dramatically strengthen the voice of TB. Data on message timing, ideal SM platform, and message quality should inform these efforts to maximize impact.

Source of Funding: None.

Abstract #: 2.011\_INF

## Traditional and Conventional Treatment for Cutaneous Leishmaniasis in an Endemic Rainforest Area of Northern Ecuador

E. Obeng-Gyasi<sup>1</sup>, M. Weigel<sup>2</sup>, R. Armijos<sup>1</sup>, W. Cevallos<sup>3</sup>, X. Sanchez<sup>4</sup>, E. Puebla<sup>4</sup>; <sup>1</sup>Indiana University Bloomington, Bloomington, USA, <sup>2</sup>Indiana University, Bloomington, Indiana, USA, <sup>3</sup>Universidad Central del Ecuador, Quito, Ecuador, <sup>4</sup>Universidad Central Del Ecuador, Quito, Ecuador

**Background:** Cutaneous leishmaniasis (CL) causes unsightly lesions and can cause permanent disfigurement. The gold standard CL treatment is a toxic antimonial drug. Our study examined the traditional and conventional treatment knowledge, beliefs, and practices (KAP) of an endemic rainforest population in Ecuador and compared the findings with those we published two decades ago in the same area.

**Methods:** We used grid sampling to randomly select 10% of households in the 21 rural communities, and from those, a subsample of 351 adult participants aged > 18 years. Participants were interviewed with closed- and open-ended questions focused on CL treatment KAP. The protocol received institutional review board approval and participants gave their informed consent. The data were collected during a 24-month period (2013-2015).

Findings: One-third of participants had a positive CL history, 75% reported familiarity with the disease and 58% identified > 1 treatment method. Their diverse ethnomedical treatment inventory included cauterization, medicinal plants, acids, heavy metals, toxic chemicals, veterinary products, and other remedies. More participants than before reported familiarity with antimonial treatment but the number of medicinal plant species identified was decreased by 54%. As before, beliefs about the adverse consequences of untreated lesions appeared to motivate getting treated. Treatment among participants with a positive CL history was somewhat reduced compared to prior studies (82% vs. 87-88%). Males were slightly more likely to be treated than females (90% vs. 78%; aPR=1.15; 95% C.I. 1.04, 1.28). Among those treated, 17% got only antimonials, 80% only traditional remedies, and 3%, both. The proportion of males treated with "strong/harsh" methods (cauterization, acids, veterinary tick dips, heavy metals/chemicals) was higher than females (34% vs. 18%; aPR=1.62, 95% C.I.=1.02, 2.59).

**Interpretation:** Most participants knew about CL treatment especially traditional methods. Their untreated lesion beliefs appeared to motivate them to seek treatment. Most used only traditional methods, some of which are potentially efficacious but may be toxic and promote scaring. Antimonial drug knowledge/use continues to be low, suggesting the need for public health system improvements

in CL education and treatment access. Studies of promising medical plants should be conducted before these traditions are lost.

**Source of Funding:** Universidad Central del Ecuador-DGIP/UTEP.

**Abstract #:** 2.012\_*INF* 

## Quality of Tuberculosis Diagnosis at DOTS Centers in Niger & Kwara states, Nigeria - Lessons from TB REACH

I. Olajide<sup>1</sup>, A. Mpamugo<sup>2</sup>, J. Bamidele<sup>3</sup>, N. Emperor<sup>4</sup>, E. Onu<sup>5</sup>, B. Gobir<sup>6</sup>, A.E. Nwandu<sup>7</sup>; <sup>1</sup>Center for clinical care and clinical research, Nigeria, FCT, FCT, Nigeria, <sup>2</sup>Center for Clinical Care and Clinical Reach, FCT, Nigeria, <sup>3</sup>Center for Clinical Care and Clinical Reach, Kwara, Nigeria, <sup>4</sup>Center for Clinical Care and Clinical Reach, Nigeria, Nigeria, <sup>5</sup>Center for Clinical Care and Research Nigeria, Abuja, Nigeria, <sup>6</sup>Maryland Global Initiative Corporation, Nigeria/ University of Maryland, Baltimore, MD, USA

Program/Project Purpose: Quality assured bacteriology at DOTS centers is a recommended tuberculosis (TB) control strategy by the STOP TB program <sup>1</sup>. Maryland Global Initiative Cooperation (MGIC) in collaboration with the Center for Clinical Care and Clinical Research Nigeria (CCCRN) implemented a WHO funded project called TB-REACH in Niger and Kwara States, from June 2014 to October 2015. Goal of the project was Rapid Identification and Treatment of TB (RITT) and improved quality assurance methods at TB DOTS microscopy centers in Kwara and Niger states to ensure accurate TB diagnosis. Baseline assessment of forty-six (46) DOTS diagnostic centers in primary and secondary health care facilities identified lack of quality assurance processes and therefore inaccurate TB diagnosis.

**Structure/Method/Design:** Our intervention in the project year included training using National curriculum and guidelines by nationally accredited trainers and mentorship of forty-six (46) microscopists on sputum microscopy. Panel testing for External Quality Assurance (EQA) and internal quality assurance by use of positive and negative control slides was introduced at the DOTS diagnostic laboratories. Other inventions included infrastructural upgrade, provision and maintenance of microscopes and provision of alternative power source.

**Outcome & Evaluation:** Proficiency of microscopists improved based on increased performance in panel testing. Quarterly EQA reports collated by state laboratory quality assurance officer showed improvement in quality assured bacteriology and TB diagnostic services after the project intervention.

**Going Forward:** To ensure accuracy of TB diagnosis at DOTs sites, state TB program should invest in human capacity building and laboratory QA processes. Nigerian State TB programs should utilize TB Panel Testing as an audit check for the IQA processes to assure quality of TB microscopy tests done and thus reduce burden of TB.