

# **Comparison of the declines in CD4 counts in HIV-1-seropositive female sex workers and women from the general population in Nairobi, Kenya**

Bwayo Job J.; Nagelkerke NJ.; Moses S.; Embree J.; Ngugi Elizabeth N.; Mwatha A.; Kimani, J; Anzala A.; Choudhri S.; Achola JO.

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## **Abstract:**

Studies from Kenya have reported rapid clinical disease progression among HIV-infected professional sex workers. The reasons for this rapid decline are unknown. To better understand factors influencing the course of disease, HIV-1 disease progression was explored in terms of declines in CD4 counts. Two samples from Nairobi, Kenya, were studied, one from a cohort of female sex workers and another, as a comparison group, from mothers enrolled in an HIV-1 vertical-transmission study. A Markov model was used to analyze transitions between HIV-1 disease stages as defined by CD4 counts. It appears that sex workers experience a rapid decline in CD4 counts, consistent with earlier findings of rapid clinical disease progression among individuals in this group. The rate of decline in CD4 counts among the mothers appears to be lower. It is speculated that either intensive exposure to sexually transmitted pathogens or infection with several strains of HIV-1 may account for the rapid disease progression among female sex workers