positive syphilis test [RR=1.59; 95%CI=1.33–1.89]. Postpartum, 39 (16%) intervention and 21 (9%) control men reported known HIV-positive status during pregnancy. Despite increased knowledge of HIV-positive status within the intervention group, men were less likely to link to HIV care services [RR=0.69; 95%CI=0.50–0.96], as 41% (16 of 39) of men were newly diagnosed with HIV. No differences were observed for uptake of male circumcision within the study period [RR=1.59; 95%CI=0.89–2.87] or attendance of subsequent clinic-based antenatal care with the female partner [RR=1.11; 95%CI=0.85–1.41].

**Conclusion** Home-based couple education and testing resulted in greater uptake of clinic-based STI consultation services among men. However, increased knowledge of HIV-status in the home did not lead to increased HIV care service uptake for men, potentially because there was a greater proportion of men with new HIV diagnoses in the intervention arm. This group of newly diagnosed men should be targeted with research to increase linkage and engagement to HIV care.

## P2.21 FEASIBILITY STUDY FOR THE DEVELOPMENT OF A RAPID LATERAL FLOW POINT OF CARE TEST FOR CONGENITAL SYPHILIS

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**Introduction** The World Health Organisation (WHO) estimates there are 7 13 600 to 1,575,000 cases of congenital syphilis worldwide annually. Congenital syphilis can lead to several health conditions at birth. Currently there is no rapid point of care test available for its diagnosis.Here we introduce a novel rapid point of care test for congenital syphilis. The objective of this test includes the ability to test whole blood or serum taken from the infant or cord blood while blocking the mother's IgG antibodies.

**Methods** Thirty-four (34) syphilis positive and negative gestational serum samples and five (5) positive congenital syphilis samples, were obtained from University of Connecticut Health Centre. Twenty-two (22) samples were RPR reactive. Chembio DPP Syphilis IgG and IgM test devices were obtained from the manufacturer. The required number of IgG and IgM devices were modified at the CDC to include an IgG blocker in the device to produce four different assay devices used for this study. Each serum sample was tested in the four separate devices. Results were reported based on the patterns observed in the assay windows.

**Results** All (17/17) the RPR positive gestational samples were positive (100%),and 5 of 5 congenital positive samples were positive (100%) using the IgM device with IgG blocking agent. Only 5/17 of gestational samples (29.4%) and 1/5 congenital samples (20%) were positive using the IgM device without IgG blocking agent. For the IgG device with the IgG blocking agent all samples were negative. The IgG device without the blocking reagent resulted in the detection of 19/22 (86.4%) of the RPR positive samples. With the exception of one sample all negative samples were negative by all 4 test devices.

**Conclusion** Only a limited number of positive and negative gestational and congenital syphilis samples were evaluated in this study, due to the short supply of such rare samples. It is apparent from this limited data that by blocking the mother's IgG an increase in sensitivity can be achieved. More in depth studies are necessary in order to prove the concept.

## P2.22 SURVEILLANCE OF HIV-1 TRANSMITTED DRUG RESISTANCE AMONG DRUG-NAÏVE POPULATIONS IN RIO DE JANEIRO, BRAZIL

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**Introduction** The WHO Global HIV drug resistance network (HIV-ResNet), was stablished to monitor the emergence and help to control the transmission of HIV-1 drug resistant strains. The TDR is progressively increasing over the last years in some Brazilian regions, mainly where the epidemic is concentrated. This study evaluated the trends in the prevalence of TDR mutations and dynamic of subtypes, among drug-naïve HIV-1 infected individuals from vulnerable group populations in the context of the WHO HIV-ResNet.

**Methods** We analysed a total of 536 HIV-1 sequences collected during 2005 to 2014, targeting drug naïve pregnant woman from four public antenatal care units and 159 recently diagnosed (<1 year) individuals identified in VCTs in all Rio de Janeiro state. The profiles of TDR mutations were evaluated using the updated WHO transmitted resistance mutation list and HIV-1 genetic diversity evaluated by phylogenetic analysis.

**Results** Overall, the prevalence of TDR was 12.5% (CI95%, 7.15% to 16.5%) being, 5.8% (CI95%, 2.5% to 9.15%) to the nucleoside reverse transcriptase inhibitors (NRTIs), 3% (CI95%, 0.1% to 4.85%) to non-nucleoside inhibitors (NNRTIs) and 3.7% (CI95%, 1.24% to 7.5%) to protease inhibitors (PIs). Both studied groups showed similar TDR prevalence for all drug classes. The timidine-associated mutations (TAMs) and M184V were the most prevalent TDR mutations found in RT gene, followed by K103N, T215 revertants and F77L. The M46I PI associated mutation was the more frequent, followed by V82A and L90M. HIV-1 subtype B was the most prevalent (80%), followed by F1 (7.5%), subtype C (4%) and BF recombinants (3.5%). In addition to non-B HIV-1 subtype A1, G, CRF02_AG, CRF31_BC, FC and DF recombinants, identified in 4% of genotyped samples. Significant difference was observed in the two groups, where subtype F (12%) was more prevalent in pregnant woman, while subtype C prevalent in new diagnosed subjects (5.9%).

**Conclusion** This work tried to study trends of HIV-1 TDR and the genetic diversity in Rio de Janeiro state, the second major HIV/AIDS epidemic in Brazil. The results demonstrated