

## **HIV prevalence and associated risk factors among individuals aged 13-34 years in rural western**

### **Abstract:**

To estimate HIV prevalence and characterize risk factors among young adults in Asembo, rural western Kenya. Community-based cross-sectional survey. From a demographic surveillance system, we selected a random sample of residents aged 13-34 years, who were contacted at home and invited to a nearby mobile study site. Consent procedures for non-emancipated minors required assent and parental consent. From October 2003 - April 2004, consenting participants were interviewed on risk behavior and tested for HIV and HSV-2. HIV voluntary counseling and testing was offered. Of 2606 eligible residents, 1822 (70%) enrolled. Primary reasons for refusal included not wanting blood taken, not wanting to learn HIV status, and partner/parental objection. Females comprised 53% of 1762 participants providing blood. Adjusted HIV prevalence was 15.4% overall: 20.5% among females and 10.2% among males. HIV prevalence was highest in women aged 25-29 years (36.5%) and men aged 30-34 years (41.1%). HSV-2 prevalence was 40.0% overall: 53% among females, 25.8% among males. In multivariate models stratified by gender and marital status, HIV infection was strongly associated with age, higher number of sex partners, widowhood, and HSV-2 seropositivity. Asembo has extremely high HIV and HSV-2 prevalence, and probable high incidence, among young adults. Further research on circumstances around HIV acquisition in young women and novel prevention strategies (vaccines, microbicides, pre-exposure prophylaxis, HSV-2 prevention, etc.) are urgently needed.