

expand the quantity, quality, and relevance of nursing and midwifery professions to address population-based health needs; 2) strengthen the capacity, quality, and effectiveness of nurse and midwifery training and education programs; 3) identify innovative models to increase the number of qualified health care workers; 4) strengthen research and professional development opportunities; and 5) develop evidence-based strategies to guide future human resources for health investments

**Structure/Method/Design:** The NEPI Coordinating Center (CC) facilitates the planning, implementation, and monitoring of this preservice nursing program in the countries of DRC, Ethiopia, Lesotho, Malawi, and Zambia. Each country receives approximately \$1.2 million per year, for 5 years. There are three to six NEPI schools of nursing (SON) in each country. Under the leadership of the Ministries of Health and Education, the CC works with national nurse leaders to implement innovative interventions that respond to identified needs and have a sustainable effect on the nursing profession by increasing the number of well-prepared nursing and midwifery graduates.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** Envisioned by Ambassador Goosby, NEPI is supported by the Office of the U.S. Global AIDS Coordinator (OGAC) and implemented through the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA). Ministries of Health and Education lead program implementation and assure synchronized coordination and sustainability. Other stakeholders include In-Country PEPFAR teams, USAID and its CapacityPlus Project, World Health Organization, Clinton Health Initiative, and ELMA Philanthropies.

**Summary/Conclusion:** NEPI has strengthened the spectrum of nursing by using innovative models to invest in preservice and regulatory bodies, educators, educational practices (competency-based curricula, preceptors, clinical simulation), equipment, and support to nursing students. Concurrently, NEPI has increased the administrative and financial capacity of NEPI schools; it is expected that NEPI SONs will be able to seek and be awarded support from other funding sources.

### Assessment of a community health worker training program in the Peruvian Amazon demonstrates effective learning retention: Implications for health care education in a resource-limited setting

K.E. Hall, M.A. Miller, V.A. Fialkowski, M.L. Cole, J.A. Boat, J.W. Bellows, I. Shumskiy; *Comunidades Unidas Peru, Denver, CO/US*

**Background:** UNICEF data suggests under-5 mortality rates (U5MR) rates in rural Peru are nearly double those of urban areas. To reduce U5MR, the World Health Organization developed the Integrated Management of Childhood Illness (IMCI) framework, which utilizes vital signs to classify illness severity in children under the age of 5. Using IMCI as a model, Comunidades Unidas Peru (CU Peru) designed and implemented trainings for community health workers (CHWs) in the Peruvian Amazon to measure and interpret vital signs. This study evaluated the effectiveness of the training to increase the ability to collect and interpret patient vital signs in the rural areas of the Loreto Region in Peru.

**Structure/Method/Design:** A vital sign pre- and post-test was administered to CHWs at each training to evaluate improvement over the year and the retention of the vital signs curriculum from year to year. CHWs were given the Short Assessment of Health Literacy for

Spanish Adults (SAHLSA-50) to assess if the curriculum was appropriate for learners with varying health literacy.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** After adjusting for gender, age, and years as a CHW, CHWs that have previously attended CU Peru training sessions scored higher on the pre-test than first-time attendees ( $P = 0.07$ ); although marginally significant, this implies a trend of curriculum retention. No significant difference was observed in post-test scores between first-time CHW training attendees and those CHWs who had previously attended ( $P = 0.49$ ). For those CHWs who had attended training sessions in 2012 and 2013, there was no significant difference in the post-test scores from 2012 and pre-test scores in 2013 ( $P = 0.13$ ), again indicating a trend in curriculum retention. The main effect of SAHLSA-50 scores and possible interaction with CHWs who had attended a previous training sessions were considered in the model but were not statistically a better fit than the model excluding SAHLSA-50 scores ( $F = 0.41$ ;  $P = 0.53$ ). Therefore, literacy is not modifying or confounding the results nor is the SAHLSA-50 score a good predictor of CHWs' pre-test scores.

**Summary/Conclusion:** CHWs who complete the training retain the curriculum from year to year, and performed better at the pre-test than those CHWs who had not previously attended a training program. First-time attendees and repeat attendees did not differ significantly in their post-test scores, indicating that single training provides substantial improvements. CHW SAHLSA-50 scores were not strong predictors of CHWs' pre-test scores, suggesting that this curriculum is well suited for a CHW population with varying levels of health literacy. Future work will evaluate the effect of training on community health outcomes.

### Creation of a continuing and professional development (CPD) library for nurses and midwives in the East, Central, and Southern Africa College of Nursing (ECSACON) region

K.N. Hosey<sup>1</sup>, J. Gross<sup>2</sup>, A. Kalula<sup>3</sup>, M. Kelley<sup>4</sup>; <sup>1</sup>Afya Bora Consortium for Global Health Leadership, Nairobi/KE, <sup>2</sup>CDC-Emory HSS/HRH Projects, Nairobi/KE, <sup>3</sup>East, Central and Southern Africa Health Community, Arusha/TZ, <sup>4</sup>Centers for Disease Control and Emory School of Nursing, Atlanta, GA/US

**Background:** The development of a CPD Library for ECSACON will contribute to the overall sustainability of newly created national-level CPD programs in the region. Many countries have created national frameworks for CPD over the past 2 years, and this library will help support them by making high-quality CPD content more accessible.

