

Abstract:

Objectives: To monitor and analyse trends in HIV-1 seroprevalence among antenatal women in Nairobi, Kenya. **Design:** Six sequential surveys were carried out among antenatal clinic attenders at four Nairobi City Council health centres between November 1991 and April 1997. **Methods:** A total of 6828 women attending for first antenatal clinic visit were administered a standard questionnaire to obtain demographic information and were screened for HIV-1. **Results:** HIV-1 seroprevalence rose from 12.1% in the first survey to 16.2% in the third, completed in October 1993. No rise was observed in subsequent surveys, and seroprevalence among women under the age of 20 declined after the third survey. Significant differences in seroprevalence ($P < 0.001$) were observed in all survey rounds between women who reported that their province of origin was Nyanza (22.4% overall), compared with those from other provinces in western Kenya (14.1%), and the eastern group of provinces (8.9%). The rise in HIV-1 seroprevalence observed between 1991 and 1993 was almost entirely attributable to the rising seroprevalence among women from Nyanza. There were considerable differences in HIV-1 seroprevalence among the four health centres, partly accounted for by differences in the proportion of clinic attenders from different provinces of origin, which also changed significantly over time. **Conclusions:** HIV-1 seroprevalence has stabilized in antenatal women attending these health centres in Nairobi, and may be declining among women in the youngest age group. This may reflect stabilization of HIV-1 incidence, but further observation is required. The levels of infection among Nairobi residents reflect the evolution of the HIV epidemic in their provinces of origin, and changing client composition influences HIV-1 seroprevalence at different clinics. HIV sentinel surveillance should be carried out at multiple sites in large urban centres to monitor accurately the evolution of the HIV epidemic and the impact of control efforts in reducing transmission.