THE COST OF DIAGNOSTIC VERSUS SYNDROMIC MANAGEMENT OF SEXUALLY TRANSMITTED INFECTIONS IN THE HIV EPICENTRE

1Katrina J Stime, 2Paul K Drain, 3Adrian Mindel, 2Sunita Panday, 3Hope Ngobese, 2Noluthando Ngcobo, 1Yuthu Dlamini, 1Anne Rompalo, 2Yvonne Barrabas, 3Nigé Garret. 1University of Washington School of Medicine, Seattle, USA; 2Centre for The AIDS Programme of Research in South Africa (CAPRISA), Durban, South African Republic; 3Prince Cyril Zulu Clinic, Durban Municipality, Durban, South African Republic; 4Johns Hopkins University, Baltimore, USA

Introduction Most low- and middle-income countries (LMICs) rely on syndromic management to guide diagnosis and treatment of sexually transmitted infections (STIs). Syndromic management is less expensive but has poor diagnostic accuracy compared to conventional laboratory testing. The goal of this study was to determine the incremental cost of implementing a rapid, near-patient diagnostic care model at an infectious disease centre in Durban, South Africa.

Methods As part of a cohort study to assess diagnostic point-of-care testing with expedited partner therapy (EPT), we compared cost incurred to standard-of-care syndromic management in the same clinic. Patients were tested with GeneXpert CT/NG assay, OSOM Rapid Trichomonas Test, and microscopy for candida and bacterial vaginosis, followed by specific treatment and EPT. Patients receiving standard-of-care were administered a symptom screen and broad STI treatment. An activity-based micro-costing approach, including time and motion studies, was used to estimate cost per patient treated. Costs were obtained from budgets, invoices, and staff interviews from 2016.

Results The mean incremental cost per patient when going from syndromic to diagnostic management was USD 36.69 ($28.15 excluding microscopy). The largest costs for diagnostic management came from Cepheid CT/NG cartridges ($14.37, 39%) and nurse time ($14.19, 39%). Average per-patient medication costs were higher for syndromic management than diagnostic testing ($11.00 vs. $1.74). Several costs of syndromic management were not accounted for, including potential misdiagnosis, overtreatment resulting in adverse reactions or drug resistance, lack of awareness of the specific STI, less effective partner notification with a greater risk of reinfection, and HIV acquisition.

Conclusion Diagnostic management cost more than syndromic management per patient visit. However, health consequences of syndromic management should be further evaluated. Accurate, low-cost STI diagnostics are potentially a cost-effective intervention for STI control.

Support: The CAPRISA 083 study was co-funded by the South African Medical Research Council and the NIH (AI116759). Cepheid loaned two 4-module Genexpert machines to the study team free-of-charge, but did not contribute to the preparation of this abstract

CONGENITAL SYPHILIS IN VULNERABLE POPULATIONS: CONSULTATION OFFICE IN THE STREET AS STRATEGY

Lis Aparecida De Souza Neves; Maria Cristina A. Francelin, Annae Lui Sandrin, Fabiana Rezende Amaral, Maria Cristina Belluzzi Garcia; Monica de Arruda Rocha, Ivana Erse Campos. Ribeirão Preto Municipal Health Department, Ribeirão Preto – SP, Brazil

Introduction In the last decade, syphilis has increased incidence in Brazil, necessitating the integration of health care services, surveillance and actions in the community. The objective of this study was to describe the strategy of using the office on the street to deal with congenital syphilis among pregnant users of crack.

Method A case study, in which the actions implemented and the results achieved will be described. Since 2013, Ribeirão Preto has developed a harm reduction project with vulnerable populations focused on pregnant users of crack living in the street, who are carrying syphilis. In 2016, the project was accredited as Consultation Office in the Street Type II, composed of 5 social action agents and a psychologist, supported by professionals from the STI/AIDS Program. Interventions are carried out daily in scenes of drug use and prostitution. The care of the pregnant woman begins with her identification, sensitisation and conduction to the Health Unit, where she is made reception, collection of the exams, vaccination and medical attention. This pregnant woman and her partner are accompanied by the team and conducted to the care, including for the application of Penicillin. There is integration between the maternity hospitals and the Program. In addition to the weekly planning of the actions and discussion of the cases, Conversation are held together with the Health Unit teams to discuss the service to drug users.

Results Between 2013 and 2016, 30 women were followed up (3 with 2 pregnancies), all crack users, 19 with up to 30 years of age; 30.5% with more than 5 pregnancies. Nobody was diagnosed with HIV; 76.7% were with syphilis, all treated after the intervention. Even with follow-up, some of the newborns were born with syphilis; in 43.3% of the women were placed contraceptive implant.

Conclusion The challenge is constant- pregnant women heavily dependent on the drug, multiplicity of partners, unprepared health workers. There is a need for continuity of the strategy and work with other institutions to form a network of protection for this population.