**Structure/Method/Design:** The CPD Library will be housed on the ECSACON website. Library content and delivery mechanisms will be determined based on the results of a survey that was developed and piloted by ECSACON, ARC, and nursing leaders in the region. It was distributed to nursing and midwifery leaders in 17 countries. A desk review was also conducted of content already available and produced by other implementing partners in the region.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** East, Central, and Southern Africa College of Nursing (ECSACON)

African Regulatory Collaborative for Nurses and Midwives (ARC)

Afya Bora Consortium in Global Health Leadership  
Centers for Disease Control and Prevention (CDC)  
Emory School of Nursing

Commonwealth Nurses Federation  
Commonwealth Secretariat

**Summary/Conclusion:** With the establishment of the ECSACON website and the creation of the CPD Library, the hope is to provide content-specific modules in areas of nursing and midwifery that would benefit the region and prevent duplication of efforts in the search for updated, relevant CPD content. Steering Committee meetings have created a positive momentum for launching a sustainable structure for the website and library. Challenges include having a plan for maintenance of the library, and ensuring country buy-in.

### Ulienda wapi: Long-term follow-up of past participants of North American and European rotations from Moi University School of Medicine, Kenya

J. Huskins<sup>1</sup>, P. Owiti<sup>2</sup>, C. Wambui<sup>2</sup>, G. Stone<sup>3</sup>, R. Umoren<sup>1</sup>, J. Helphinstine<sup>1</sup>, D.K. Litzelman<sup>4</sup>, S. Mining<sup>5</sup>, P. Ayuo<sup>5</sup>, A. Gardner<sup>6</sup>; <sup>1</sup>Indiana University School of Medicine, Department of Pediatrics, Indianapolis, IN/US, <sup>2</sup>Academic Model Providing Access to Healthcare (AMPATH), Eldoret/KE, <sup>3</sup>Massachusetts General Hospital, Boston, Department of Medicine, Boston, MA/US, <sup>4</sup>Indiana University School of Medicine, Department of Medicine, Indianapolis, IN/US, <sup>5</sup>Moi University, College of Health Sciences, School of Medicine, Department of Immunology, Eldoret/KE, <sup>6</sup>Indiana University School of Medicine, Department of Infectious Diseases, Indianapolis, IN/US

**Background:** Little research has been done on the impact of international rotations on career choices of medical learners from resource-limited settings or their effect on the “brain-drain” phenomenon. Over 20 years, 256 learners from Moi University School of Medicine (MUSOM) in Eldoret, Kenya have participated in short-term international electives in North America (NA) and Europe. We report the results of a long-term follow-up study on the impact of this experience.

**Structure/Method/Design:** A cross-sectional survey was conducted of 180 former MUSOM medical students and 33 registrars in medicine and pediatrics with available contact information who participated in medical electives in NA and Europe from 1995

**Table 1. Demographics (N = 100)**

Age, y (mean)	34
Gender, n (%)	
Female	30 (30)
Male	70 (70)
Hometown, n (%)	
Urban	38 (38)
Rural	62 (62)
Site Rotation, n (%)	
North America	88 (88)
Europe	12 (12)
Current Residence, n (%)	
Kenya (urban)	82 (82)
Kenya (rural)	11 (11)
Primary Employer, n (%)	
Government	62 (62)
Private	22 (22)
Other	15 (15)

to 2010. Study data were collected and managed using a REDCap electronic database survey tool hosted at Indiana University.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** 100 (47%) trainees responded to the survey: 70% male, mean age 34 years (IQR 30-37 years); 88% of respondents rotated in NA. 78% described it as one of the most influential experiences of their medical education with exposure to different standards of care (89%), exposure to extensive use of technology for diagnosis and treatment (75%), and access to information technology (50%) being the most valued areas. Although 52% reported that the rotation made them more likely to seek opportunities outside Kenya, 93% currently practice in Kenya with 62% employed by the government (Table 1). Respondent opinions on why Kenyan doctors choose to practice medicine outside of Kenya included opportunities for professional advancement (39%) and higher salary (34%).

The most common reasons for remaining in Kenya were family relationships (65%), belief in their professional responsibility to give back to their community/country (53%), and participation in ongoing training/education (43%) (Table 2).

**Table 2. Reported Impact of Elective (N = 100)**

Describe Rotation Impact, n (%)	
One of the most influential experiences of my medical education	78 (78)
Somewhat influential	21 (21)
Not very influential	1 (1)
Greatest Influence of Elective (Top 3), n (%)	
Different standard of care	89 (89)
Specialty medicine and subspecialty consultation	38 (38)
Extensive use of technology for diagnosis/treatment	75 (75)
Factors for Remaining in Kenya (Top 3), n (%)	
Family relationships	65 (65)
Professional responsibility to give back to community/country	53 (53)
Ongoing training/education	43 (43)

**Summary/Conclusion:** International medical rotations for trainees from resource-limited settings are valued components of medical education, offering exposure to different standards of patient care and technology. The majority of participants remain in Kenya, arguing against contribution of such electives to “brain drain.” Expressed factors for remaining in Kenya, such as desire to give back to one’s community and educational opportunities, may encourage a “brain gain.”

### Capacity building on global health diplomacy (GHD): Experience from the South East Asia region

C. Kanchanachitra; Mahidol University, Institute for Population and Social Research, Nakhon Pathom/TH

**Background:** “Global health diplomacy” has become ever more important as a new field of global health action with increasing concern from many developed and developing countries. Countries in the Southeast Asia (SEA) region have placed a high priority on