

an increase in child mortality over the period, a number of others reduced child mortality at a pace even faster than that set by the MDGs.

**Interpretation:** These maps are important for accurately and optimally targeting interventions and to define a baseline for measurement that will facilitate independent auditing of progress in reducing child mortality as mandated by the new Sustainable Development Goal targets.

**Source of Funding:** Bill and Melinda Gates Foundation.

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### **Epidemiology of Soil-Transmitted Helminthiasis and Taeniasis in Rural Communities near Ranomafana National Park, Madagascar with a Comparison of Kato-Katz Technique Against Spontaneous Sedimentation Technique**

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**Background:** Soil Transmitted Helminthiasis (STHs) and taeniasis are major health burdens in many developing settings. Rural communities near Madagascar's Ranomafana National Park (RNP) struggle to meet the basic standards of health from a lack of road infrastructure and endemic infections of parasites. This July 2016 study determined the epidemiology of parasitic infections and compared two parasitological stool diagnostic techniques.

**Methods:** A cross sectional study was conducted on 164 random households (561 people  $\geq$  age 5 years) around RNP. Surveys, blood and stool were collected from all participants. Distances to the main road from each village were measured using Google Earth. Kato-Katz (KK) and Spontaneous Sedimentation technique (S) were performed under field conditions. The data was analyzed by Stata® SE, version 12.1.

**Findings:** A total of 561 people (52.3% males) were included in this study. The age range was 5–82, median age 18. The overall prevalence rates with either technique was 71.3% for *Ascaris lumbricoides* (95% CI 67.58–75.06), 75.3% for *Trichuris trichiura* (95% CI 71.83–78.96), 33.4% for hookworm (95% CI 29.54–37.35), 2.1% for *Taenia* spp (95% CI 0.93–3.31), and 3.1% for *Strongyloides stercoralis* (95% CI 1.73–4.63). The majority of this population (92.7%) were found to have 1 or more parasite infection. Those with a parasite were found further away from the main road (mean distance of 6.3 km) than those without any parasite (mean distance of 4.5 km ( $P=0.002$ )). Sensitivity of the techniques for the diagnosis of each parasite were: *Ascaris* (S:96.1%, KK:93.4%), *Trichuris* (S:77.6%, KK:91.8%), hookworm (S:82.1%, KK:50.5%), *Taenia* (S:91.7%, KK: 83.3%), *Strongyloides* (S:72.2%, KK: 27.8%).

**Interpretation:** Despite current control measures rural regions near RNP is infected with parasites. Living further from the main road is associated with parasitic infections, suggesting that STHs are related to lack of infrastructure. Additional analysis is underway

to understand and resolve the factors that drive this problem. In comparing techniques: S, the simpler method to conduct, was more sensitive for most parasitic infections; KK was more sensitive for trichuris infections.

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### **Womens Constraint in Access to Prevention of Mother to Child Transmission of HIV/AIDS (PMTCT) in Enugu State Nigeria**

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**Background:** The presentation is based on a study on prevention of mother to child transmission of HIV/AIDS (PMTCT) in Enugu state Nigeria. Prevalence of HIV/AIDS among children in Nigeria remains high. UNAIDS indicate that in 2009 children with HIV in Nigeria comprised about 1.8 million out of the 2.5 million that are HIV positive globally. Women's constraint in access to PMTCT is linked to gender inequality constraining them from making vital decisions to prevent primary infection of HIV, community norms and health system factors. The overarching aim of this study is to explore factors constraining women's access to PMTCT.

**Methods:** The study was carried out in three health facilities offering comprehensive PMTCT services namely University of Nigeria Teaching Hospital Ituku Ozalla; Mother of Christ Hospital Enugu and Bishop Shanahan Hospital Nsukka. Qualitative method using in-depth interviews (IDIs) and Focus Group Discussions (FGDs) were used for data collection. The target population for IDIs comprised nine HIV positive women, three per facility, and their male partners; six health workers, two per facility; and six PMTCT programme managers, two per facility. Four FGDs were held comprising a male and female group of members of HIV support groups at Enugu and Nsukka respectively.

**Findings:** Constraints women experience include; difficulty in practicing appropriate infant feeding; male control in decision-making on going to PMTCT; fear to disclose HIV status to spouse; limited spousal communication on prevention of unwanted pregnancy; hiding and skipping use ART drugs for fear of repercussion; difficulty in using ART facilities due to fear of stigma; inability to deliver in facilities providing optimal services for PMTCT due to distance; lack of adherence to treatment due to inability to collect and pay for ART drugs; and unwelcome attitude of health workers.

**Interpretation:** Strategies to enhance women's access to PMTCT services include sensitization to encourage male support to enable wives take their drugs regularly without hiding, enhance spousal communication about their status and enable spouses comply to treatment, learn how to protect the unborn babies and children born by HIV positive women from becoming HIV positive.

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