

# **Epidemiology of human papillomavirus infection among fishermen along Lake Victoria Shore in the Kisumu District, Kenya**

## **Abstract:**

The epidemiology of human papillomavirus (HPV) infection in men in Kenya is largely uncharacterized. We set out to determine the prevalence and determinants of HPV infection among sexually active fishermen along Lake Victoria in the Kisumu district of Kenya.

**METHODS:** Genital swabs were obtained from 250 consenting fishermen from 18 beaches and a detailed sociodemographic questionnaire was administered. HPV positivity was determined by polymerase chain reaction amplification and detected by dot blot hybridisation with generic HPV and beta-globin probes. HPV positive samples were genotyped using the Roche Linear array assay. **RESULTS:** Overall, 144 (57.6%) fishermen had detectable HPV DNA, 106 (42.4%) were infected with oncogenic HPV types, with HPV-16 being the most frequent type (12.4%). Among HPV positive men, 105 (72.9%) were infected with more than one HPV type and 20 (13.9%) were infected with more than six different types. HIV seropositive men (PR 1.49, 95% CI 1.19 to 1.86) and those divorced or separated (PR 1.62, 95% CI 1.13 to 2.33) were more likely to be infected with HPV. HIV infection (PR 1.22, 95% CI 1.01 to 1.47) was the only factor independently associated with infection with multiple types of HPV. **CONCLUSION:** The prevalence of oncogenic HPV infection is high among this population and is associated with HIV serostatus and marital status. This community could benefit from enhanced sexually transmitted infection and HIV prevention interventions.