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* by alphabetical order:

Design of the bibliographic retrieval of this issue

**Databases:** Current Contents Life Sciences, Clinical Medicine, Social & Behavioral Sciences
(weeks # 24 to 27: June 17, 2002 to July 8, 2002; coverage: journal and book citations)

**Conferences:** XIV International Conference on AIDS Barcelona, Spain, 7-12 July 2002.

**Number of citations screened for this issue:** 912

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

**Number of citations selected for this issue:** 10 + XIV International Conference on AIDS Summary

**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

Notes: This paper presents first, the organizational structure in place in US to update the PMTCT guidelines. The June 2002 guidelines highlight the most recent findings on transmission with and without combination therapy, toxicity, and resistance. It also provides in Tables 3 and 4 four clinical scenarios and possible solutions with respect to the use of antiretroviral drugs and/or mode of delivery. The complete recommendations are available on the following web site http://www.hivatis.org.

Address: Jamieson DJ, CDCP, Div HIV AIDS, Natl Ctr HIV STD & TB Prevent, Mailstop E-45, 1600 Clifton Rd, Atlanta, GA 30333 USA


PMTCT/ARV


Notes: In this review, Dabis et al. firstly depict the HIV-1/AIDS African pandemic in women. High HIV prevalence and rapid progression of HIV disease are characteristic of the epidemic among African women of childbearing age. The MTCT risk increases with advanced maternal HIV infection. Thus, in this context where breastfeeding is the norm, the MTCT rate ranges between 25% and 45% in the absence of intervention. Knowing the lack of effectiveness of simple interventions such as vaginal disinfection or multivitamin supplementations to reduce MTCT, the authors insist on the need for short and simple peripartum antiretroviral (ARV) treatments, whose efficacy is properly evaluated. They also underline that the use of highly active antiretroviral treatment (HAART) could reduce peripartum transmission of HIV-1 and possibly postpartum transmission, especially for mothers with advanced HIV infection. Concerning HIV/AIDS in African children, Dabis et al. stress the dimension of the pandemic (1,900 children acquire HIV-1 infection from their mother every day in Africa), and its consequences on child morbidity and mortality. Community-based responses to the increasing number of orphans are mostly needed as 9% of children younger than 15 years in Africa will be orphans by 2010. The authors conclude on the need for reducing sexual transmission of HIV-1, developing nation wide HIV-1 testing and ARV-based PMTCT programmes, with the aim to reduce MTCT below 5% in Africa.

Address: Dabis F, Univ Victor Segalen, ISPED, INSERM U330, 146 Rue Leo Saignat, F-33076 Bordeaux, FRANCE


Infant feeding, MTCT, PMTCT, Primary prevention of sexual transmission/VCT


Notes: An updated review explores whether micronutrient status influences vertical transmission of HIV-1. Indeed, as micronutrient deficiencies impair immune response, weaken epithelial integrity and are associated with accelerated disease progression, micronutrient supplementation could be a cost-effective strategy for PMTCT of HIV. On the one hand, many prospective cohorts conducted among HIV-infected women underlined that low serum vitamin A concentrations were associated with an increased risk of vertical transmission of HIV. But those low serum vitamin A concentrations may be a result of advanced HIV disease that could explain the observed increased risk of transmission. On the other hand, randomised placebo-controlled trials provide evidence that vitamin A or multivitamin supplementation was unlikely to reduce the risk of vertical HIV transmission. These studies only explored the vertical transmission through transplacental and intrapartum routes. So the authors underlined that postpartum micronutrient supplementation of breastfeeding women and their infants should be explored as a potential intervention for preventing HIV transmission through breast milk. Moreover, the authors suggest that the timing of supplementation in these studies maybe inappropriate. Thus, micronutrient supplementations may need to be started earlier in pregnancy or before conception to provide benefits for foetal immune system development. The authors lastly underline that the effect of other micronutrients (such as zinc or selenium) on vertical transmission of HIV have not yet been investigated and need to be explored.

Address: Dreyfuss ML, Johns Hopkins Univ, Bloomberg Sch Publ Hlth, Dept Populat & Family Hlth Sci, 615 N Wolfe St, Room W4033, Baltimore, MD 21205 USA


MTCT, PMTCT

Notes: This article argues that community initiatives are the most efficient means of caring for orphans in Africa. The number of children orphaned by HIV/AIDS is increasing dramatically, especially in developing countries, however this issue has only recently been set as a public health priority. The author underlines the slow involvement of international agencies and the fact that the projects implemented to support these vulnerable children are not always well targeted and sustained in the long-term. He insists on the fact that, in contrast, local responses such as the traditional care taking of orphans by extended families are most cost-effective. These community initiatives, often informal and of limited coverage, need to be supported. The author proposes a combined approach encouraging international organisations to work together with local communities for sustained social development and to overcome institutional barriers to the distribution of resources to community groups such as capacity-building NGOs for long-term partnership.

