

P1-S5.18 ABSTRACT WITHDRAWN

P1-S5.19 MARRIAGE DISSOLUTION AND HIV PREVALENCE IN RURAL ZIMBABWE 2003–2008

doi:10.1136/sextrans-2011-050108.197

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Background Over the past decade, HIV prevalence in Zimbabwe has significantly declined, with recent research attributing this decline to wide-spread behaviour change such as reductions in extramarital sexual partnerships. Despite these reductions in risky sexual behaviours, infections could still be transmitted from one marital union to another as divorced or widowed HIV-positive persons remarry.

Methods Using information collected through face-to-face interviews in 2003–2005 AND 2006–2008, we compared HIV prevalence and basic demographics among women and their spouses (married, or in a long-term or cohabiting relationship for >12 months) in Manicaland, Zimbabwe. We used logistic regression to assess differences in marital history and basic demographics between HIV seronegative concordant couples, HIV serodiscordant couples and HIV seropositive concordant couples.

Results In nearly one-third of the 2836 (27.8%) of marital unions interviewed, at least one member was infected with HIV (n=787); both members were HIV positive in 372 couples (13%). Of the 415 serodiscordant couples, 157 (5.5%) were serodiscordant female positive. Overall, compared to those in seronegative concordant (NC) partnerships, women in female-positive discordant (FP) or seropositive concordant (PC) partnerships were older (25–34 years vs 15–24; OR 1.7, 95% CI 1.17 to 2.47; OR 3.35, 2.52 to 4.45, respectively), more likely to be divorced (FP OR 4.19, 2.83 to 6.20; PC OR 4.12, 3.10 to 5.48), and more likely to have been widowed (FP OR 7.83, 3.65 to 16.76; PC OR 7.86, 4.30 to 14.36). Similar but weaker trends in divorce/widowhood were observed among men in male-positive discordant relationships compared to men in SN relationships. Women in FP and PC partnerships both were nearly three times as likely to report >1 lifetime sex partners than women in SN partnerships (FP OR 2.82, 2.02 to 3.92; PC OR 2.86, 2.27 to 3.59); mean lifetime sex partners reported by women in FP and PC partnerships was similar (FP: 2.11 lifetime partners; PC 2.06).

Conclusions HIV prevalence is high among persons in long-term, stable partnerships, and strongly associated with one or both partners reporting a history of divorce or being widowed. In particular, widowed and divorced women may play an important role in ongoing HIV transmission dynamics. VCT services and other interventions that target couples should be promoted among divorced and widowed individuals.

P1-S5.20 MULTI-LEVEL ANALYSIS OF THE PREDICTORS OF HIV PREVALENCE AMONG PREGNANT WOMEN ENROLLED IN SENTINEL SURVEILLANCE IN FOUR SOUTHERN INDIA STATES

doi:10.1136/sextrans-2011-050108.198

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Background The heterogeneity of HIV epidemic in the districts of four Southern states of India is reflected in HIV prevalence in

pregnant women (ANC HIV prevalence) as well. Earlier studies have attempted to identify district level high risk population parameters that influenced ANC HIV prevalence. It is important to identify other district and individual level factors that influence ANC HIV prevalence to plan effective interventions.

Methods The data from cross-sectional studies, known as integrated biological and behavioural assessments (IBBA), carried out between 2004 and 2007 among female sex workers (FSWs), their clients and men who have sex with men (MSM) in 24 districts were used to generate district-level variables concerning high-risk sub-population. The data on HIV sentinel surveillance in the ANC population (dependent variable) were obtained from the National AIDS Control Organization (NACO) for the same years. Other district level data were obtained from various governmental agencies and other reliable sources. Multilevel logistic regression analysis was used to identify individual and district-level factors associated with ANC HIV prevalence.

Results The mean annual ANC HIV prevalence between 2004 to 2007 in the 24 districts considered ranged from 0.25 to 3.25%. In the multilevel model, individual level factors such as age ≥ 25 years [Adjusted OR (AOR): 1.49; 95% CI 1.27 to 1.76], being illiterate (AOR: 1.64; 95% CI 1.07 to 2.53) and being employed (AOR: 1.38; 95% CI 1.17 to 1.64) were significantly associated with high risk of being infected by HIV. HIV prevalence among FSWs at the district level, which was a significant high risk population parameter in the earlier studies, remained significant in the current study (AOR: 1.03; 95% CI 1.01 to 1.05). The only other district level factor which was considered in the final model was percentage of women who married below age of 18 years (AOR: 1.02; 95% CI 1.00 to 1.04).

Conclusion HIV prevalence among FSWs is a key determinant of HIV prevalence among pregnant women in Southern India. Illiteracy of women and high prevalence of women marrying under 18 years at district level are both indicators of low socio economic status. Therefore in addition to targeted interventions for FSWs, awareness programs among individuals from lower socio economic status might help in reducing incidence of HIV in pregnant women.

P1-S5.21 SELF-ESTEEM AND STI/HIV PREVALENCE AMONG RESIDENTS OF A TANZANIAN SUGAR PLANTATION

doi:10.1136/sextrans-2011-050108.199

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Background Sexually transmitted infections (STIs), including HIV, lead to significant reproductive morbidities worldwide. The association between risky sexual behaviours and increased STI/HIV prevalence has been well-documented. In addition, low self-esteem appears to lead to higher-risk sexual behaviours. However, the direct association between self-esteem and STI/HIV has not been well studied. We aimed to examine whether self-esteem directly affects STI/HIV prevalence, after adjusting for risky sexual behaviour.

Methods We conducted a secondary analysis of a cross-sectional study of sugar plantation residents in Tanzania. The 2004 study included a self-administered survey with self-esteem assessment and testing for syphilis, herpes simplex virus type 2 (HSV-2) and HIV. We restricted our analysis to individuals with valid STI/HIV results and complete self-esteem data. Through principal component analysis, the 8-item self-esteem scale was reduced to a single variable. This variable was further categorised as low, medium, and high self-esteem and was the primary exposure variable in a multivariable log binomial model with a combined outcome representing any prevalent STI/HIV (syphilis, HSV-2, or HIV).