P333 SEXUALLY TRANSMITTED INFECTIONS IN WOMEN VICTIMS OF SEXUAL VIOLENCE IN VITORIA, BRAZIL

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Background Sexual violence increases the risk of sexually transmitted infections (STI) and pregnancy, which makes it essential to approach them as part of an integrated healthcare. The goal of this study was to analyze the frequency of STI and its prophylaxis in women victims of sexual violence.

Methods A retrospective cohort study including adolescent and adult women assisted in referral clinic was performed in Vitória, Brazil. Clinical records were reviewed from 2010 to 2019. Prevalence rates were calculated using data from STI diagnostic at the first visit and incidence rates using diagnostic from the follow-up visit.

Results Data from 814 women were reviewed. Most of them were adolescent (42.7%) and single (79.2%), the mean of sexual partners was 3.1 (SD±2.8), one third have not had the first sexual intercourse yet. Rape was the predominant type of sexual violence (90%), mainly perpetrated by one aggressor, unknown person in 46%. Recurrence of the aggression was observed in 24%. STI prophylaxis was performed in 44.3% and emergency contraception in 39.8%. The prevalence rates detected were 0.5% of syphilis and 0.1% of hepatitis B (HBV). Incidence rates were 1.2% of syphilis, 0.8% of HBV, 1.0% of hepatitis C and 1.9% of trichomoniasis. There were no cases of HIV. Physical violence and several partners increased the chance of syphilis by 15.9 times ($p=0.048$) and 1.3 times ($p=0.040$), respectively. Incidence of hCG positive test was 29.6%; 88.3% of women requested a legal termination of pregnancy and 67.7% did it. Receiving emergency contraception prophylaxis decreased in 85.6% the chances of pregnancy ($p < 0.001$).

Conclusion STI prevalence and incidence were low, even though STI prophylaxis has been performed in less than half of the women. These results emphasize the need of implementing public policies and strategies that guarantees the access to the sexual and reproductive rights in Vitória.

P334 ROLE OF NEIGHBORHOOD FACTORS ON RACIAL/ETHNIC DIFFERENCES IN SUSTAINED HIV VIRAL SUPPRESSION AMONG RYAN WHITE PROGRAM CLIENTS IN MIAMI, 2017

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Background Neighborhoods characterized by adverse socioeconomic factors may be associated with poor HIV care outcomes, including viral suppression, which varies by race/ethnicity. Health disparities are observed among racial/ethnic minorities in disadvantaged neighborhoods. Moreover, once a person is virally suppressed, it is imperative that suppression is sustained long-term to reduce risk of secondary transmission and disease progression to AIDS. Therefore, the study's objective was to examine the effect of neighborhood factors on the association between race/ethnicity and sustained viral suppression.

Methods A cross-sectional study was conducted using 6,491 people with HIV from the Miami-Dade County Ryan White Program dataset, in 2017. Neighborhood level data was collected from the American Community Survey. Indices were created using exploratory and confirmatory factor analysis for psychosocial and neighborhood level data. Multilevel mixed effects modeling was used to examine the effects of neighborhood characteristics on the association between race/ethnicity and sustained viral suppression (<200 copies/ml on all viral load test in a given year).

Results Three neighborhood indices were created (socioeconomic disadvantage index, residential instability index, racial/language homogeneity index), and were categorized into tertiles (low, moderate, high). Significant differences in race/ethnicity was observed within each neighborhood tertiles. Non-Hispanic Blacks had lower odds of sustained viral suppression in neighborhoods characterized by low socioeconomic disadvantage (adjusted odds ratio [aOR]: 0.39; 95% confidence interval [CI]: 0.20–0.74), moderate residential instability (aOR: 0.31; 95% CI: 0.15–0.65), and low racial/language homogeneity (aOR: 0.38; 95% CI: 0.16–0.88) and high (aOR: 0.38; 95% CI: 0.19–0.75), when compared to non-Hispanic Whites. Haitians also exhibited poor outcomes in moderate residential instability (aOR: 0.42; 95% CI: 0.18–0.97) and high racial/language homogeneity neighborhoods (aOR: 0.49; 95% CI: 0.26–0.93), when compared to non-Hispanic Whites.

Conclusions Racial/ethnic differences in rates of sustained viral suppression exist in different neighborhood characteristics. Findings indicate that neighborhood factors might affect optimal care for minorities.

P335 ASSESSMENT OF CHANGES AND COPING MECHANISMS IN A LARGE, STAND-ALONE HIV TESTING CENTRE, IN INDIA, DURING THE COVID-19 PANDEMIC

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Background The sudden emergence of the unprecedented Covid-19 pandemic, saw the world grappling with a never-before crisis situation in all walks of life. The repercussions were many, and each country, and discipline of medicine, handled it in the best way possible. Our HIV testing laboratory, catering to the large population of Delhi and neighboring states, faced many challenges and handled them, during the pandemic, which are discussed.

Methods The study-setting is the stand-alone Integrated Counseling and Testing Centre (ICTC) for HIV, located in the capital city of New Delhi, India. The study period included a full year from March 2020 to February 2021, when the Covid-19 pandemic hit the country. Various aspects of the changes in our HIV testing facility during the lockdown were studied, including- changes in footfall, demography of clients, availability of staff and supplies, numbers tested for HIV, HIV positivity and Covid-19 patients tested for HIV.

