Findings: Half of the sample were female (51.7%, n = 78), nearly 43% (n = 55) had the equivalent of a high school diploma, and over half of the sample were single (51%, n = 77). The majority of the participants had heard of ZIKV (90.1%, n = 136) and knew it was transmitted via mosquito bites (82.8%, n = 125); however, only 7.9% (n = 21) knew that ZIKV was transmitted via sexual contact and 13.9% (n=21) knew that it was transmitted via mother to child. Only 18.5% (n = 28) of the sample knew that ZIKV was transmitted via day biting mosquitoes and only 9.3% (n = 14) knew that using condoms would prevent ZIKV. For the HBM items, half of the sample agreed they were at risk for contracting ZIKV, 80% (n = 104) agreed that ZIKV causes serious complications, and the majority agreed that preventive actions (wearing bug spray and long clothing) could prevent transmission, however, only 28.1% (n = 36) agreed that condoms could prevent transmission. The majority agreed that the media impacted their decision to take action to prevent ZIKV (68.2%, n = 88), and the majority were confident they could prevent getting ZIKV (66.4%, n = 85).

Interpretation: More credible information is needed in Ecuador to combat misconceptions about ZIKV through the mass media. Finally, the Health Belief Model seems appropriate for designing ZIKV intervention messages.

Source of Funding: Internal Ohio University funding.

Abstract #: 1.003_*INF*

Strengthening Health Care Waste Management through Strategic Mentoring and Supportive Supervision in Rural HIV Clinics, South-Eastern Nigeria

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Program/Project Purpose: HIV pandemic placed additional burden on the weakened health care systems in Nigeria. With an estimated population of over 180 million and national HIV prevalence of 3.6%, the poorly organized health systems were put under serious stress; especially in the rural areas were large number of persons infected with HIV accessed services. The high volume of clients accessing care at these rural health facilities translated into more health care waste being produced without adequate waste management plan. This was complicated by indiscriminate dumping of health care wastes at non-designated points by health workers. Lack of proper waste segregation and disposal systems was observed in 209 rural HIV clinics in Ebonyi, Enugu and Imo States, South-Eastern Nigeria during a pre-service assessment of the health facilities for comprehensive HIV care and treatment program in 2013. This study evaluates the outcomes of mentoring and supportive supervision to health care workers on Health care waste management between October, 2013 and June, 2016.

Structure/Method/Design: Health care workers in the supported states were mentored on the segregation and disposal of waste collected into the different color coded bins. 22,207 color-coded bin liners and 1,252 injection safety boxes were provided to the facilities. Guidelines on healthcare waste management were provided at the supported facilities. Facilities were also supported to dig infectious diseases waste disposal pits. Continued Medical Educations were strengthen by incorporating messages on waste management of infectious materials. Program monitoring visits were conducted across the three states to reinforce messages on the use of color coded bin liner for segregation of waste, proper disposal of injection safety containers using burn and bury approach.

Outcome & Evaluation: Program monitoring visits revealed increased compliance on the use of color coded bin liners as waste segregation method and utilization of the dug pit from 10% in October, 2013 to 95% in June, 2016 across the supported sites.

Going Forward: Health waste management practices improved with provision of commodities and continuous mentoring of health care workers. Routine supportive supervision is need to maintain good waste management.

Source of Funding: None.

Abstract #: 1.004_INF

Redefining the Target Area for Leprosy Elimination Programs Through Serological Evaluation of a Broader Definition of Leprosy Contacts

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Background: With 33,000 new cases in 2014, Brazil has the highest incidence of leprosy worldwide. Incidence fails to decrease while case-finding campaigns mostly evaluate household contacts (HHC's). In Northeast Brazil several studies have explored risk of exposure to neighbors. Regarding multibacillary leprosy cases, (the primary source of infection) no significant difference was found between *Mycobacterium leprae* seropositivity rates of HHC's compared to next door neighbors. Therefore, the foci of infection could be larger than the current definition of HHC's identifies. The purpose of this study was to compare the rate of seropositivity in individuals living near a leprosy case to those living farther away from a leprosy case.

Methods: This cross-sectional study was conducted between June to October 2016 in five neighborhoods of perimetropolitan areas of Natal, in Rio Grande do Norte, Brazil. Index leprosy cases were individuals under current treatment at the referral center for leprosy, Hospital Giselda Trigueiro. Home visits were made to the 9 index cases, 59 participants living within 3 blocks of the patient (contacts), and 80 participants living farther than 3 blocks from the patient (controls). A consent form and a questionnaire were administered verbally. Blood samples were tested for *M. leprae* using ML Flow and LID-NDO standard ELISA. Data analysis