Institut de Santé Publique, d'Epidémiologie et de Développement
Université Victor Segalen Bordeaux 2, France

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Members: Elise Arrivé, Renaud Becquet, François Dabis (Coordinator), Valériane Leroy, Evelyne Mouillet (Coordinator), Joanna Orne-Gliemann, Freddy Perez, Catherine Seyler, Besigin Tonwe-Gold.

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Giuliano M, Guidotti G, Andreotti M, Pirillo ME, Villani P, Liotta G, Marai MC, Mancini MG, Cusato M, Germano P, Loureiro S, Ceffa S, Regazzi M, Vella S, Palombi L. **Triple antiretroviral prophylaxis administered during pregnancy and after delivery significantly reduces breast milk viral load - A study within the drug resource enhancement against AIDS and malnutrition program**. Journal of Acquired Immune Deficiency Syndromes 2007;44(3):286-291.

Abstr. Background: The administration of antiretroviral therapy to lactating women could represent a possible strategy to reduce postnatal HIV transmission. In this study, we assessed the effect of antiretroviral treatment on breast milk viral load and determined plasma and breast milk drug concentrations in pregnant women receiving highly active antiretroviral therapy (HAART). Methods: We studied 40 women receiving zidovudine, lamivudine, and nevirapine from 28 weeks of gestation to I month postpartum (group A) and 40 untreated pregnant women (group B). Blood and breast milk samples were collected at delivery and 7 days postpartum. Results: Women in group A had received a median of 85 days of therapy before delivery. Median breast milk concentrations of nevirapine, lamivudine, and zidovudine were 0.6, 1.8, and 1.1 times, respectively, those in maternal plasma. HIV RNA levels in breast milk were significantly lower in group A than in group B (median of 2.3 vs. 3.4 log at delivery and 1.9 vs. 3.6 log at day 7; P < 0.001 for both comparisons). Conclusions: Antiretroviral drugs administered during the last trimester of pregnancy and after delivery reach levels similar to or higher than plasma concentrations in breast milk and can significantly reduce HIV RNA levels. Our data support the potential role of maternal HAART prophylaxis in reducing the risk of breast-feeding associated transmission.

Address: Giuliano, M; Ist Super Sanita; Dept Drug Res & Evaluat; Viale Regina Elena 299; I-00161 Rome; Italy. giuliano@iss.it

Harries AD, Schouten EJ, Makombe SD, Libamba E, Neufville HN, Some E, Kadewere G, Lungu D. **Ensuring uninterrupted supplies of antiretroviral drugs in resource-poor settings: an example from Malawi**. Bulletin of the World Health Organization 2007;85(2):152-155.

Abstr. Problem Drug procurement and distribution practices are weak in many resource-poor countries, and are a major reason for lack of access to medicines. With many countries scaling up antiretroviral therapy (ART), it is vital to avoid interrupted drug supplies, which would lead to drug resistance and treatment failure. Approach Malawi has adapted a model, based on that adopted by the country's Tuberculosis Control Programme, to allow rational ART drug forecasting. Local setting The model includes a focus on one standardized first-line ART regimen; a "push system" and "ceilings" for first-line ART drugs for facilities; use of starter pack and continuation pack kits; quarterly monitoring of patient outcomes and ART drug stocks at facility level; provision of a three-month buffer stock of ART drugs at facility level; and use of a procurement and distribution system outside central medical stores. Lessons learned The focus on a single first-line regimen, "ceilings" for first-line ART drugs and quarterly data collections to calculate drug needs (for new and follow-up patients, respectively), as well as the use of an independent procurement facility, allow drug orders to be made 6-9 months ahead. These measures have so far ensured that there have been no ART drug stock-outs in the country.

Address: Harries, AD; Minist Hlth; Clin HIV Unit; POB 30377; Lilongwe; Malawi. adharries@malawi.net

Hill A, Wood E. **Balancing effectiveness and access to HIV treatment in the developing world**. AIDS 2007;21(3):361-363.

