The effect of rapid HIV-1 testing on uptake of perinatal HIV-1 interventions: a randomized clinical trial.

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Abstract

OBJECTIVE:

We examined whether HIV-1 testing using a rapid assay increases the proportion of pregnant women obtaining HIV-1 results and the uptake of perinatal HIV-1 interventions.

METHODS:

Pregnant women attending public health clinics in Nairobi were offered voluntary counselling and testing for HIV-1. Consenting women were randomly assigned to receive either rapid or conventional HIV-1 testing. Women randomly assigned to rapid testing were allowed to receive same-day results or to return later. The results for women randomly assigned to conventional enzyme-linked immunosorbent assay (ELISA) testing were available after 7 days. HIV-1-infected women were referred for antiretroviral prophylaxis to prevent mother-to-child transmission of HIV-1.

RESULTS:

Among 1282 women offered voluntary HIV-1 testing and counselling, 1249 accepted testing, of whom 627 were randomly assigned to rapid testing and 622 to conventional testing. The median duration between testing and obtaining results was 0 days for women who received rapid testing compared with 11 days for women who received conventional testing. The percentage receiving HIV-1 results was significantly higher among women who received rapid testing compared with conventional testing. Of 161 HIV-1-seropositive women, only 24 received antiretroviral prophylaxis. The uptake of perinatal HIV-1 interventions did not differ between HIV-1-seropositive women randomly assigned to rapid testing or conventional ELISA testing.

CONCLUSION:

Rapid HIV-1 testing significantly increased the proportion of women receiving HIV-1 results, which is important for sexual and perinatal HIV-1 prevention. The challenge remains to improve the uptake of perinatal HIV-1 interventions among HIV-1-seropositive women.

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