Address: Foster G, Mutare Prov Hosp, Mutare, ZIMBABWE

URL: NA

MTCT


Erratum of a previously citation in IR 2002;2 (6).


Notes: HIV-1 and herpes simplex virus type -2 (HSV-2) have a synergistic relation. As so, understanding the factors that influence HSV-2 reactivation among individuals with HIV-1 may help to reduce transmission of both viruses. Cross-sectional analyses have demonstrated an association between use of hormonal contraceptives and shedding of HSV-2. Based on these results, McClelland et al conducted a prospective study of HSV-2 shedding among HIV-1 positive women initiating use of hormonal contraception. The study sample consisted of 200 women who were seropositive for HSV-2 and HIV-1. All women were examined for cervical mucosal HSV-2 by use of quantitative DNA polymerase chain reaction before and after beginning the use of hormonal contraceptives. Results showed no association between hormonal contraceptive use and cervical shedding of HSV. Cervical HSV was detected in 32 women (16.0%) before contraception initiation and in 25 women (12.5%) after initiation (p= 0.40). In addition, there was no significant difference in the quantity of HSV in cervical secretions before and after initiating use of oral contraceptives in both subgroups: women starting estrogens and progesterone containing contraceptives or progesterone only contraceptives (p = .40). Finally, no association was found between initiating use of hormonal contraceptives and the presence of a genital ulcer on physical examination. The authors conclude that the use of hormonal contraceptives did not increase detection of cervical HSV and recommend additional prospective studies to gain greater understanding of the factors associated with symptomatic and asymptomatic HSV reactivation.

Address: McClelland RS, Univ Washington, Int AIDS Res & Training Program, Dept Med, Box 359909, 325 9th Ave, Seattle, WA 98104 USA


Contraception


Notes: Thirty seven HIV-1 positive pregnant women eligible for clinical trials in Sowetho, South Africa, were screened at the end of 2000 for viral sequencing and drug resistance mutations. All of them were infected by subtype C. There was no detectable resistance pattern and a few polymorphisms. Viral resistance should not be considered at this stage as a barrier for implementing PMTCT in South Africa.

Address: Morris L, Natl Inst Communicable Dis, AIDS Virus Res Unit, Private Bag X4, ZA-2131 Johannesburg, SOUTH AFRICA


PMTCT/ARV
Notes: An editorial putting into perspective the issue of preventing HIV infection in children. The author particularly emphasises the gap between rich and poor countries in terms of accessing antiretrovirals (ARV) for PMTCT but also for basic antenatal care and safe maternity services. He also underlines the growing problem of children orphaned by HIV/AIDS, especially in developing countries. His overall message fits quite well with the conclusions drawn after the 14th International AIDS Conference in Barcelona. Major efforts are required to improve access to ARV treatments (reduced prices, definition of national policies for safe use of PMTCT and MTCT-Plus strategies and programmes). For this, funds should be made available through international initiatives such as the Global Fund. However, the author concludes that the most critical is the sustained involvement of local governments to ensure not only children but also mothers and fathers have access to safe ARV treatment.

Address: NA
URL: NA

PMTCT


Notes: A compilation of observational and trial data collected in the US between 1990 and 1998, aiming at investigating the association between PMTCT with antiretrovirals and adverse pregnancy outcomes (not considering pediatric HIV infection as a specific outcome or as a confounder). Four groups were constituted and compared: 1143 untreated women, 1590 treated with zidovudine monotherapy, 396 with combination therapy but without protease inhibitor (PI) and 137 with combination therapy including at least on PI. Frequency of premature delivery, low birth weight, poor Agar score and stillbirth rate were comparable between the groups. Very low birth weight (<1500g) occurred in 5 percent of the newborns of women treated with a PI-containing PMTCT regimen, a 3.5 fold increase compared to those born to women treated by a combination therapy without PI (95% CI: 1.04-12.2 in adjusted analysis). The US public health recommendations remain in favor of the use of combination therapy (see the most recent guidelines in this issue).

Address: Tuomala RE, Brigham & Womens Hosp, Dept Obstet & Gynecol, 75 Francis St, Boston, MA 02115 USA


Notes: An in depth review article on most aspects of management of HIV infection in pregnancy, with a clear emphasis on developed countries.

Address: Jamieson DJ, CDCP, Div HIV AIDS, Natl Ctr HIV STD & TB Prevent, Mailstop E-45, 1600 Clifton Rd, Atlanta, GA 30333 USA
URL: NA

XIV International Conference on AIDS Barcelona, Spain, 7-12 July 2002.


Notes: From 07 to July 12, 2002 took place in Barcelona the 14th International conference on AIDS. A total of 143 abstracts related to PMTCT interventions. The principal subjects presented were VCT, uptake of interventions, effectiveness of new strategies for antiretroviral use to prevent MTCT of HIV and the difficulty of proposing alternatives to breastfeeding in HIV-infected women.

