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Design of the bibliographic retrieval of this issue

**Databases:** Current Contents Life Sciences, Clinical Medicine, Social & Behavioral Sciences
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**Number of citations screened for this issue:** 1116

**News Groups:** AFRO-NETS, AMEDEO, CABA, Kaiser, Medscape, ProCAARE, RHO, UNAIDS e-Workspaces

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**Subject Headings/Subheadings**
- Conference summary
- Contraception
- Gynaecology
- Infant feeding/Breastfeeding
- MTCT (Mother-to-Child Transmission)
- Obstetrics
- PMTCT/ARV (Prevention of Mother-to-Child Transmission/AntiRetroVirals)
- Primary prevention of sexual transmission/VCT (Voluntary Counselling and Testing)
- Termination of pregnancy/Abortion

**Citation format** (by alphabetical order of the authors)

**Author(s).** Title. Source.

**Notes** (prepared by the Bordeaux Working Group)

**Author address**, if available (for reprints)

**URL**, if available (link to author abstract/full text/journal TOC)

**Subject Headings**

Abstract: In 1999, for the first time in South Africa, a Mother-to-Child HIV Transmission (MTCT) prevention programme was implemented at the routine primary care level and not as part of a research protocol. A total of 264 women attending prenatal care in these clinics were interviewed in Xhosa using a standardized questionnaire. All had been offered HIV testing, and 95% had accepted. Women who had not been tested were four times more likely to believe that in the community families reject HIV-positive women (p < 0.005). Of women who tested, 19% were HIV positive and 83% had told their partner that they had taken the test. HIV-positive women who had not disclosed testing to their partners were three times more likely to believe that, in the community, partners are violent towards HIV-positive women (p < 0.005); 86% stated that they would have taken AZT if found to be HIV positive. Only 11% considered that the use of formula feeding indicated that a woman was HIV positive. In conclusion, routine prenatal HIV testing and interventions to reduce perinatal HIV transmission are acceptable to the majority of women in a South African urban township, despite an awareness of discrimination in the community towards HIV-positive women.

PMTCT/ARV, Infant feeding/Breastfeeding


Editorial Note: Several reactions have been published in the correspondence section of the Lancet (January 17, 2004) to the paper by Jackson et al on the long-term results of the HIVNET 012 nevirapine trial (see IR 3 (10)). In particular, Hudson highlights the lower postnatal transmission rate in the HIVNET 012 trial compared to what was reported in the PETRA zidovudine+lamivudine trial and proposes several leads to explain this difference.

Address: Papua New Guinea Institute of Medical Research, PO Box 60, Goroka, EHP 441, Papua New Guinea

PMTCT/ARV


Abstract: Prevalence of placental malaria in human immunodeficiency virus (HIV) type 1-infected and -uninfected women and the effect of placental malaria on genital shedding and perinatal transmission of HIV-1 were examined. Genital samples for HIV-1 DNA RNA were collected during labor. Infants were tested for HIV-1 at 1 day and 6 weeks postpartum. Placental malaria was diagnosed by histopathological examination: 372 placentas of HIV-1-infected women and 277 of HIV-1-uninfected women were processed. A higher prevalence of placental malaria was seen in HIV-1-infected women. No association was found between placental malaria and either maternal virus load, genital HIV-1 DNA, or HIV-1 RNA. Placental malaria did not correlate with in utero or peripartal transmission of HIV-1.

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MTCT


Abstract: Objectives: To evaluate the safety and feasibility of zidovudine and lamivudine (AZT/3TC) given to HIV infected pregnant women and their infants in Rio de Janeiro, Brazil. Methods: This open label phase II study enrolled 40 HIV infected antiretroviral naive women greater than or equal to 20 weeks gestation, CD4 < 500 cells x 10(6)/l, from two public hospitals. Treatment: fixed dose AZT 300 mg/ 3TC 150 mg by mouth every 12 hours until labour; AZT 300 mg by mouth every 3 hours until delivery; infants: AZT 4 mg/ kg every 12 hours plus 3TC 2 mg/ kg every 12 hours for 6 weeks. Blood haematology and chemistry were monitored; adherence evaluated by pills count; efficacy measured by changes in lymphocyte (CD4) and viral load, and by HIV RNA-PCR tests performed at birth, 6 and 12 weeks, to diagnose infant infection. No women breast fed. Results: Patient characteristics: mean age 24.48 (SD 3.5) years; gestational age 24.5 (4.5) weeks; AZT/3TC duration 14.4 (4.4) weeks; vaginal delivery: 11/ 39;
caesarean section: 28/ 39. Entry and pre-labour CD4: 310/ 486 cells x 10^6/ l (p < 0.001); entry and pre-labour
viral load: 53 818/ 2616 copies/ml (p < 0.001). Thirty nine women tolerated treatment with > 80% adherence; one
was lost to follow up. Five newborns were excluded from 3TC receipt. All 39 babies were uninfected.
Haematological toxicity in newborns was common: anaemia in 27; neutropenia in five (two severe); platelets counts
< 100 000 in two. All values recovered on study completion. Conclusions: Fixed dose AZT/ 3TC is well accepted,
gives improvements in CD4 and viral load; no infants were HIV infected. Haematological toxicity in infants needs
careful monitoring.