Address: Hill, A; Univ Liverpool; Pharmacol Res Labs; 70 Pembroke Pl; Liverpool L69 3BX; Merseyside; England. microhaart@aol.com

Homsy J, King R, Malamba SS, Opio C, Okallany A, Kalamya JN, Obonyo JH, Mermin J. **The need for partner consent is a main reason for opting out of routine HIV testing for prevention of mother-to-child transmission in a rural Ugandan hospital**. Journal of Acquired Immune Deficiency Syndromes 2007;44(3):366-369.

Address: Homsy, J; Univ Calif San Francisco; Inst Global Hlth; San Francisco; CA 94143; USA, CDC Kenya, Coordinating Off Global Hlth, Nairobi, Kenya

Lawn SD, Myer L, Bekker LG, Wood R. **Tuberculosis-associated immune reconstitution disease: incidence, risk factors and impact in an antiretroviral treatment service in South Africa**. AIDS 2007;21(3):335-341.

Abstr. Objective: To determine the burden and impact of immune reconstitution disease (IRD) associated with tuberculosis (TB) among patients initiating antiretroviral treatment (ART) in sub-Saharan Africa. Design: Retrospective analysis of a study cohort enrolled over 3 years within a community-based ART service in South Africa. Methods: Patients receiving treatment for TB at the time ART was initiated (n = 160) were studied. Cases of TB-associated IRD during the first 4 months of ART were ascertained. Results: The median baseline CD4 cell count was 68 cells/mu l [interquartile range (IQR), 29-133 cells/mu l) and ART was initiated after a median of 105 days (IQR, 61 -164 days) from TB diagnosis. Although IRD was diagnosed in just 12% (n = 19) of patients overall, IRD developed in 32% (n = 12) of those who started ART within 2 months of TB diagnosis. Pulmonary involvement was observed in 84% (n = 16) and intra-abdominal manifestations were also common (37%). Overall, 4% (n = 7) of the cohort required secondary level health-care for IRD and two (1%) patients died. In multivariate analysis, risk of [RD was strongly associated with early ART initiation and low baseline CD4 cell count. Of patients with CD4 counts < 50 cells/mu l, the proportions who developed IRD following initiation of ART within 0-30, 31-60, 61-90, 91-120 and > 120 days of TB diagnosis were 100%, 33%, 14%, 7% and 0%, respectively. Conclusions: The risk of TB-associated IRD in this setting is very high for those with low baseline CD4 cell counts initiating ART early in the course of antituberculosis treatment. However, most cases were self-limiting; overall secondary health-care utilization and mortality risk from IRD were low.

Address: Lawn, SD; Univ Cape Town; Fac Hlth Sci; Anzio Rd; ZA-7925 Cape Town; South Africa. stevelawn@yahoo.co.uk

Libamba E, Makombe SD, Harries AD, Schouten EJ, Yu JKL, Pasulani O, Mhango E, Aberle Grasse J, Hochgesang M, Limbambala E, Lungu D. **Malawi's contribution to "3 by 5": achievements and challenges**. Bulletin of the World Health Organization 2007;85(2):156-160.

Abstr. Problem Many resource-poor countries have started scaling up antiretroviral therapy (ART). While reports from individual clinics point to successful implementation, there is limited information about progress in government institutions at a national level. Approach Malawi started national ART scale-up in 2004 using a structured approach. There is a focus on one generic, fixed-dose combination treatment with stavudine, lamivudine and nevirapine. Treatment is delivered free of charge to eligible patients with HIV and there is a standardized system for recruiting patients, monthly follow-up, registration, monitoring and reporting of cases and outcomes. All treatment sites receive quarterly supervision and evaluation. Local setting In January 2004, there were nine public sector facilities delivering ART to an estimated 4 000 patients. By December 2005, there were 60 public sector facilities providing free ART to 37 840 patients using national

