given the greater risk of acquiring HIV, especially for those newly infected. Interventions targeted against HSV-2, such as new HSV vaccines, have the potential for an additional benefit against HIV, which could be substantial particularly in regions where co-infections are abundant.

P3.120 PREVALENCE OF *UREAPLASMA UREALYTICUM* IN URINE OF MEN ATTENDING A SEXUALLY TRANSMITTED DISEASE CLINIC

Kenneth Fife, James A Williams, Sarah Fortney, Brahim Qadadri, Aaron Ermel. *Indiana University School of Medicine, Indianapolis, USA*

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Introduction *Ureaplasma urealyticum* (UU) is probably one of the causes of non-gonococcal, non-chlamydial urethritis in men and post-partum endometritis in women. The epidemiology of UU is currently unclear because culture isolation is difficult and molecular identification is limited to specialised laboratories. Testing for UU would be useful for surveillance, disease management, and epidemiology. This study assessed the prevalence of UU in men attending the local STD clinic by real-time PCR.

Methods A convenience sample of de-identified residual urine specimens from men attending an STD clinic was collected. Urine was placed into commercially available transport tubes and tested by PCR for *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (NG), and *Trichomonas vaginalis* (TV). The remaining residual processed specimen was tested for UU DNA using a previously published real-time PCR assay. Descriptive statistics were used to examine UU prevalence with age, and co-infection with CT, NG, and TV.

Results A total of 99 residual male urine specimens were available for testing. UU DNA was detected in 16/99 (16.2%) of the specimens and was comparable to CT (14/97, 14.4%), NG (11/97, 11.3%), and TV (4/25, 16.0%). Of the 16 UU positive specimens, co-infection with CT was observed in one (6.25%), NG in one (6.25%), and the remaining 14 (87.5%) had no other infection identified. The mean age of those individuals positive for UU DNA was 32.4 (range 18–63) while the mean age of those infected with CT, NG, and TV was 29.8, 28.3, and 36.8 years old, respectively.

Conclusions The prevalence of UU in men attending an STD clinic is similar to that observed for CT, NG, and TV. This study was useful in order to gain a better understanding of UU in this population including the age of those positive for UU, co-infection status with other commonly identified pathogens, and as a means to confirm the feasibility of real-time PCR testing using residual processed specimens. More studies are needed to elucidate the significance of UU in this population.

P3.121 VAGINAL DISCHARGE: EXPLORING DEMOGRAPHIC PROFILE, RISK FACTORS AND ALTERNATIVE METHOD OF RELIABLE DIAGNOSIS THROUGH SELF-COLLECTION OF VAGINAL SWABS

Z Khan, A Bhargava, P Mittal, R Bharti, P Puri, N Khunger, M Bala. *VMMC and Safdarjung Hospital, New Delhi, India*

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Introduction Vaginal discharge (VD), a common gynaecological complaint, is often associated with bacterial vaginosis (BV), vulvovaginal candidiasis (VVC) and *Trichomonas vaginitis* (TV). Prevention and control of these STIs/RTIs require understanding of demographic patterns and risk factors. Moreover, diagnosis in resource constrained settings can be facilitated using self-collected vaginal swabs, provided the reliability of the method is established. Aims were to establish the (1) association of sexual, demographic and hygienic practices for the above infections and (2) reliability of self-obtained over clinician-collected vaginal swabs for diagnosis.

Methods A total of 550 females aged 18–45 years (median: 32) attending two NACO designated STI/RTI clinics (Jan 2015-May 2016) with abnormal vaginal discharge were evaluated for relevant risk factors using a questionnaire. Swabs were self-collected by patients after instructions and subsequently by a physician under speculum examination. They were then examined by standard bedside tests, Gram staining, wet mount and culture.

Results BV, VVC and TV were observed in 79 (14.4%), 144 (26.2%) and 3 (0.5%) patients respectively. VVC coexisted with BV in 58 (10.5%) patients. *C. albicans* was isolated in 84 (58.33%) VVC cases. Prevalence of VD was higher in rural ($p>0.5$) and illiterate ($p>0.5$) patients. BV was strongly associated with douching (odds ratio 8.26) and moderately with use of condoms (odds ratio 1.6), whereas VVC showed minimal association. Use of cloths instead of sanitary pads was also a risk factor for BV (odds ratio 1.3) and with a minimal impact on VVC. Highly concordant self vs physician-collected results established the reliability of self-collected samples with Cohen's Kappa values of 0.95 (BV), 0.99 (VVC) and 1.0 (TV).

