Results Totally, 3,130 cases were recruited into the study. 54.6% were males, the first case had been reported in 1990, and the highest incident case had been reported in the year 2004 with 461 cases followed by 2005 (543), and 2006(302) respectively. The highest cumulative case had been reported from Mae Fah Luang Hospital (25.8%), followed by Mae Suai hospital (18.8%). 46.0% were Akha, 19.7% were Lahu, and 9.5% were Yao. 38.8% were 31–40 years old, followed by 21–30 years (33.6%), and 41–50 years old (13.4%). 44.4% were agriculture, 32.0% were female. 91.6% were infected by sexual intercourse, 5.7% were mother to Child. 24.0% were receiving ARV, 30.7% were receiving OI treatment, and 9.5% were tested CD4 level. Male had higher of survival rate than female (p-value > 0.001), and male were younger than female at the age of infection (p-value > 0.001). There was statistically significant difference of mode of infection by tribe (p-value > 0.001).

Conclusion Specific health education programmes and empower them for using condom are needed to setting up for HIV/AIDS prevention and control among hill tribe people in Thailand.

**P3.220** INCIDENCE AND PREVALENCE OF HIV INFECTIONS AMONG FISHERMEN AROUND LAKE VICTORIA IN KISUMU KENYA

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Background Men with high-risk sexually behaviour are important drivers of HIV/STIs infections in the general population. Prevention of HIV/STIs among such men could potentially reduce these infections especially among women - who bear the greatest HIV/STIs disease burden in sub Saharan Africa. We sought to understand immunovirology of HPV infections among fishermen. This evaluation highlights the rate of HIV infections in this population.

Methods Three hundred fishermen were recruited and followed up every 3 months for 1 year. HIV, syphilis serology, CD4/CD8 and complete blood count were evaluated and a demographic questionnaire administered. Data was analysed by SPSS ver18.

Results The 300 men recruited into this study had mean age of 28 years, 76% were married and 57% had only basic education. The mean for age of sexual debut and lifetime sexual partners was 15 years and 10 respectively. They had a modal sexual activity of 3 times/week and a mean of 3 rounds/sexual act. Sixty one (20%) had practised oral sex. Thirty six (12%) and 80 (27%) of men washed their genitals, before and after sex respectively. A significant number of men; 183 (61%) P < 0.01 and 118 (39%) P < 0.05, never used condoms with their regular sexual partners and new sexual partners respectively. They had a mean CD4 and white blood cell (WBC) count of 850 cells/ml and 5.6 × 10⁸/L of blood. Baseline HIV and syphilis prevalence was 23% and 9% respectively. The HIV incidence during the 1 year follow-up was 4.2%. Fishermen HIV burden was over 5 times the Kenyan national HIV prevalence of 7%.

Conclusion Fishermen in this context, comprise a young sexually high-risk, highly-migratory population with high HIV incidence and prevalence. Low condom use coupled with concurrent multiple sexual partnerships make them a potential key population who require targeted prevention strategies to reduce HIV/STI infections and transmission.

**P3.222** HIGH RISK HUMAN PAPILLOMAVIRUS VIRAL LOAD AND PERSISTENCE AMONGsterosexual NEGATIVE AND HIV-POSITIVE MEN

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Background High-risk human papillomavirus (HR-HPV) viral load is associated with transmission and persistence in women. It is unknown whether viral load is associated with HR-HPV persistence in HIV-negative or HIV-positive men.

Methods 703 HIV-negative and 233 HIV-positive heterosexual men participated in a male circumcision trial in Rakai, Uganda. Penile swabs were tested at enrollment and 6, 12 and 24 months for HR-HPV using the Roche HPV Linear Array, which provides a semi-quantitative measure of HPV shedding by hybridization band intensity (graded:1–4). Prevalence risk ratios (PRR) were used to estimate the association between HR-HPV viral load and persistent detection of type-specific HR-HPV infection.

**P3.221** ORAL AND INJECTABLE HORMONAL CONTRACEPTION DECREASE RISK OF BACTERIAL VAGINOSIS BUT ORAL CONTRACEPTION MAY INCREASE RISK OF VAGINAL CANDIDIASIS: A SYSTEMATIC REVIEW OF PUBLISHED AND UNPUBLISHED DATA


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Results At least one HR-HPV was identified in 264 HIV-negative women (37.6%, 403 genotypes total) and 164 HIV-positive women (70.4%, 399 genotypes total) at enrollment. Among HIV-negative women, younger and unmarried men were more likely to have higher viral loads. HR-HPV genotypes with high viral load (grade:3–4) at enrollment were more likely to persist than HR-HPV genotypes with low viral load (grade:1–2) among HIV-negative women (month 6: adjPRR = 1.80, 95% CI: 1.31–2.47; month 12: adjPRR = 2.04, 95% CI: 1.39–3.01), and HIV-positive women (month 6: adjPRR = 1.33, 95% CI: 1.06–1.67; month 12: adjPRR = 1.70, 95% CI: 1.16–2.50). Long-term persistence of HR-HPV was more frequent among HIV-positive men compared to HIV-negative men (month 24: adjPRR = 2.24, 95% CI: 1.46–3.45), and HR-HPV infections with low viral loads were detected more frequently among HIV-positive men at all follow-up visits (6 months: PRR = 1.81, 95% CI: 1.17–2.97; 12 months: PRR = 1.43, 95% CI: 0.82–2.42; 24 months: PRR = 2.9, 95% CI: 1.53–5.53).

Conclusions HR-HPV genotypes with high viral load are more likely to persist among HIV-positive and HIV-negative men, though persistence was more common among HIV-positive men. The results may explain the association between high HR-HPV viral load and transmission to women and increased levels of HR-HPV persistence in HIV-positive men.