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.

**Funding:** NYU School of Medicine International Health Program and Chinese University of Hong Kong Summer Undergraduate Research Program.

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:** Umblical 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 health-care 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