Conclusion Avoiding douching, using condoms and sanitary pads help in reducing the risk of acquiring VD. Reliability of self-collected swabs for diagnosis shall go a long way in strengthening National STI/RTI Program, especially in resource constrained settings.

P3.122 SIGNIFICANT DECREASE OF CD4+ T-CELLS BETWEEN RECENT AND LONG-TERM INFECTION IN HIV-1 SUBTYPES NON-B IN THE NORTHEAST BRAZIL

[1]Kledoaldo Oliveira De Lima, [2]Élcio Leal, [3]Ana Maria Salustiano Cavalcanti, [3]Daniela Medeiros Salustiano, Heloísa Ramos Lacerda. [1]*Post-graduation in Tropical Medicine, Federal University of Pernambuco, Recife, PE, Brazil*; [2]*Hospital das Clínicas, Federal University of Pernambuco, Recife, PE, Brazil*; [3]*Institute of Biotechnology, Federal University of Pará, Belém, PA, Brazil*; [4]*Sector of Virology, Central Laboratory of Public Health, Recife, PE, Brazil*

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Introduction Immunoassays for detection of HIV-1 recent infection are important in guiding prevention policies in more affected groups and, especially, in the monitoring of antiretroviral resistance when performed in conjunction with genotyping assays. The objective of this study was to evaluate the frequency of individuals with HIV-1 recent infection and to relate infection status to viral load, CD4+ T cells count and viral subtype.

Methods One hundred and one samples from individuals diagnosed with HIV-1 were obtained from five Voluntary and Counselling Testing Centres (VCTs) in the state of Pernambuco (Northeast - Brazil), from 2007 to 2009, and tested by BED-CEIA Enzyme Immunoassay for determination of recent/long-term infection. Then, the HIV-1 *pol* region was sequenced

through TRUGENE HIV-1 Genotyping assay. Phylogenetic analyses were performed by the maximum likelihood method with MEGA software.
Results Among the 101 sequences analysed, 54 (53.5%) were HIV-1 subtype B and 47 (46.5%), non-B subtypes. The recent infection rate was 22.2% (n=12) and 19.1% (n=09) for subtypes B and non-B. In non-B subtypes there were a significant decrease in CD4+ T cells count between recent and long-term infections compared to subtype B (p=0.002). There was no statistical difference in viral load levels and infection status for the analysed subtypes.
Conclusion Decreases in CD4+ T cells count in the course of infection by non-B subtypes may indicate a propensity for disease progression by these variants. Thus, genotyping, antiretroviral resistance, and infection status assessments are important for monitoring local epidemics.

P3.123 POPULATION GROWTH AND EVOLUTIONARY HISTORY OF HIV-1 B AND F SUBTYPES IN THE NORTHEAST BRAZIL

[1]Kledoaldo Oliveira de Lima, [2]Élcio Leal, [3]Ana Maria Salustiano Cavalcanti, [3]Daniela Medeiros Salustiano, [4]Heloísa Ramos Lacerda. *[1]Post-graduation in Tropical Medicine, Federal University of Pernambuco, Recife, PE, Brazil; [2]Hospital das Clínicas, Federal University of Pernambuco, Recife, PE, Brazil; [3]Institute of Biotechnology, Federal University of Pará, Belém, PA, Brazil; [4]Sector of Virology, Central Laboratory of Public Health, Recife, PE, Brazil*