Editorial Note: A small scale study with results in the line of the PETRA trial. No resistance data is provided in this
report, an important issue with the use of lamivudine-containing PMTCT regimens.

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PMTCT/ARV

Lohman BL, Slyker J, Mbori Ngacha D, Bosire R, Farquhar C, Obimbo E, Otieno P, Nduati R, Rowland Jones S and
John Stewart G. Prevalence and magnitude of human immunodeficiency virus (HIV) type 1-specific
Abstract: Human immunodeficiency virus (HIV) type 1-specific cell-mediated immunity of breast milk may
influence the likelihood of mother-to-child transmission of HTV-1 via breastfeeding. In breast-milk specimens
collected during the first month postpartum from HIV-1-seropositive women in Nairobi, HIV-1 gag specific cellular
responses were detected in 17 (47%) of 36, and env-specific cellular responses were present in 20 (40%) of 50.
Peripheral blood lymphocyte responses against either gag or env were detected in 35 (66%) of the 53 subjects, 18
(51%) of whom had positive gag or env responses in their breast milk. In paired analyses of blood and breast milk,
the mean magnitude of responses to env or gag stimulation in breast milk was significantly higher than that in blood
and remained higher in breast milk after normalization of responses according to CD8(+) lymphocyte count. These
results suggest that CD8(+) lymphocytes present in breast milk have the capacity to recognize HIV-1-infected cells
and may be selectively transported to breast milk to reduce either viral replication or transmission in breast milk.
Address: Dr. Grace John-Stewart, International AIDS Research and Training Program, University of Washington,
325 Ninth Ave., Box 359909, Seattle, WA 98104 (gjohn@u.washington.edu)

MTCT, Infant feeding/Breastfeeding

Abstract: The HIV/AIDS epidemic intersects with the problem of maternal mortality in many circumstances. The
extent of the contribution of HIV/AIDS to maternal mortality is difficult to quantify, as the HIV status of pregnant
women is not always known. HIV infection and AIDS-related deaths have become one of the major causes of
maternal mortality in many resource-poor settings. HIV impacts on direct (obstetrical) causes of maternal mortality
by an associated increase in pregnancy complications such as anaemia, post-partum haemorrhage and puerperal
sepsis. HIV is also a major indirect cause of maternal mortality by an increased susceptibility to opportunistic
infections such as Pneumocystis carinii pneumonia, tuberculosis and malaria. Appropriate antiretroviral therapy
started in pregnancy could reverse the toll of HIV-related maternal mortality. Without such efforts and increased
HIV prevention, the gains achieved by safe motherhood programmes will be lost in the future.
Editorial note: A review paper emphasizing the need to design comprehensive programmes combining PMTCT,
safe motherhood and women treatment for their own HIV infection.
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PMTCT/ARV, Gynecology/Obstetrics

**Abstract:** Vertical HIV transmission rates and associated factors among mother-infant pairs cared for at a Brazilian reference centre from 1988 to 1993 (period 1), and from 1996 to 1999 (period 2) were evaluated. A total of 150 and 239 infants born to HIV+ mothers were enrolled at birth during these periods. No zidovudine prophylaxis was available in period 1. In period 2, 92.4% of the infants were exposed to zidovudine (54% started at delivery or in the post-natal period). During period 1, 25 of 129 infants were found to be infected (19.4%; 95% confidence interval [CI] = 13-27) vs 20 of 232 (8.6%; 95% CI = 5-13) during period 2 (P<0.01). After controlling for co-variables, this decline was due to zidovudine prophylaxis, either with complete (odds ratio [OR] = 0.24; 95% CI = 0.08-0.70) or incomplete (OR=0.37; 95% CI=0.17-0.81) regimens. Premature rupture of membranes (OR = 3.2) and rhesus-negative blood type of the infant (OR = 2.6) facilitated transmission. Although confirming the protective effect of zidovudine prophylaxis, alternative approaches aimed at pregnant women identified late are needed for this population.

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**PMTCT/ARV**