

As part of a multi-modal approach, federal and regional Peruvian institutions partnered with several organizations, including UCSF, to improve access to, and quality of breast cancer care in Peru. Phase 1 involved screening with clinical breast exam, creating a community-based referral system for women with masses, and promoting evaluation of lesions using fine needle aspiration biopsy (FNAB) by trained physicians, with treatment at the regional cancer institute. Curricula for each activity were developed and validated. During phase 1, it was recognized in-country FNAB expertise was limited. For phase 2, the critical objective was to solidify local capacity for high-quality FNAB and integrate FNAB into standard of care for breast cancer.

Structure/Method/Design: Three main activities were completed during phase 2. Activity 1: Develop a Training of Trainers (ToT) curriculum for FNAB, and identify master trainers and trainees. Activity 2: Facilitate endorsement of a national approach to training FNAB and undertake preliminary rollout in La Libertad region. Activity 3: Strengthen interpretation and reporting of FNA results.

Outcome & Evaluation: A 5-day ToT pilot course occurred during October 19–23, 2014. Prior to the course, women with palpable masses were identified during a breast screening campaign and scheduled for FNAB. Local, regional, national and international clinical teams observed, procured and interpreted FNAB. Four new cases of cancer and 8 cases of granulomatous mastitis clinically mimicking tumor were diagnosed. For evaluation, slide quality before and after training intervention will be compared. Following the course, a one-day validation meeting including physicians and national leaders took place at the national cancer center in Lima, Peru. FNAB was endorsed for early diagnosis and triage. Subsequently a senior leader/cancer surgeon and cytopathologist studied at UCSF for 2 days and 2 weeks respectively.

Going Forward: To ensure sustainability and expansion of FNAB, cytology fellowships and training centers are needed. Strengthening partnerships will be critical for long-term capacity. An electronic reporting system will be developed to replace paper-based methods.

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Abstract #: 2.036_NEP

Knowledge, attitudes and perceptions about Ebola in Liberia

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Background: The Ebola virus epidemic in West Africa has claimed over 11,300 lives with Liberia hardest hit. Community mobilization was considered a key strategy for breaking transmission during the outbreak however little is known as to the best source of messaging or how effective at knowledge delivery and retention this messaging was. The objective of this study was to describe the source of messaging and the acquired knowledge, attitudes and perceptions of Ebola among the community dwellers nationally.

Methods: Healthcare access and Ebola knowledge surveys were administered via interview to a cluster randomized sample in the catchment area around Liberia's 21 government hospitals. Data was managed in a mobile data application on smart phones and analyzed using SPSS

Findings: A total of 543 heads of household were interviewed equally distributed between male/female and urban/rural. The three most common sources of message across location was radio 76.6%, community health worker 55.5% and community leader 35.9%. Of households surveyed 78% of urban and 54.9% of rural owned a radio. Knowing of someone who had Ebola was 32.3% in urban areas versus 18.9% in rural. Penetration of knowledge about Ebola was high, with an average of 98.9% and 97.4% of respondents having heard of Ebola in urban and rural areas respectively. In urban areas 98% of people believed Ebola to be real as compared to 96.5% in rural. The retained knowledge of ebola symptoms was red eye 100% and 78%, fever 94% and 74.4%, diarrhea 81.9% and 88.7% in urban and rural areas respectively.

Interpretation: The most common messaging modalities accessed by community members were radio, community health workers and community leaders. Knowledge of Ebola was consistently high across the country with retention of specific symptoms associated with the disease and the message of transmission prevention. This study provides insight into the best source of information dissemination for future outbreaks.

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Abstract #: 2.037_NEP

Primary CNS lymphoma in immunocompetent chinese patients and the association with chronic Hepatitis B

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Background: Primary CNS lymphoma (PCNSL) is an aggressive neoplasm occurring in immunocompromised and competent hosts. The etiopathogenesis in immunocompetent is unknown and conflicting evidence exists on the role of Hepatitis B infection. We performed a retrospective study of our patients with PCNSL in Hong Kong and studied the association with chronic Hepatitis B in this endemic area.

Methods: Patients over the age of 18 with a biopsy proven diagnosis of PCNSL between Jan 1st 1997 and May 31st 2015 in the Department of Clinical Oncology, Prince of Wales Hospital in Hong Kong were included. Data regarding demographics, comorbidities, viral co infections, PCNSL disease characteristics, treatment, and outcome were collected by chart review. Data collection was censored as of June 30th, 2015.

