Trends of Reported HIV Sexual Risk Behaviour and HIV Incidence Among Fisher Folk in Uganda Receiving Clinic-Based Routine HIV Counseling and Testing

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Abstract

HIV counseling and testing (HCT) has been shown to reduce HIV risk behavior and is central to HIV prevention programs. We investigated risk behavior and HIV incidence trends in a fisher folk cohort on Lake Victoria, Uganda. HIV negative volunteers aged 18–49 years, at high risk of HIV infection and willing to undergo HCT were enrolled. At every quarterly visit, they received HCT. Condoms and STI treatment were also provided. Risk behavior data on alcohol consumption before sex, multiple or new sex partners, condom use and exchange of gifts for sex in the past 3 months were collected at baseline and every 6 months for 2 years. We fitted multilevel logistic regression models to investigate the trends. A total of 428 (63% men) volunteers, mean age 28 years were enrolled. There were significant reductions in reported risk behavior over the 2-year follow-up. The proportion reporting ≥ 2 partners decreased from 80% at baseline to 45% at month 6 and to 43% at month 24 for males; for females the decrease was from 42% at baseline to 13% at month 6 and to 6% at month 24; P < 0.01). Similarly there were significant reductions among men (P = 0.01) reporting new partners but of borderline statistical significance among females (P = 0.09). In both sexes there were significant decreases in reported non-condom use, transactional sex and in having sex when drunk. HIV incidence (in brackets 95% CI) reduced from 8.2/100 person years (5.1-13.5), to 7.3 (5.0-10.6), 6.5 (4.6-9.1) and 6.0 (4.3-8.3) at 6, 12, 18 and 24 months respectively (p = 0.21). In this study there was a substantial reduction in self-reported risk behavior in the first 6 months and marginal reduction in the later period. However, a modest HIV incidence reduction was observed. This calls for an urgent need for combination prevention strategies in this population.

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