standardized systems. Analysis of quarterly cohort treatment outcomes at 12 months showed 80% of patients were alive, 10% dead, 9% lost to follow-up and 1 had stopped treatment. Lessons learned Achievements were the result of clear national ART guidelines, implementing partners working together, an intensive training schedule focused on clinical officers and nurses, a structured system of accrediting facilities for ART delivery, quarterly supervision and monitoring, and no stock-outs of antiretroviral drugs. The main challenges are to increase the numbers of children, pregnant women and patients with tuberculosis being started on ART, and to avert high early mortality and losses to follow-up. The capacity of the health sector to cope with escalating case loads and to scale up prevention alongside treatment will determine the future success of ART delivery in Malawi.

Address: Harries, AD; Minist Hlth; Clin HIV Unit; POB 30377; Lilongwe; Madagascar. adharries@malawi.net

Madec Y, Laureillard D, Pinoges L, Fernandez M, Prak N, Ngeth C, Moeung S, Song S, Balkan S, Ferradini L, Quillet C, Fontanet A. **Response to highly active antiretroviral therapy among severely immuno-compromised HIV-infected patients in Cambodia**. AIDS 2007;21(3):351-359.

Abstr. Background: HAART efficacy was evaluated in a real-life setting in Phnom Penh (Medecins Sans Frontieres programme) among severely immuno-compromised patients. Methods: Factors associated with mortality and immune reconstitution were identified using Cox proportional hazards and logistic regression models, respectively. Results: From July 2001 to April 2005, 1735 patients initiated HAART, with median CD4 cell count of 20 (inter-quartile range, 6-78) cells/mu l. Mortality at 2 years increased as the CD4 cell count at HAART initiation decreased, (4.4, 4.5, 7.5 and 2 4.7% in patients with CD4 cell count > 100, 51-100, 21-50 and <= 2 0 cells/mu l, respectively; p < 10(-4)). Cotrimoxazole and fluconazole prophylaxis were protective against mortality as long as CD4 cell counts remained <= 200 and <= 100cells/mu l, respectively. The proportion of patients with successful immune reconstitution (CD4 cell gain > 100 cells/mu l at 6 months) was 46.3%; it was lower in patients with previous ART exposure [odds ratio (OR), 0.16; 95% confidence interval (CI), 0.050.45] and patients developing a new opportunistic infection/immune reconstitution infection syndromes (OR, 0.71; 95% CI, 0.52-0.98). Similar efficacy was found between the stavudine-lamivudine-nevirapine fixed dose combination and the combination stavudine-lamivudine-efavirenz in terms of mortality and successful immune reconstitution. No surrogate markers for CD4 cell change could be identified among total lymphocyte count, haemoglobin, weight and body mass index. Conclusion: Although CD4 cell count-stratified mortality rates were similar to those observed in industrialized countries for patients with CD4 cell count > 50cells/mu l, patients with CD4 cell count <= 20cells/mu l posed a real challenge to clinicians. Widespread voluntary HIV testing and counselling should be encouraged to allow HAART initiation before the development of severe immuno-suppression.

Address: Fontanet, A; Inst Pasteur; Unite Epidemiol Malad Emergentes; 25-28 Rue Docteur Roux; F-75015 Paris; France. fontanet@pasteur.fr

Minga A, Danel C, Abo Y, Dohoun L, Bonard D, Coulibaly A, Duvignac J, Dabis F, Salamon R, Anglaret X. **Progression to WHO criteria for antiretroviral therapy in a 7-year cohort of adult HIV-1 seroconverters in Abidjan, Cote d'Ivoire**. Bulletin of the World Health Organization 2007;85(2):116-123.

