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Program/Project Purpose: An estimated 200 million people are infected with schistosomiasis, making the disease one of the top neglected tropical diseases and a major global health concern. In Tanzania, with a population just over 42 million, about 33 million are in need of treatment or preventative chemotherapy. The disease is of particular concern in the Lake Victoria region, due to daily use of lake water. In conjunction with the Shirati district hospital, Touro University-CA has led control programs carried out in mobile clinics at local villages by providing screening, treatment, and education. Recently there has been a push for use of static dispensary locations for diagnosis and treatment. The aim of this study is to assess the longitudinal efficacy of community based interventions for schistosomiasis carried out from 2009-2014 and compares the utilization of static health dispensary clinics to the community based mobile clinics in reaching out to the population.

Structure/Method/Design: Villagers were alerted to the screening, treatment, and education program through local leaders, announcements over the radio, and posters. Effectiveness will be measured by analyzing trends in the number of people visiting the clinics, prevalence of infection, the number treated, given positive infection status, and change in prevalence patterns with treatment. The number of people screened at dispensaries versus mobile clinics will be compared. We hypothesize that mobile clinics are effective in reducing prevalence of schistosomiasis in community based interventions and that health dispensaries provide no additional value towards increasing number of individuals screened.

Outcomes & Evaluation: Univariate analysis and 2-tailed t-tests will be performed to assess if the use of services has significantly increased or not at mobile clinics from 2009-2014, and to compare utilization of health dispensaries versus mobile clinics. Prevalence of those who test positive will also be determined and analyzed to assess for a downward trend. Preliminary analysis reveals that from 2012 to 2014, prevalence of infection has decreased and that utilization of health dispensaries provides no additional value over mobile clinics. Our study supports the use of mobile clinics to carry out community-based health education, screening, and treatment programs over the use of dispensaries in rural Tanzania.

Going Forward: During this study mobile clinics reported decreased prevalence and are able to capture a larger population of people interested in being screened for infection. Since use of dispensaries is favored by the Mara district, it will be important to point out the efficiency of mobile clinics or improve the efficacy of dispensaries by increasing the frequency of screenings or widening the area of promotion to other nearby villages.

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Abstract #: *02CD019*

How much of tubal infertility can we attribute to Chlamydia Trachomatis infection in Lagos, Nigeria?

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Background: Worldwide, Chlamydia Trachomatis has been identified as an important etiological agent for tubal infertility. Active infection is often asymptomatic and progression to tubal infertility occurs over time without any suspicion or intervention. Tubal infertility is a difficult medical and social menace to deal with in our environment. Addressing tubal infertility will require that more cases are detected early especially those asymptomatic with prompt interventions to treat them before they cause irreversible damage. This will require routine screenings and sensitization of women on the silent but harmful consequences of chlamydia trachomatis infection. To begin advocacy for routine screening as a means of tackling this problem, it is necessary to provide evidence on how much of tubal infertility can be attributed to chlamydia trachomatis infection in our environment. This study attempts to address this knowledge gap by providing the evidence for this decision.

Methods: We carried out a case-control study at the Lagos University Teaching Hospital (LUTH) Nigeria among women who presented with tubal infertility. One hundred and twenty women with infertility were sequentially recruited into the study in 2010: 60 with Hysterosalpingogram confirmed bilateral blocked tubes, 60 others with patent tubes. Detailed history, physical examination, serological and radiological investigations were conducted and documented for each woman according to a standard guideline. Sera prepared from blood samples were analyzed for chlamydia antibody with Dia.Pro chlamydial IgG antibody detection kit (manufactured by Dia.Pro Diagnostic Bioprobes, Italy). Active chlamydial infection through antigen detection on an endocervical specimen was also carried out using the Diaspot chlamydia kit (Bresta Perkasa, Indonesia). Univariate and bivariate analysis was done using Stata version 10.

Findings: The prevalence of chlamydia antibodies was 27% among the studied population. None of the women tested in this study had an active chlamydia infection. Of those with blocked tubes, 38% (23/60) were positive for chlamydia antibodies while 15% (9/60) of those with patent tubes had chlamydia antibodies. A higher proportion of those with tubal infertility had at least one abortion previously (68% vs 50%). Attributable risk for tubal infertility as a result of chlamydia infection was 25% while the attributable risk fraction was 71%. The odds of women with tubal infertility being positive for chlamydia antibody was 3.5 (95% CI = 1.5 − 8.5). Tubal infertility was more associated with secondary infertility than primary infertility among the studied population (OR 2.7, 95% CI = 1.1 − 6.4).

Interpretation: Chlamydia trachomatis infection has a strong association with tubal infertility among women presenting in LUTH. Should active infections be detected and treated early, a large proportion of tubal infertility burden in Lagos could be averted. Since many chlamydia infection cases are asymptomatic in our environment, women will benefit from routine screening for chlamydia trachomatis infection.

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Predictors of HIV-infection during routine clinic-based HIV testing in Nakivale Refugee settlement in SW Uganda

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