Results The study yielded mixed results, with some parameters showing a decline (numbers tested, female to male ratio, fall in numbers of children and elderly tested for HIV, fall in laboratory errors), some parameters remaining the same (kits and supplies, HIV positivity percentage of 2–4%), and some other parameters showing a distinct increase in numbers (efficiency

of laboratory staff as measured by fall in errors, improvement in competency assessment scores, attendance in training programs and compliance with standard precautions, documentation and record keeping). A totally new parameter included in this study was the testing of Covid-19 positive patients for HIV, with a positivity of 2.08%.

Conclusion In conclusion, this study yielded some interesting revelations on various aspects of working in an HIV testing laboratory. It has clearly demonstrated that adversities can be used as opportunities for improvement in work ethics, documentation, service providing skills and practice of universal work precautions.

P337 HIV PARTNER NOTIFICATION AMONG MSM LIVING WITH HIV IN GUANGDONG PROVINCE, CHINA: FINDINGS FROM A CROSS-SECTIONAL STUDY

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Background HIV partner notification is critical in preventing HIV transmission, but not widely used in many low and middle-income countries, including China. We conducted a cross-sectional survey to investigate the usage of partner notification (PN) for MSM living with HIV in China, and to identify factors that could influence their PN decisions towards different types of sexual partners.

Methods The study recruited MSM who were diagnosed as HIV positive in the past two years in six cities of Guangdong province, China. All participants were ≥ 18 years old and informed consented. Descriptive analysis was used to report the partner notification rates among different types of sexual partners, along with the top facilitators and barriers for PN. Logistic regressions were used to examine correlates of PN.

Results Among 5799 MSM with HIV, 1376 clicked the link and 944 completed the survey. Mean age was 29 (SD:7.6) and 674 (70.8%) identified gay. Overall, 65.1% (300/461), 46.4% (194/416) and 54.5% (30/55) notified at least one of their stable, casual, and female partners, respectively. 26.7% (165/617) of the stable male partners tested as HIV positive, while 6.8% (74/1091) of the casual partners tested positive. Important facilitators included stepwise disclosure to friends and HIV support groups, relational intimacy, and anonymous notification, while important barriers included anticipated HIV stigma and fear of discrimination.

Conclusions This study presents the most updated HIV PN data among MSM and contributes to the knowledge of PN in China by differentiating the partner types. It identifies important factors that could influence stable and casual PN decisions, which offers great implications for designing tailored partner services intervention in further research.

P338 SYNERGISTIC ACTIVITY OF AZITHROMYCIN PLUS CEPHALOSPORIN DUAL THERAPY FOR MULTIDRUG-RESISTANT N. GONORRHOEA IN INCREASING RESISTANCE ENDEMIC SETTING: A CHINA REGIONAL STUDY

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Background The emergence of multidrug resistance (MDR) in *Neisseria gonorrhoeae* is concerning, especially the co-occurrence of azithromycin resistance (AZMR) and decreased cephalosporin susceptibility (ECSD). We evaluated the feasibility of azithromycin and cephalosporin dual therapy to provide a treatment solution for MDR *N. gonorrhoeae* strains in Guangdong, China.

Methods A total of 3,609 *N. gonorrhoeae* strains were collected, and the minimum inhibitory concentrations (MICs) of various antibiotics were assessed for each strain using the agar dilution method. Among the identified MDR strains, 45 isolates were selected and analyzed by *N. gonorrhoeae* sequence typing for antimicrobial resistance (NG-STAR), *N. gonorrhoeae* multi-antigen sequence typing (NG-MAST), multi-locus sequence typing (MLST), and phylogenetic tree. The effectiveness of dual therapy was scored by a combination of the MIC and the fractional inhibitory concentration (FIC) index.

Results Among the selected isolates, a high degree of antibiotics resistance was observed: 11.54% of strains were resistant to AZM; 9.25% of strains displayed decreased susceptibility to ceftriaxone (CROD); and 11.84% were less susceptible to cefixime (CFMD). The proportions of isolates with both AZMR and ECSD were once up to 2.11% for AZMR/CFMD and 1.79% for AZMR/CROD. NG-STAR, NG-MAST, and MLST categorized the 45 MDR isolates into 35,

35, and 23 major genogroups, respectively, which could be divided into different evolutionary branches due to genetic diversity. These isolates could be effectively killed with the coadministration of less than 1 mg/L AZM and 0.125 mg/L ECS, with a synergistic effect of FIC<0.5.

Conclusions AZM plus ECS dual therapy remains effective against MDR *N. gonorrhoeae*.

P339 IMPACT OF A NEW RAPID SPECIALIST SEXUAL HEALTH RESULT SERVICE ON TIME FROM TESTING TO TREATMENT OF CHLAMYDIA TRACHOMATIS

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Background Unity Sexual Health, Bristol UK, introduced a Panther (Hologic Inc) system in November 2018 at point-of-care. This rapid *Neisseria gonorrhoeae* (GC) and *Chlamydia trachomatis* (CT) nucleic acid amplification test (NAAT) provides results to patients within 4–48 working hours compared with 1–2 weeks previously. Patients are now only treated if CT NAAT-positive, symptomatic and unable to wait for results, or a sexual contact of CT/GC within the preceding 2 weeks. We hypothesised the new service would result in more rapid treatment of CT/GC infections. We evaluate the effect on time to CT treatment.

Methods All new CT NAAT-positive cases attending over a 2-month period, 1 year before and 1 year after the introduction of the new service were evaluated (01/01/2018–28/02/2018 and 01/01/2020–28/02/2020). Dates of NAAT testing and treatment were obtained from electronic patient records. The one-sided Mann-Whitney U-test was used to compare time to treatment before and after service introduction.