Effectiveness of new strategies to prevent MTCT: The interim analysis of new strategies to prevent MTCT of HIV were presented in Barcelona, among which four studies were directly pertaining to PMTCT interventions in developing countries.

Taha et al [ThOrD1427] in Blantyre, Malawi presented the results of an open-label randomized clinical trial. The principal hypothesis of this study was that a combined regimen of oral Nevirapine (NVP) and Zidovudine (ZDV) given directly to the newborn alone could reduce MTCT of HIV. Babies of HIV positive women arriving very late for delivery were randomized to receive either NVP+ZDV or NVP alone. The first results relate to 1059 babies (of
The effectiveness of VCT services within PMTCT programmes strongly relies on client’s needs, social context and VCT assessment of the AZT+NVP combination [ThOrD1428]. Ditrame Plus ANRS 1201/1202 will start a new combined drug regimen (AZT+3TC+NVP), after successful breastfeeding and maintain mothers healthy. Treatment arms will be allocated according to CD4 counts and AIDS efficacy and safety of a triple antiretroviral combination (ZDV, 3TC, NVP) to reduce MTCT during pregnancy and De Vincenzi et al presented a WHO project, a multicentre trial in developing countries to assess the acceptability, ZDV [WePeB5920]. This study was started in March 2001 and has experienced difficulties of enrollment. Delivery, and one of two feeding strategies: formula feeding with 1 month of ZDV or breastfeeding with 6 months of infant. Mothers and their infants are randomized at enrollment to receive either single-dose NVP or placebo at delivery, and one of two feeding strategies: formula feeding (FF), 29% exclusive breastfeeding (EBF) and 11% had refused the two options proposed and planned to predominantly breastfeed [MoPeD3677]. Similar results were found in Uganda, where Magoni et al reported that 54% of mothers chose EBF and 46% FF at delivery [TuOrB1178]. They confirm the good acceptability of FF before delivery in HIV infected women in Africa. Both Uganda and Côte d’Ivoire studies highlight the problem of mixed feeding (11% of women using EBF admitted [MoPeD3677]).

New studies in PMTCT: The Mashi study is a randomized placebo controlled clinical trial with a 2x2 factorial design. 1200 HIV-1 infected pregnant women will be enrolled. All participants receive at least the standard of care for PMTCT in Botswana: ZDV from 34 weeks gestation until delivery, and 1 month of ZDV prophylaxis to the infant. Mothers and their infants are randomized at enrollment to receive either single-dose NVP or placebo at delivery, and one of two feeding strategies: formula feeding with 1 month of ZDV or breastfeeding with 6 months of ZDV [WePeB5920]. This study was started in March 2001 and has experienced difficulties of enrollment. De Vincenzi et al presented a WHO project, a multicentre trial in developing countries to assess the acceptability, efficacy and safety of a triple antiretroviral combination (ZDV, 3TC, NVP) to reduce MTCT during pregnancy and breastfeeding and maintain mothers healthy. Treatment arms will be allocated according to CD4 counts and AIDS symptoms.

Ditrame Plus ANRS 1201/1202 will start a new combined drug regimen (AZT+3TC+NVP), after successful assessment of the AZT+NVP combination [ThOrD1428]. VCT: Of all abstracts related to Voluntary Counseling and Testing, 41 pertained to VCT within the MCH context. The effectiveness of VCT services within PMTCT programmes strongly relies on client’s needs, social context and
medical staff adhesion. A study on VCT uptake in Zambian District Health Facilities [TuPeD4983], undertaken within the Zambia Exclusive Breastfeeding Study (ZEBS), shows the importance of increased quality of targeted messages delivered during VCT, support to male involvement, community outreach activities and peer support groups. Indeed, Rutenberg et al [TuPeF5390] demonstrate the positive impact of male participation and support throughout VCT activities: increased discussions between pregnant women and their partner about VCT and PMTCT, increased number of men tested (from 13% to 26%, p<0.001) and increased sharing of results with their partner (from 47% to 96%, p<0.001). In Uganda, Katarikawe et al. argued for the importance of a participatory model (including women within a multi-sectoral team) for developing training materials for VCT and PMTCT [MoPeG4236]. South African results [ThPeD7761] suggest that programmes aiming to care for VCT service providers, additional and ongoing training together with continuous supervision are essential, especially as increased attention is paid to VCT strategies involving lay volunteer and community-based counselors [WePeD6290] [ThPeF7977]. In India, rapid testing was confirmed as an ideal choice in rural settings [MoPeB3092]. Overall, the Barcelona conference reminded that poor uptake of VCT can limit the effectiveness of PMTCT programmes: availability, acceptability and quality of VCT services thus still remains a challenge for public health actors and policy-makers.

Conference summary