Abstract:

Globally, heterosexual intercourse is the primary route of HIV-1 (HIV) transmission. It follows that mechanisms that protect against HIV infection are likely operative at the genital mucosa. In HIV-resistant Kenyan sex workers who are highly exposed to HIV infection yet remain uninfected, protection correlates with HIV-specific immune responses and genetic factors. However, these factors do not entirely explain this model of natural immunity to HIV. We hypothesized that protection may be mediated by innate immune proteins in the genital tract of HIV-resistant sex workers.