order of prevalence were education/knowledge, health care system, culture/religion, and empowerment.

**Interpretation:** Our retrospective data shows that the prevalence of contraception within the NMI women at our practice is 44%, which is low compared to the US prevalence in 2010 (62%). This may be partially explained by the lack of documented counseling with almost 1/3 of our patients. However, our data does show that the number of women who start contraception increases steadily throughout the first year after arrival. Our qualitative research revealed that a majority of participants had knowledge of family planning prior to coming to the US through word of mouth and/or formal education. However, many were embarrassed to address the topic themselves. Ultimately, access to healthcare and our ability as providers to deliver culturally sensitive care will dictate whether this population receives quality healthcare in the US. Limitations of the retrospective portion include possible errors secondary to abstraction by multiple personnel, missing or incorrect information in patient’s charts, and limited documentation about barrier methods and sexual activity. Limitations of the qualitative portion are possible translation error and social desirability bias. Strengths of our study are its large sample size as well as the study’s involvement of three major refugee populations in the US.

**Funding:** There was no external funding used for this research study.

**Abstract #:** 02ETC080

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**Program leadership council: Collaborative, peer-to-peer learning to strengthen global health residency education**

A. Sprockett, C. Renault, N. Vona, A. Bhatt, M. Barry, Stanford University, Stanford, CA/US

**Program/Project Purpose:** Over 25% of medical school graduates participate in a global health experience during their training. These experiences are a critical introduction to the field of global health. Continued exposure during residency training is critical to the development of future global health leaders. Residency programs, such as those at the Stanford University School of Medicine, are facing significant challenges in addressing this recognized need while meeting ACGME requirements and in a setting of limited infrastructure and funding. Opportunities to collaboratively surmount shared challenges are often missed as individual specialty program leadership teams struggle in isolation. The goal of the Stanford University Program Leadership Council (PLC) is to facilitate global health training at the postgraduate level by bringing together residency program leaders to share resources, to support educational initiatives, and to provide peer-to-peer learning.

**Structure/Method/Design:** The PLC aims to build collaboration across residency programs to strengthen global health training opportunities that support the professional development of future global health leaders. A formal consensus building strategy was applied to achieve this goal. First, a representative leading global health work in each residency program was identified. These individuals were invited to a structured initial PLC meeting. Prior to the meeting, participants were asked to prepare: (a) one slide introducing the residency program’s global health training opportunities and (b) a focused list of challenges faced in global health education. Participants were led through an interactive consensus building activity to identify common challenges across programs over the course of one hour, followed by a formal closing evaluation to define steps forward.

**Outcomes & Evaluation:** This meeting was the first of its kind to bring together residency programs in the Stanford University School of Medicine. Fifteen residency training programs were represented, and 10 cross-program challenges were identified. Many participants expressed surprise to learn about the activities or infrastructure present in other residency programs. Other participants have begun discussing opportunities to expand program offerings and to collaborate on education and service projects. Following the meeting, a formal evaluation tool indicated that all participants found the meeting to be (a) beneficial and (b) worthy of continuation.

**Going Forward:** Moving forward, the PLC will continue to meet every two months to address the challenges identified in the consensus building activity through peer-to-peer learning, network building, and administrative support. It will also continue to identify novel met

**Funding:** No project funding is currently required.

**Abstract #:** 02ETC081

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**Strengthening nursing workforce: A key ingredient for achieving PEPFAR HIV prevention, care & treatment priorities**

S. Strauss; ICAP Columbia University, New York, NY/US

**Program/Project Purpose:** Long standing underinvestment in nursing and midwifery education continues to limit the ability to train sufficient number of nurses and midwives with the appropriate clinical skills to meet population health needs. When HIV positive patients seek care in Africa, they will in all likelihood get treated by a nurse. They will also have their babies delivered by, their children immunized from, and their common as well as uncommon ailments, whether diarrhea, pneumonia, tuberculosis, malaria, cholera or Ebola, treated by a nurse. Increased investment is required to address the need for more nurses, training them better, and ensuring they have the necessary support to remain at the front lines, caring for the most vulnerable.

**Structure/Method/Design:** In 2009, ICAP at Columbia University began implementation of the PEPFAR funded Global Nurse Capacity Building Program (GNCBP), which consists of two subprojects, Nursing Education Partnership Initiative (NEPI) and General Nursing (GN). GNCBP aims to improve population health by fostering individuals, institutions, and networks to expand, enhance, and sustain the nursing and midwifery workforce by achieving three objectives: (1) Improve the quantity, quality, and relevance of nurses and midwives to address essential population-based health care needs, including HIV and other life-threatening conditions; (2) Identify, evaluate and disseminate innovative human resource for health models and practices that are generalizable for national scale-up of nursing and midwifery education; and (3) Build local and regional partnerships to provide technical and capacity building support for nursing and midwifery policy, regulatory and faculty development, curricula reform, continuing professional development and retention, and high impact nursing leadership. ICAP works collaboratively with relevant ministries, nursing bodies and education institutions to build local capacity and country ownership in the 13 countries where GNCBP is implemented.

**Outcomes & Evaluation:** To date, efforts to equip nurses and midwives with the clinical skills needed to meet population health needs, have led to over 10,000 pre-service nurses enrolled in 19 NEPI-supported nursing schools, 9 simulation skills labs and 4 model wards established, 15 curricula newly developed or revised to
be competency-based and up-to-date, 43 faculty enrolled in higher education at the Masters and PhD level, and national standards for nursing education implemented. Tools developed include a “Campus to Clinic” mentorship guide for HIV care, a clinical simulation training program, a webinar series on curriculum development, and an e-learning module on the Option B+ approach to prevention of mother-to-child transmission of HIV. South to south exchanges have fostered regional dialogue and experience sharing.

