

HIV AND PRE-ECLAMPSIA: IS THERE A CONNECTION?

ABSTRACT

Objective

In view of recent suggestions that HIV infection may protect against pre-eclampsia, this study was done to estimate whether untreated HIV positive pregnant women have a lower rate of preeclampsia-eclampsia than HIV negative women.

Methods

Subjects for this study were pregnant women from Soweto, South Africa, who gave birth from March to December 2002 at midwife-run clinics or at the Chris Hani Baragwanath Hospital, and in whom the HIV status was known. A sample size calculation indicated that 2588 subjects would be required to show statistical significance at $P < 0.05$ with a power of 80% for a reduction in the rate of preeclampsia from 8% to 5% with HIV seropositivity, assuming an HIV seroprevalence rate of 30%. Data collection was by record review from randomly selected patient files and birth registers.

Results

In the total sample of 2600 women, 1797 gave birth at the hospital and 803 at the midwife-run clinics. The HIV seroprevalence rate was 27.1%. Hypertension was found in 17.3% of women, with 5.3% having preeclampsia-eclampsia. The rates of preeclampsia-eclampsia were 5.2% in HIV negative and 5.7% in HIV positive women ($P = 0.61$). CD4 count results were available for only 13 women (0.5%).

Conclusion

HIV seropositivity was not associated with any reduction in the risk of developing preeclampsia-eclampsia.