Abstr. Objective To estimate the probability of reaching the criteria for starting highly active antiretroviral therapy (HAART) in a prospective cohort of adult HIV-1 seroconverters in Abidjan, Cote d'Ivoire. Methods We recruited participants from HIV-positive donors at the blood bank of Abidjan for whom the delay since the estimated date of seroconversion (midpoint between last negative and first positive HIV-1 test) was <= 36 months. Participants were offered early trimethoprim-sulfamethoxazole (cotrimoxazole) prophylaxis, twice-yearly measurement of CD4 count and we made

standardized records of morbidity. We used the Kaplan-Meier method to estimate the probability of reaching the criteria for starting HAART according to WHO 2006 guidelines. Findings 217 adults (77 women (35%)) were followed up during 668 person-years (PY). The most frequent diseases recorded were mild bacterial diseases (6.0 per 100 PY), malaria (3.6/100 PY), herpes zoster (3.4/100 PY), severe bacterial diseases (3.1/100 PY) and tuberculosis (2.1/100 PY). The probability of reaching the WHO 2006 criteria for HAART initiation was estimated at 0.09, 0.16, 0.24, 0.36 and 0.44 at 1, 2, 3, 4 and 5 years, respectively. Conclusion Our data underline the incidence of the early HIV morbidity in an Ivorian adult population and provide support for HIV testing to be made more readily available and for early follow-up of HIV-infected adults in West Africa.

Address: Minga, A; Programme PAC CI; Abidjan; Cote Ivoire. minga.albert@caramail.com

O' Brien D, Sauvageot D, Zachariah R, Humblet P. **In resource-limited settings good early outcomes can be achieved in children using adult fixed-dose combination antiretroviral therapy**. AIDS 2006;20(15):1955-1960.

Abstr. Objectives: To (a) determine early treatment outcomes and (b) assess safety in children treated with adult fixed-dose combination (FDC) antiretroviral tablets. Setting: Sixteen Medecins Sans Frontieres (MSF) HIV programs in eight countries in resource-limited settings (RLS). Methods: Analysis of routine program data gathered June 2001 to March 2005. Results: A total of 1184 children [median age, 7 years; inter-quartile range (IQR), 4.6-9.3] were treated with antiretroviral therapy (ART) of whom 616(52%) were male. At ART initiation, Centres for Disease Control stages N, A, B and C were 9, 14, 38 and 39%, respectively. Children were followed up for a median period of 6 months (IQR, 2-12 months). At 12 months the median CD4 percentage gain in children aged 18-59 months was 15% (IQR, 6-18%), and the percentage with CD4 gain < 15% was reduced from 85% at baseline to 11%. In those aged 60-156 months, median CD4 cell count gain was 275 cells/mu l (IQR, 84-518 cells/mu l), and the percentage with CD4 < 200 cells/mu l reduced from 51% at baseline to 11%. Treatment outcomes included; 1012 (85%) alive and on ART, 36 (3%) deaths, 15 (1%) stopped ART, 89 (8%) lost to follow-up, and 31 (3%) with unknown outcomes. Overall probability of survival at 12 months was 0.87 (0.84-0.89). Side effects caused a change to alternative antiretroviral drugs in 26 (2%) but no deaths. Conclusions: Very satisfactory early outcomes can be achieved in children in RLS using generic adult FDC antiretroviral tablets. These findings strongly favour their use as an 'interim solution' for scaling-up ART in children; however, more appropriate pediatric antiretroviral drugs remain urgently needed.

Notes. We are commenting here on an article published in the December 2006 issue of AIDS where O'Brien et al provide early treatment outcomes results in children using adult fixed-dose combination (FDC) antiretroviral tablets in eight countries where Médecins sans Frontières (MSF) have provided HIV care and treatment since 2000.

