

**Results:** A total of 543 heads of household were interviewed. The average age of respondents was 42 years with equal male to female and rural to urban ratios. An average of 48% of respondents reported on a graduated scale that it was “very difficult” to obtain basic healthcare, and that it was more difficult in rural areas (55%). Reasons for not accessing healthcare included fear of exposure to Ebola in hospitals (33%), closure of hospitals (22%), and healthcare workers refusal to see patients presenting for care (20%). There was an overall decline in facility use by 30% with obstetric care, prenatal care and pediatric care down by 45%, 40% and 30% respectively. There was a slight increase in healthcare seeking at pharmacies for pediatric care and in use of traditional birth attendants and midwives for obstetric care.

**Interpretation:** Access to basic healthcare was severely affected during the Ebola outbreak in Liberia. Although hospital closures/limited functioning were a large factor in inability to provide care, other factors such as fear of exposure to Ebola within healthcare facilities played a role in reduced access. Obstetric, prenatal and pediatric care were especially difficult to access during this time. Strategies to preserve healthcare system function and public impression of these facilities will be critical, should future outbreaks occur.

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**Abstract #:** 2.024\_NEP

### Prevalence and correlates of depression in a high emigration town in Oaxaca, Mexico: Findings from a binational student research training program

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**Background:** Depression is the most common mental health disorder and a leading cause of disability worldwide. Residents of high emigration towns in Mexico often live with prolonged separation from family members; limited economic opportunities; and, for returned migrants from the United States, histories of stress, fear, discrimination, and guilt that may place them at increased risk for depression.

**Methods:** Our binational research team of Latino/a, Mexican, and American students conducted a household-based health and migration survey in a high emigration town in rural Oaxaca, Mexico, in January 2014. All residents aged 15–65 were eligible for the survey; participants provided verbal consent. Participants were screened for depression (CES-D short form) and substance use (WHO ASSIST), and reported their migration history and chronic health conditions. Logistic regression was used to determine correlates of screening positive for depression.

**Findings:** Of the 463 residents who completed our survey, a majority (61.9%) were female and the average age was 38.5 (SD: 14.9). Over half the participants (60.0%) reported some history of migration: 54.5% had internal migration experience and 28.5% were returned migrants from the United States. Two thirds (67.0%) reported talking regularly with family in the United States. A third (36.1%) met the CES-D screening criteria for depression.

In bivariate analyses, history of internal migration was associated with a positive depression screening ( $p=.019$ ), but history of U.S. migration was not. In multivariate logistic regression analyses, female gender (AOR: 3.44, 95% CI: 2.08–5.67), talking with family in the United States (AOR: 1.85, 95% CI: 1.17–2.93), lifetime alcohol use (AOR: 2.80, 95% CI: 1.74–4.50), and having another chronic health condition (AOR: 2.45, 95% CI: 1.55–3.88) were independently associated with screening positive for depression.

**Interpretation:** Although we were limited by the lack of validated depression scale for this population, survey findings showed a very high prevalence of depression. These findings indicate a need for culturally appropriate mental health services, especially for women, that can be integrated with health services for other chronic conditions and alcohol abuse prevention. U.S. and Mexican migration policies that facilitate family reunification might also mitigate psychological distress experienced by members of high emigration communities.

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### Sustainable university-based water quality program in the developing world

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**Background:** Point-of-Use (POU) ceramic filter systems have been shown to be reliable sources of safe drinking water. However, the long-term effectiveness of these systems has been questioned because of a lack of sustainability due user loss, filtration integrity, cost, replacement part accessibility, and use and cleaning complexity. Using data collected from work of the Institute for Latin American Concern - Water Quality (ILAC-WQ) Program, which provides (POU) Ceramic Candle water filtration systems to households in rural, developing communities throughout the Dominican Republic, this study presents quantitative longitudinal data supporting the efficacy of our program model for sustaining a POU filter program.

**Methods:** A University-Based Service-Learning Program has been developed which provides long-term sustainable access to clean drinking water for Dominican families. Student participants from Creighton University work with ILAC, an organization that has a 40 year history of providing healthcare to rural Dominican communities. Student participants annually visit households in 25–30 communities, sampling filtered water to later test for microbiological purity, interviewing users for maintenance knowledge, and conducting physical examination of filter condition. Participants educate the household on proper usage and provide necessary repairs and replacement parts. Under the infrastructure of ILAC-WQ, households can notify community staff of breakages and need for more filters and an incoming team will be notified.

**Findings:** Data collected from the 17 communities, each visited at least 5 times from 2009 to 2015, shows no decline in filter usage. There is a statistically significant increase in filter users when comparing means of the first 3 years to that of the last 4 over all communities. Data show an increase in average filter functionality from 74.7% to 93.6%, and in average filter potability from 84.5% to 97.8% over this 7 year time period.

