

Results The majority of the 11876 participants included in the analysis were White, employed, and median age was 33 years. In 2013, overall and undiagnosed HIV prevalence was 13.6% (106/782) and 3.2% (25/782) respectively. Overall undiagnosed fraction remained unchanged: 34% (45/131) in 2000 and 24% (25/106) in 2013. Undiagnosed fraction among sexual health clinic non-attenders in last year remained unchanged: 62% (23/37) in 2000; 59% (10/17) in 2013. HIV testing in the last year increased: 26% (263/997) to 60% (467/777); among undiagnosed HIV+ men, it increased from 28.6% (10/35) to 66.7% (16/24). Compared to men aged >45, men aged 15–25 (AOR: 7.47, 95% CI: 1.56–35.74); compared to sexual health clinic attenders in the last year, non-sexual health clinic attenders (AOR: 4.39, 95% CI: 1.90–10.16) were more likely to have undiagnosed HIV.

Conclusions HIV testing has increased yet undiagnosed HIV remains unchanged. Strategies to increase HIV testing among young MSM and in non-sexual health clinics should be developed and evaluated.

Declaration of interest statement AMJ has been a Governor of the Wellcome Trust since 2011. The other authors declare that they have no conflicts of interest.

020.6 FIRST FORCED SEX AND SEXUAL BEHAVIOUR AFFECTING PREVALENCE OF HIV/AIDS AMONG MSM IN SOUTH INDIA

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Background Forced sex is the risk factor for psychological morbidities, HIV, and other sexually transmitted infections. Limited study on MSM are available in India and no systematic attempt has been made to know the impact of first forced sex with male and HIV. Therefore, the present study examined the prevalence of the first forced sex and its linkage with HIV infection in South India.

Methods The present study has been used data from the cross sectional survey known as Integrated Behavioural and Biological Assessment during 2009–10. The survey was conducted in the selected districts of states, Andhra Pradesh, Tamil Nadu and Maharashtra. The sample size of MSM was 3875. Bivariate and multivariate logistic regression analysis were used.

Results Those MSM who have reported of their first forced sex with males, are found more likely to be HIV positive (34.69% vs. 29.06% and OR = 1.297, $p < 0.05$) as compared to those MSM who did not have first forced sex with male. In Tamil Nadu, prevalence of first forced sex with male among MSM highest in Salem (57.1%) followed by Madurai (56.4%), and Dharmapuri (51.2%). In Andhra Pradesh, 23.5% MSM have had first forced sex with male in Hyderabad followed by Guntur (16.8%), East Godavari (8.8%) and Vizag (4.0%).

Conclusion The present study has found that first forced sexual intercourse with a male is a significant risk factor for the HIV infection among MSM in South India. Therefore, there is an urgent need to control the prevalence of first forced sex and transmission of HIV infection.

Disclosure of interest N/A.

021 - HIV and co-morbidity

021.1 PLATELET DERIVED SOLUBLE GLYCOPROTEIN VI DECREASES PRIOR TO CORONARY EVENT IN HIV POSITIVE PATIENTS

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Introduction Platelets play a key role in coronary artery disease (CAD). Glycoprotein VI (GPVI) is a platelet specific collagen receptor which is shed when activated. Soluble (s) GPVI is associated with CAD in the general population and lower levels have been found in patients taking abacavir. This trial was performed to determine if sGPVI was predictive of CAD in HIV.

Methods 24 HIV+ subjects with CAD (HIV+ cases) with stored plasma available in the 12 months before CAD diagnosis were age and sex matched 1:2 with 46 HIV+ subjects without CAD (HIV+ controls). 41 HIV negative controls (healthy controls) were used as comparators. HIV+ patients had two samples analysed; 12 and 1 month before CAD diagnosis; healthy controls had a single sample analysed (202 samples in total). sGPVI was determined by ELISA.

Results Of the combined HIV+ subjects 63 [90%] were male; mean 51 years; 92.8% taking antiretrovirals. HIV+ subjects (combined HIV+ cases and HIV+ controls) were more likely to smoke (34 [30.6%] v's 3 [7.3%], $p < 0.001$) than healthy controls. HIV+ cases were hypertensive (13 [54.1%] v's 5 [10.8%], $p < 0.001$) and had a family history of CAD (12 [52.1%] v's 9 [25.0%], $p = 0.033$) at higher rates than HIV+ controls. sGPVI was higher in HIV+ subjects (combined) than healthy controls (129.9 ng/ml [SD 59.5] v's 84.4 ng/ml [SD 46.1], $p < 0.001$). 12 months before event there was no difference in sGPVI between HIV+ cases and HIV+ controls (123.2 ng/ml [SD 61.7] v's 137.8 ng/ml [SD 63.5], $p = 0.369$). 1 month before event sGPVI was significantly lower in HIV+ cases (111.1 ng/ml [SD 45.0] v's 143.9 ng/ml [SD 56.1], $p = 0.016$).

Conclusion HIV+ subjects have higher sGPVI than healthy controls; sGPVI is lower prior to CAD event in HIV+. sGPVI may play an important role in promoting CAD in HIV.

Disclosure of interest statement No commercial funding was involved in this project.

021.2 ONE PROFILE OR MANY? PLASMA BIOMARKERS CXCL10, SCD163 AND SCD14 REVEAL DISTINCT ASSOCIATIONS WITH HIV TREATMENT RESPONSE, CHOICE OF TREATMENT REGIMEN, AND CARDIOVASCULAR RISK FACTORS

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