**Going Forward:** Continued advocacy for and investment in nursing education and training are required to ensure that enough nurses are fit to practice and purpose.

**Funding:** The President’s Emergency Plan for AIDS Relief (PEPFAR), U.S. Health Resources and Services Administration (HRSA), Cooperative agreement #U92HA12772.

**Abstract #:** 02ETC082

**The importance of clinical accompaniment for VIA/cryotherapy programs in low and middle income countries**

M.M. Sullivan; Global Health Delivery Online and Partners In Health, Boston, MA/US

**Program/Project Purpose:** Cervical cancer is one of the leading causes of cancer mortalities for women in low and middle income countries (LMIC). Because most health infrastructures in these countries are inadequate for paps to effectively detect cervical cancer, visual inspection with acetic acid (VIA) and cryotherapy have proven to be effective tools for detection and prevention in LMICs. From January 2011 to present, Partners In Health (PIH) has supported a VIA/cryotherapy program in the Western Highlands of Guatemala. This program targets women most at risk for developing cervical cancer. With the goal of screening and treating 80% of the target population, PIH is hopeful it can contribute to a decrease in the incidence and mortality of cervical cancer in this region. Because VIA/cryotherapy is effective, not cost prohibitive and has an extremely low complication rate, it can be taught to nurses in rural communities. However, as these were new skills for nurses with often limited education, to bolster program quality, the aim was to also provide regular and ongoing clinical accompaniment from a US-based volunteer nurse, rather than rely on a single one-time training as is more commonly done.

**Structure/Method/Design:** Program goals included a series of rigorous trainings. Additionally, the US-based nurse traveled twice yearly for three weeks to evaluate technique and reinforce evidence based practices. PIH has a longstanding relationship with the coordinating local NGO. Nurses and one physician self-selected to participate. The protracted training, regular clinical accompaniment and provision of materials (including cryotherapy equipment), will strengthen local capacity sufficient for this program to self-sustain.

**Outcomes & Evaluation:** Five nurses and one physician were trained and certified in VIA and three were also certified in cryotherapy. In all, approximately 375 training hours were received. The US-based nurse spent approximately 20 weeks in country providing clinical accompaniment. Clinical confidence and critical thinking skills progressed over time, and surrounding municipalities now refer patients for management of screening and treatment.

**Going Forward:** The primary challenge is beyond the actual provision of training and accompaniment. Due to program funding, there were sufficient resources to treat women diagnosed with cervical cancer, which will now be difficult to access. Seamless collaboration between

**Funding:** Family Foundation grant.

**Abstract #:** 02ETC083

**The impact evaluation of health promotion on improving rational use of antibiotics among rural children caregiver: A cluster randomized controlled trial in China**

W. Sun, Q. Sun; Center for health management and policy, Jinan, Shandong Province, CN

**Program/Project Purpose:** Inappropriate use of antibiotics is a global public health problem. Rural children are the victims of inappropriate use of antibiotics especially in China rural areas. Using drug for children to a large extent depends on the caregivers. The aim of the project is to evaluate the impact of health promotion on improving rational use of antibiotics among rural children caregiver through a cluster randomized controlled trial in China.

**Structure/Method/Design:** We conducted a cluster randomized controlled trial of a 8 month, village-based health promotion intervention to improve children caregivers’ knowledge, attitudes and practices towards antibiotics. One parent or grandparent of children whom was born between 2007 and 2013 in a family was recruited in study. The software of Optimal Design was used to calculate the sample size taking account of the design-effect. We randomly selected 12 villages form a rural town in Yanggu county, Shandong province, and these villages were randomly assigned to either intervention group or control group, with each group contains 6 villages. In each village, about 60 eligible caregivers were recruited. The intervention group received the health promotion program which included three times lectures about rational use of antibiotics, post some posters in the village, and gave them booklets. All the lectures completed by one pediatrician to insure the unification of quality. Surveys of all subjects were carried out by trained interviewers using self-designed questionnaire before and after the intervention. We also completed some individual in-depth interview to help reveal the real effect of the intervention. The percent of anticipate that inappropriate use of antibiotics was defined as the main outcome indicator. Adjusted chi-square and multivariate statistical analysis were used with intention-to-treat.

**Outcomes & Evaluation:** Up to now, we completed the baseline survey and 8 months intervention. We carried out three times lectures with 82.6% participants attended, distributed 363 booklets, posted more than 100 posters, and interviewed 26 individuals. According to these works we find that only 56.1% caregivers know about antibiotic resistance, 20.0% of them believe that the higher price the better antibiotics, 45.2% of them have ever take drugs interruptedly. So far it’s all going smoothly.

**Going Forward:** The final survey will be carried out in November, and we will compare the differences between the two periods and the intervention group vs control group, with each group contains 6 villages. In each village, about 60 eligible caregivers were recruited. The intervention group received the health promotion program which included three times lectures about rational use of antibiotics, post some posters in the village, and gave them booklets. All the lectures completed by one pediatrician to insure the unification of quality. Surveys of all subjects were carried out by trained interviewers using self-designed questionnaire before and after the intervention. We also completed some individual in-depth interview to help reveal the real effect of the intervention. The percent of anticipate that inappropriate use of antibiotics was defined as the main outcome indicator. Adjusted chi-square and multivariate statistical analysis were used with intention-to-treat.

**Funding:** China Medical Board (CMB).

**Abstract #:** 02ETC084

**Rwanda, looking to a healthy future**

B.J. Swann; Cambridge Health Alliance/Harvard School of Dental Medicine, Somerville, MA/US

**Program/Project Purpose:** The Human Resources for Health Rwanda (HRHR) represents a new model for a country struggling to