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Introduction Despite low prevalence in the world, the HIV-1 subtype F is expanding in the state of Pernambuco, Northeast - Brazil, being the most prevalent subtype after subtype B. Increase of the frequency of other recombinants BF in the region, denoting the high capacity of recombination of subtype F with B. Thus, the objective of this work was to characterise the transmission dynamics between subtypes B and F in the state of Pernambuco, Northeast - Brazil.
Methods One hundred and fifty-six sequences of HIV-1 infected individuals were obtained from five Voluntary and Counselling Testing Centres (VCTs) in the state of Pernambuco (Northeast - Brazil), of which 103 were HIV-1 B and 53, HIV-1 F. Samples were collected between 2002 and 2009. We used the Bayesian Markov chain Monte Carlo (BMCMC) coalescent framework to estimate the ancestral genealogy, phylodynamics and evolutionary parameters such as nucleotide substitution rates per year and time to the most common ancestor (tMRCA) with BEAST package version 1.8.1.
Results Pattern of population growth are similar between subtype B in Brazil and in Pernambuco showing a pattern of steep exponential growth followed by a plateau in the diversity. Population dynamics of subtype F shows a moderate growth phase continuously expanding and the beginning of infection started later than that of global subtype F infection. The coalescent method also provided the date of introduction of HIV-1 in Pernambuco since the inferred time to the most recent common ancestral (tMRCA) was 1978 (95% CI: 1971–1981) and 1982 (95% CI: 1977–1986) respectively for the subtypes B and F.
Conclusion Introduction of subtype B occurred earlier in other regions of Brazil than in Pernambuco (Northeast, Brazil). Subtype F is in population expansion around the world and in Brazil. In addition, introduction of subtype F in Pernambuco (Northeast) was later than in the country (1982, CI95%: 1977–1986). These findings support the hypothesis that the viral variability of HIV-1 is increasing in Brazil with the spread of subtypes non-B.

P3.124 ADOLESCENTS LIVING WITH HIV/AIDS – DIFFERENT APPROACHES IN DIFFERENT MODES OF HIV TRANSMISSION

[1]Krysna Pires, [2]Eveline Xavier-Souza, [2]Maiara Timbó, [1]Raiza Trindade, [1]Camila Souza, [3]Ana Gabriela Travassos. *[1]Universidade do Estado da Bahia, Salvador – BA, Brazil; [2]Universidade Federal da Bahia, Salvador – BA, Brazil; [3]Centro Estadual Especializado em Diagnóstico, Assistência E Pesquisa (CEDAP), Salvador – BA, Brazil*

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Introduction Recently, the number of adolescents infected with HIV has been increasing worldwide, but there is still little information available on the characteristics of this population. The aim of this study is to compare the characteristics of adolescents living with HIV attending a Sexually Transmitted Infection (STI) Referral Centre according to the modes of transmission.
Methods A cross-sectional study evaluating adolescents between 10 and 19 years of age, carried out from January to August 2012, at the state STI reference centre in Bahia, Brazil. Sociodemographic and clinical data were obtained by reviewing charts and analysed through SPSS 20.0.
Results A total of 123 adolescents living with HIV were attended during the study period, 76.3% (90/118) of them acquired the virus through vertical transmission (VT), whereas 22.9% (27/118) acquired via sexual transmission (ST). Regarding the adolescents with VT, the group was younger than the ST, with 93.7%<16 years old (p<0.01, OR 20.35, 95% CI 6.70–61.83); 78.9% attended school (p<0.01, OR 0.15, 95% CI 0.04–0.61), 62.1% did not work (p=0.02), 55.2% denied use of alcohol (p<0.01, OR 0.07, 95% CI 0.01–0.65), and 98.7% also denied sexual debut (p<0.01, OR <0.01, 95% CI 0.00–0.03). On the other hand, patients with a ST infection started their sexual life earlier, with a mean age of 12.9 (±3.74) years, 93.8% of them had had previous gestation (p<0.01, OR 27.5, 95% CI 2.89–262.3), 75.0% had HPV co-infection (p<0.01, OR 11.5, 95% CI 2.03–64.78) and 88.9% had another STI in the period (p<0.01, OR 45.71, 95% CI 5.30–394.42). The VT group showed rates of 93,5% of AIDS diagnosis (p<0.01, OR 72., 95% CI 16.41–315.98) and 100% (p=0.01) had had opportunistic infections; 93,1% performed genotyping (p=0.02, OR 5.87, 95% CI 1.27–27.09) and 85.4% used ART (p<0.01, OR 8.54, 95% CI 2.72–26.85).
Conclusion We observed two distinct groups, defined according to the modes of transmission, both showing specific characteristics. Thus, is it evident the need of customise the health care and promotion according to each group.

P3.125 KNOWLEDGE ON SEXUALLY TRANSMITTED INFECTIONS/HIV, SEXUAL RISK BEHAVIOURS AND UTILISATION OF DROP-IN-CENTRES AMONG KEY AFFECTED POPULATION IN MYANMAR

[1]Kyaw-Min Htut, [1]Myo-Myo Mon, [2]Ye Aung. *[1]Ministry of Health And Sports, Yangon, Myanmar Burma; [2]Save The Children, Yangon, Myanmar Burma*

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