

Prevalence and risk factors for sexually transmitted infections in a high-risk occupational group: the case of fishermen along Lake Victoria in Kisumu, Kenya.

Abstract:

The aim of this study was to assess prevalence and risk factors for sexually transmitted infections (STIs) among fishermen along Lake Victoria, Kenya. This cross-sectional study surveyed 250 fishermen from beaches in Kisumu District using proportional-to-size sampling based on the number of registered boats per beach. Participants provided demographic and sexual behaviour information, blood for HIV-1 herpes simplex virus type 2 (HSV-2) and syphilis serological tests urine for transcription-mediated amplification assays for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* and penile and scrotal swabs for human papillomavirus (HPV) DNA assay. Consistent condom use with the three most recent sexual partners was reported by 30%; 38% reported concurrent sexual partnerships and 65% reported ever having transactional sex. HIV seroprevalence was 26%, HSV-2 seroprevalence by Western blot assay was 58% and 9.5% were rapid plasma reagin and *Treponema pallidum* particle agglutination assay positive. Genital HPV DNA of any type was detected in 57.2% with 74% of these having two or more HPV types. *C. trachomatis* and *N. gonorrhoeae* were detected in 3.2% and 1.2% respectively. Risk factors for syphilis seropositivity included working on multiple beaches during the past year (adjusted odds ratio [AOR] 3.81; 95% confidence interval [CI] 1.29-11.28). HPV infection was associated with owning a radio which is a marker for higher socioeconomic status (AOR 6.33; 95% CI 2.94-7.14) and reporting transactional sex with the most recent sexual partner (AOR 3.03; 95% CI 1.23-7.69). In conclusion, 90% of fishermen had evidence of one or more STIs. This exceptionally high-risk occupational group represents a high priority for preventive interventions.