Abstract

BACKGROUND: A cross-sectional survey was performed to determine the seroprevalence and correlates of human immunodeficiency virus (HIV) infection among long-distance truck drivers in Kenya. METHODS: Truck drivers along the Mombasa-Nairobi highway were enrolled at a roadside research clinic. A standardized interview and serologic evaluation for HIV and syphilis were conducted. RESULTS: We enrolled 970 truck drivers and their assistants of whom 257 (27%) had HIV antibodies. In univariate analysis, HIV infection was correlated with older age, non-Kenyan nationality, Christian religion, longer duration of truck driving, travel outside of Kenya, less frequent visits to wives, and more frequent visits to prostitutes. Uncircumcised status, history of genital ulcer disease or urethritis during the previous 5 years, and a positive Treponema pallidum hemagglutination assay for syphilis were each associated with positive HIV serostatus. Univariate correlates of uncircumcised status included younger age, non-Kenyan nationality, Christian religion, travel outside of Kenya, and less frequent visits to prostitutes. There was a significant association between uncircumcised status and 5-year history of genital ulcer disease or serologic evidence of syphilis, but not with 5-year history of urethritis. In multivariate analysis, HIV infection was independently associated with uncircumcised status (adjusted odds ratio [OR], 4.9; 95% confidence interval [CI], 2.8 to 8.4), history of genital ulcer disease (adjusted OR, 2.4; 95% CI, 1.5 to 4.1), history of urethritis (adjusted OR, 1.8; 95% CI, 1.1 to 2.9), more frequent sex with prostitutes (more than once per month; adjusted OR, 1.7; 95% CI, 1.1 to 2.8), and positive T pallidum hemagglutination assay (adjusted OR, 1.2; 95% CI, 1.0 to 1.4). The attributable risk percentage for the association between HIV and uncircumcised status was 70%, and the population attributable risk was 25%. CONCLUSIONS: Truck drivers in east Africa are at high risk of HIV infection. The strongest correlates of HIV seropositivity were uncircumcised status and history of both ulcerative and nonulcerative sexually transmitted diseases.