

Rwandan medical and pharmacy students. To date, Jefferson has hosted 27 Rwandan medical students as part of a 2-month clinical experience during which students attend public health courses, complete observatory clinical rotations, work in the Clinical Skills Center, and participate in community outreach activities. Directed by an interdisciplinary group of student, resident and faculty *global health clinical mentors* across several departments, the curriculum is designed to introduce Rwandan students to the many dimensions of clinical and global public health practice, health systems, and health professions education in the United States.

**Outcome and Evaluation:** The RVCP-RHHP exchange provides the opportunity to expose students from the United States and Rwanda to the practice of healthcare across health systems, institutions, and cultures. Most importantly, this student initiated *bi-directional model* of global health education has the potential to build local and international global health capacity in a way that is fundamentally more equitable, cross-cultural, and inter-professional,

**Going Forward:** Future plans for the RHHP-RVCP project include: (a) continuing to seek opportunities for sustainability, (b) (c) consolidating more clinically focused rotation opportunities, and (d) continuing bi-directional mentoring programs.

**Abstract #:** 2.006\_MDG

### Evaluation of a health education intervention to improve maternal and early childhood nutrition in the Kisumu region of Kenya

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**Program/Project Purpose:** Nutrition during pregnancy and early childhood is a significant determinant of a child's physical and cognitive development, as well as their long-term health. In 2013, the Global Health Initiative (GHI) joined with a local organization, Partners in Community Transformation to initiate a community-based nutrition project in the Kisumu region of Kenya. The goal of this project was to provide Community Health Workers (CHWs) with the tools required to educate community members on maternal and early childhood nutrition. Since CHWs are integrated within the community and make frequent household visits, they are well positioned to disseminate important information about health to community members.

**Structure/Method/Design:** In 2014, the GHI team delivered workshops to CHWs about nutrition during pregnancy and early childhood. In 2015, the GHI team assessed whether this train-the-trainer teaching format was an effective tool for spreading information about nutrition within the community. Focus groups were conducted with CHWs in three villages near Kisumu. Topics included basic food groups, accessibility, knowledge and practices surrounding childbirth, breastfeeding and complementary feeding. In addition, random household surveys were conducted in each village to assess nutrition knowledge among community members.

**Outcome & Evaluation:** Overall, the train-the-trainer method was found to be an effective knowledge translation tool for maternal

and early childhood nutrition in rural communities. The information provided in the workshops was successfully retained among CHWs and conveyed to mothers in the community. For example, household surveys confirmed that 100% of women were aware of the exclusive breastfeeding protocol for six months prior to initiating complementary feeding, and breastfeeding should continue until at least two years of age. While many women were aware of these guidelines, they were not always able to adhere to them due to barriers such as inadequate finances, lack of access to certain foods, or another pregnancy.

**Going Forward:** The train-the-trainer format is appealing because it provides a community with the means to sustainably educate its members on important health topics. Future education teams will apply this teaching method to a variety of health topics in order to bolster overall community health.

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### Treatment outcomes of HIV infected adolescents attending a national referral hospital in Kenya

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**Background:** HIV infected adolescents are at high risk of developing antiretroviral treatment failure and drug resistance. The study sought to describe the clinical, immunological and virological outcomes in a cohort of HIV infected adolescents actively on follow up in a tertiary hospital setting.

**Methods:** This was a retrospective review of electronic medical records. Data of HIV infected adolescents aged between 10 and 20 years with at least 6 months of follow up were abstracted. Categorical variables were compared using chi-square and Fishers exact test; continuous variables were analyzed using Student t-test and Mann Whitney test.

**Findings:** Of the 418 eligible adolescents, 312 (75%) were in WHO stage I and II HIV disease. The median CD4 cell count was 665 cells/mm<sup>3</sup>, with 85 % of them having a CD4 cell count exceeding 350 cells/mm<sup>3</sup>. Poor immunological status (CD4 cell count <350 cells/mm<sup>3</sup>) was associated with mid (14–16 years) and late (17–20 years) adolescence, [OR 2.2 (95% CI 1.1–4.4), P=0.032], [OR 2.8 (95% CI 1.2–6.1), P=0.0012] respectively. Mid adolescents (14–16 years old) were more likely to have virological failure (Viral load ≥1000 copies/ml) [OR (95% CI 0.2–1.0), P=0.044].

**Interpretation:** Mid and late adolescents were more likely to have a poor immunological outcome (CD4 cell count <350 cells/mm<sup>3</sup>). Mid adolescence was more likely to be associated with virologic failure (Viral load ≥1000 copies/ml). Interventions focusing on mid and late adolescence are necessary to improve outcomes in this cohort of adolescents.