in November 2015 and other institutions in India in 2016. Active engagement of diaspora health workers, academic institutions, and development agencies is being pursued to sustain this program and further strengthen the impact of biomedical research in LMICs.

**Funding:** None.

**Abstract #:** 2.081\_HRW

### Development of a multi-disciplinary global health curriculum at an Academic Medical Center

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**Introduction:** The UCSF Fresno Global Health Curriculum was established in 2007 to provide a unique, multi-disciplinary forum for practitioners to teach others about their international health care experiences. Since its inception, our group has been collecting data in the hopes of evaluating the needs, goals, and priorities of the Global Health Curriculum so that we are able to better serve the needs of healthcare staff and clinical providers across all disciplines and departments at Community Regional Medical

Center (CRMC) affiliated with UCSF Fresno Medical Education Program, serving the culturally diverse area of central California.

**Methods:** Two online surveys was administered to query the group's preferences regarding topic preferences and department/level of training. Attendance data from the initial 3 years of this group's meetings were also analyzed.

**Results:** There were 13 responses in our 2015 resident survey and 12 responses in our 2007 resident survey for a total of 25 responses. Attendance data demonstrated a total of 201 staff and clinical providers. The 2015 resident survey found that 6/12 (50%) of all survey respondents have not yet gone abroad in a medical capacity while in our data from 2007, almost 92% of our respondents had already planned an international or domestic underserved elective.

**Conclusions:** The UCSF Fresno Global Health Curriculum interest surveys have demonstrated that there is ample interest in our program since there continues to be an interested group of participants that have been attending out events. Additionally, with more than half of our survey population not having gone abroad in a medical capacity, we at UCSF Fresno have a profound opportunity to share the field of global health with medical professionals who have little first hand knowledge of global health. Moving forward, by learning more about our survey population and their interests there could be a greater interest in engaging in international health care experiences. It is our hope to expand international health care experiences through these monthly multi-disciplinary forums.

**Abstract #:** 2.82\_HRW

### Important aspects for sustainability through community partnership

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**Program/Project Purpose:** US medical schools send physicians and students abroad to experience global health and to serve vulnerable populations, but frequently neglect to deliver sustainable care. Quality, sustainable care requires partnership with local and national organizations. This is one of the main goals of the Honduran Health Alliance (HHA). HHA aims to deliver "sustainable continuity" in women's health and health education to underserved women in Choluteca, Honduras. Simultaneously, HHA provides valuable, responsible, and supervised global health education opportunities to medical students and physicians, which help them also better serve diverse patient populations at home.

**Structure/Method/Design:** HHA partners with local *promotores* (trained community health advocates), a community advocacy organization (Comunidades Unidas), and a national healthcare organization — *Ashonplafa* (Planned Parenthood affiliate) to ensure women are provided with sustainable, quality care, with a focus on prevention of cervical cancer, family planning, and STI treatment. Students travel to remote communities and provide *charlas* (educational workshops) also working directly with *promotores* to recruit women to clinic. In clinic students perform pap smears and many