

20,771 (26.3%) had enough locating information to begin PNS. Among these partners initiated for PNS, 5,851 were unlocatable/refused PNS (28.2%, range: 23.9%–38.8%), 5,959 were prophylactically treated (28.6%, range: 2.1%–39.8%) and 5,905 were classified as infected and brought to treatment (28.4%; range: 12.1%–37.3%). After excluding partners treated before ($n=1,436$) and ≥ 90 days after ($n=90$) the index case interview, 4,379 partners were considered infected and brought to treatment (0.15 partners per reported case [range 0.02–0.50] or 0.18 partners per interviewed case [range 0.05–0.60]).

Conclusion For every 5 to 6 index patients interviewed, PNS resulted in 1 infected partner brought to treatment. The success of DIS in finding and bringing partners to treatment varied across jurisdictions.

Disclosure No significant relationships.

P738 NO BEJEL AMONG *TREPONEMA PALLIDUM* ISOLATES DIAGNOSED AS SYPHILIS FROM SURINAM, ANTILLEAN AND DUTCH CLIENTS IN AMSTERDAM

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Background *Treponema pallidum* subsp. *pallidum* (TPA) is the causative agent of syphilis, a world-wide prevalent venereal disease. Bejel is caused by *T. pallidum* subsp. *endemicum* (TEN), which shows similar clinical manifestations and is morphologically and serologically indistinguishable from TPA. The PCR used for syphilis diagnostics, targeting the *poA* gene, does not discriminate between subspecies of *T. pallidum*. Bejel is thought to be restricted to semi-arid areas and its transmission to be non-venereal, but recently, in patients diagnosed with syphilis in Cuba and Japan, sexual transmission of TEN was shown to occur. We therefore performed molecular typing on samples from Surinam, Antillean and Dutch patients to discover bejel causing TEN strains among syphilis cases in Amsterdam.

Methods DNA was extracted from 137 ulcer swabs collected between 2006 and 2018 from male clients attending the Amsterdam sexually transmitted infections (STI) clinic. MLST was performed by partial sequence analysis of the *tp0136*, *tp0548* and *tp0705* genes to generate allelic profiles. In addition, 23S rRNA loci were checked for A2058G and A2059G macrolide resistance mutations.

Results We found 15 distinct allelic profiles from 99/137 (72%) fully typed samples, of which none were TEN, 83% were SS14-like strains and 17% Nichols-like. The most prevalent types were 1-3-1 (44%) and 1-1-1 (19%), in concordance with similar TPA typing studies. There was no association found between TPA types and ethnicity. Five new allelic types and profiles were found adding to the knowledge of TPA strain diversity. The successfully sequenced 23S rRNA loci from 123/137 (90%) samples showed the presence of A2058G and A2059G mutations, 79% and 2% respectively.

Conclusion No misdiagnoses were found within the samples from different ethnicities residing in Amsterdam, the

Netherlands. The strain diversity found in this study reflects the local male STI clinic population which is a diverse, mixed group.

Disclosure No significant relationships.

P739 NOVEL RAPID TEST FOR IMPROVED DIAGNOSIS OF ACTIVE SYPHILIS AT THE POINT OF CARE

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Background Syphilis has been and still is one of the greatest global health concerns. Syphilis can seriously damage the nervous system of infected individuals including infants born to infected mother. Treatment of syphilis is simple and effective with penicillin but diagnosis is challenging, particularly in resource-constrained settings, due to the need for a laboratory-based confirmatory test. Current point of care (POC) tests for syphilis are available but cannot distinguish active infections from past treated infections with a misclassification rate of up to 50% (low specificity). We developed a prototype rapid POC test (IgA Confirm) that can differentiate active syphilis from past treated infections at the point of care.

Methods We conducted a prospective diagnostic accuracy study to assess the specificity (and sensitivity) of the IgA Confirm test in identifying active syphilis infections classified by *Treponema pallidum* Antibody (TPAb) and rapid plasma regain (RPR) laboratory serology. Between June-December 2018, 500 pregnant women attending Rahima Moosa Mother and Child hospital, South Africa were recruited and provided venous blood samples for syphilis testing including the IgA Confirm (index) and laboratory serology (reference) tests.

Results The IgA Confirm demonstrate a sensitivity of 100% (5/5) for identifying samples with active syphilis infections (TPAb positive and RPR positive); 100% (9/9) specificity for identifying samples with past or treated infections (TPAb positive, RPR negative) and, 99.4% (484/487) specificity for samples with no evidence of syphilis (TPAb and RPR negative).

Conclusion This study showed that the IgA Confirm test has the ability to identify active syphilis infection and meet the WHO Target Product Profile for syphilis confirmatory testing. Future study is needed to further evaluate diagnostic performance of the test in high prevalence setting.

Disclosure No significant relationships.

P740 IMPROVING SYPHILIS DIAGNOSIS AND TREATMENT IN AN URBAN POPULATION THROUGH ROUTINE EMERGENCY DEPARTMENT SCREENING

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Background With the recent nationwide increase in syphilis, it is imperative to find novel means of reaching at-risk populations for early diagnosis and treatment. Many urban communities have both high rates of syphilis and frequently utilize the