**Interpretation:** These data support that our model can provide the long-term sustainability absent in many POU projects. This model can be applied to virtually any underserved or developing community with an NGO connecting with a University study abroad program.

**Funding:** The program is self-funded but relies upon the administrative services from the University.

**Abstract #:** 2.026\_NEP

### Acceptability of option B+ (lifelong treatment) among HIV-positive pregnant and lactating women in selected sites in Kenya

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**Background:** Conducted in a slum-based HIV program serving a large cohort of poor HIV infected women in Kenya, a high HIV burden context. New major treatment guidelines impact delivery of care and patients' experience of care. We sought to explore the acceptability of the new WHO guideline Option B+ and factors influencing patients' decision to initiate lifelong antiretroviral therapy (ART).

**Methods:** We collected data using convenience sampling at the AHF-Kenya HIV care centre in Mathare slum, Nairobi, between July–November 2013. 12 in-depth interviews (IDIs) and 6 focus-group discussions (FGDs) were conducted with HIV-1 infected pregnant women, 12 IDIs and 7 FGDs with infected lactating women and 5 FGDs with health care workers (HCWs). Eligibility criteria: pregnant or lactating women, ≥18 years old, HIV-positive, on ART ≥1 month and – for lactating mothers – with a child ≤18 months. HCWs identified and referred eligible participants to data collectors. Eligible HCWs worked in the ANC/ART for ≥6 months, referred by the head nurse, and willingly consented to participate. All participants provided written informed consent.

**Results:** Learning their HIV status and initiating ART on the same day caused considerable distress to the women, including feeling overwhelmed by new information. Most felt they needed time to 'absorb' the information/diagnosis, discuss with their partners, think about ART initiation, before committing to lifelong ART. Disclosure had resulted in receiving partner/family's support; non-disclosure resulted in challenges initiating and adhering to ART. Knowledge of other women having a positive experience with Option B+ made it easier to initiate. HCWs reported the women accepted the medicine, took it home, but waited to initiate once they felt ready. All groups felt sensitizing the community was a critical to increase acceptability of Option B+.

**Conclusion:** Women face a double challenge of receiving test results and having to make a sudden decision to initiate life-long therapy. Partner/family support is important, as it knowledge of patients having positively on ART. There's need to bear in mind and address the factors which influence acceptability of Option B+ among the users, to enhance uptake, and develop delivery methods that promote greater adherence to lifelong therapy.

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**Abstract #:** 2.027\_NEP

### HIV and masculinity in Gugulethu, South Africa [July 2, 2015 - Aug 2, 2015]

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**Background:** South Africa carries the greatest HIV burden in the world with 6.3 million people living with HIV.<sup>1</sup> HIV continues to burden the health system, and affects socio-economic productivity as heads of households (men) reject HIV treatments – especially in urban townships such as Gugulethu.<sup>1</sup> This project explored the extent to which masculine gender norms limit men's awareness of, and the effectiveness of, HIV interventions in Gugulethu.

**Methods:** 20 men (HIV positive and negative) were interviewed in community centers, and taverns. Men were recruited if they were not employed by the men's clinic, or gender-activist NGO *Sonke Gender Justice*. Men were not compensated. Semi-structured, 60-minute interviews explored: *What motivates men to look after their own health? What challenges do men face in disclosing their HIV status? What influences men to test or treat HIV? For what reasons do men use public health facilities? For what reasons do men use traditional healers?*

**Findings:** Complete ARV<sup>2</sup> regimens ran contrary to local ideals of masculinity, and strength in Gugulethu. Masculinity influenced ARV treatments as men valued pride, privacy, and confidentiality. Pride inhibited willingness to take advantage of HIV interventions, which increased preferences for traditional medicines. Men voiced that public health facilities (clinics) did not value privacy, or confidentiality regarding HIV status, and treatment. Thus, men would not visit most (commonly female-staffed) clinics, which precluded them from treatment, and contraception.

**Interpretation:** Research in Gugulethu emphasized that masculine gender norms contributed to men's resisting treatment. Men were aware of treatment options available, however nearly all men were not aware of where to access treatment options – there was poor awareness of *Sonke's* male-staffed clinic in Gugulethu. Recommendations include: cater to masculine needs; promote gender transformation; increase publicity around *Sonke's* clinic.

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1. *HIV and AIDS in South Africa*. AVERT, 2015. Web. 27 Oct. 2015.
2. Anti-Retroviral drugs (ARV) are used to hinder proliferation of the HI virus, in order to increase the CD4 cell count and increase immunity levels in a patient. ARV are administered to patients with HIV as treatment.

**Abstract #:** 2.028\_NEP

### The effect of child gender composition on spousal sexual abuse: an instrumental variable approach

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**Background:** The causes of sexual abuse within intimate relationships are not clearly understood which hinders efforts to mount effective prevention campaigns. This study examines whether