Findings: 27 patients, all of Han Chinese descent, were identified. Mean age at diagnosis was 57 years. 59% were male and 41% were female. Common symptoms at presentation included focal neurological deficits (74.1%), headache (37%), and higher function defects (33.3%). On imaging, edema or mass effect was seen in 82%, 78% had meningeal disease, and 48% had multifocal disease. 81.5% had at least one deep region involved. 96.3% were tested for HBsAg; 11.5% were positive. 43.5% of the HBsAg negative patients were tested for HBcAb, a marker for prior exposure to the virus. 60% were positive. 77.8% received modified DeAngelis Protocol

treatment. Complete response was seen in 36.8% of treated patients. Median overall survival of the treated patients was 7.5 months; of treated patients showing a partial response or greater was 11.5 months. The most common cause of death was progression of disease in 47.4%.

Interpretation: The prevalence of HBsAg positivity of 11.5% in the PCNSL patients is higher than the current reported seroprevalence in East Asia of 8.6%. While these data suggest an association, suitable case control studies should be designed to further investigate. Larger epidemiological studies comparing the incidence of PCNSL in hepatitis B endemic versus non-endemic regions will also be of value.

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Abstract #: 2.038_NEP

Knowledge, attitudes and practices regarding care of newborn umbilical cord among healthcare workers and mothers in the Volta region of Ghana

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Background: Umbilical cord associated child mortality is a serious problem in sub-Saharan Africa, including Ghana where the neonatal mortality rate in Ghana is 30/1000 live births. The objective of this study was to investigate the knowledge, attitudes, and current practices regarding care of the newborn umbilical cord among healthcare workers and mothers in the Volta region of Ghana.

Method: This was a cross sectional study of 102 mothers and 66 health workers in 11 health centers and health centers in the Volta region of Ghana. Survey data were collected through face-to-face semi-structured interviews. Data collected from mothers included their socio-demographic characteristics, the cord care treatment they used for the most recent child, and their sources of information regarding the treatment method. Healthcare workers were asked about their education and credentials, and their recommendations for cord care. Descriptive statistics were used to summarize the survey findings.

Findings: While the most commonly used practice for cord care was methylated spirits (68%), a significant number of mothers used non-recommended practices including shea butter (18%), toothpaste (4%), oil (2%), water (2%) and 6% used nothing. Overall 79% of the mothers surveyed received recommendation from healthcare workers on the best medical practice. Mothers residing in the southern Volta region or in urban areas and those with higher education levels were most likely to follow recommended best practices for cord care. Distrust in healthcare workers and low education levels were found to be the main barriers for adherence to the recommended practices. Health workers reported they were knowledgeable and confident in cord care practices (61%) and most (97%) supported medically recommended practices for cord care. Nurses and midwives were taught best practices of newborn cord care during their pre-licensure training.

Interpretation: More than one in five mothers are not following the recommended practices in newborn cord care. Public health interventions are needed to promote best practices for cord care

especially in the northern Volta, in rural areas and among women with low education levels.

Funding: University of California Davis Blum Center.

Abstract #: 2.039_NEP

Effect of a maternal infant HIV care clinic for HIV-infected mothers and exposed infants on follow up postnatal HIV testing and care in Southeastern Nigeria: A retrospective review

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Program Purpose: Adherence to care and evaluation of HIV-exposed infants remains a challenge. We evaluated the effect of a Maternal Infant HIV Clinic (MIHC) model of care on adherence to a prescribed set of interventions for infected mothers /exposed infants. Objective was to increase proportion of HIV-exposed babies tested for HIV DNA PCR at 6–8 weeks postpartum.

Methods: Review of records of 123 HIV-infected pregnant mothers and their infants at 2 PEPFAR-supported teaching hospitals in SE Nigeria. 22 pairs excluded due to missing data. Two groups defined according to whether infant born in the 14 months before or after intervention: Group 1 (July 2009 - Aug 2010) and Group 2 (Sep 2010 - Oct 2011). Group 1 mothers received HIV care at the adult ART clinic and their infants received HIV services within the child welfare clinic however there was no structured approach to care. Group 2 mother-infant pairs received monthly comprehensive HIV services by trained MIHC team (doctor, nurse, counselor) using an interventions checklist until 18–24 months postpartum. Interventions include HAART for all pregnant women, infant diagnostics at 6 weeks and 9–12 months, infant feeding counseling, family planning, and family HCT.

Outcome and Evaluation: There was a large and significant increase in completion of timely first PCR ($p=0.0023$). Although only 12 Group 2 infants reached 12 months of age, completion of second PCR has not improved.

Going Forward: Implementing a MIHC model of care increases infant testing at two months. Implementation research required to identify critical components of the model, whether it can be generalized, and how to further improve completion of care.

Funding: PEPFAR.

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Contextualizing randomized trials in lower income countries

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Background: This presentation reveals implementation considerations for mHealth interventions trials through the lens of the