One of the main obstacles to treating HIV infection in children living in resource-limited settings (RLS) is the lack of practical, affordable and appropriate pediatric formulations available and the reported MSF experience provides much needed data regarding the use of alternative temporary low-cost solutions used as first line regimens in children. The main advantages of using FDC adult formulations are that they are widely available in most ART programs worldwide, easily administered in comparison to syrups, are much less costly and thus affordable for scaling up at country level and reduce the pill burden facilitating adherence and thus reducing the risk of developing subsequent viral resistance. MSF began offering ART in RLS in 2000 with more than 57000 individuals on treatment in more than 30 countries by the end of 2005. The aim of this study was to determine early outcomes and assess safety in children treated with adult generic FDC tablet Triviro containing stavudine (30 or 40mg), lamivudine 150mg and nevirapine (NVP) (200mg) administered whole, or cut in half, in children weighing more than 10kgs. O'Brien et al[1] had previously reported good early outcomes in a retrospective study among 568 children who initiated nonnucleoside reverse-transcriptase inhibitor (NNRTI)—

based antiretroviral therapy. Indeed, after 12 months of treatment, survival probability was 0.89 (95% confidence interval, 0.86–0.92), with no significant difference among children stratified on the basis of baseline immunological levels; 62% had attained a CD4 cell percentage >25%, and 7% continued to have a CD4 cell percentage <15%. Their results were similar to those published from resource-rich settings although the children from resource-rich settings were mainly ART nonnaive, less immunosuppressed (i.e., the CD4 cell percentage was >15% for 33%–54% of the cohorts), and were treated with mainly protease inhibitor–containing regimens. ON se perd un peu entre les resultants de l'ancienne etude et les résultats qu'elle commente dans cette note.

In the study O'Brien et al have published recently, a total of 2047 children, of which 1184 (60%) (median age of 7 years; IQR: 4.6-9.3), were given adult FDC antiretroviral tablets and were followed for a median of 6 months (IQR:2-12months). At 12 months they observed a median CD4 percentage gain of 15% in children aged between 18-59 months and a median CD4 gain of 275 cells/microl (IQR: 84-518) in those aged 60-156 months. Early outcomes were satisfactory with 85% of children still alive and on ART, 5% of deaths, 1% having stopped ART, 8% lost to follow up and 3% with unknown outcomes. Regarding safety, 4% of children reported side effects with only 2% having severe enough events to require change of treatment.

Limitations of this study were numerous due to operational constraints; only short follow up data was available with no data on longer term outcomes, limited information on immunological outcomes, probable under-reporting of antiretroviral adverse events due to lack of standardized reporting across sites and no measure of antiretroviral drug level to confirm therapeutic adequacy. Regarding the last point, it is particularly critical that optimal NVP plasma concentrations are acheived as NVP has a low resistance barrier and a high level of cross-resistance to other NNRTI. However reassuringly, a previously published study in Thailand[2] using FDC adult (GPO-VIR containing stavudine, lamivudine and NVP) tablets, whole or in fractions, reported satisfactory results in terms of plasma drug levels in children. They found that out of 34 children having been given these tablets as their first line regimen, only one had minimum plasma NVP level concentrations of less than 3.4micrograms/ml which is the cut-off point concentration associated with adequate long-term virological reponse. It is known that pill cutting may alter absorption and cause inaccurate drug dosing however satisfactory plasma concentrations of NVP were found even though 71% of these children were receiving broken tablets as part of their standard dose.

O'Brien et al conclude that although far from ideal, these preliminary results using FDC adult tablets in children are encouraging whilst ART progams worldwide await for other affordable and more adapted pediatric formulations to become rapidly available.

References:

1.   Madec Y AIDS 2007, 21:351–359
2.   Chokephaibulkit K et al AIDS 2005; 19:1495-1499.

Address: O'Brien, DP; Med Sans Frontieres; AIDS Working Grp; Plantage Middenlaan 14; NL-1001 EA Amsterdam; Netherlands. daniel.obrien@amsterdam.msf.org

Pitter C, Kahn JG, Marseille E, Lule JR, McFarland DA, Ekwaru JP, Bunnell R, Coutinho A, Mermin J. **Cost-effectiveness of cotrimoxazole prophylaxis among persons with HIV in Uganda**. Journal of Acquired Immune Deficiency Syndromes 2007;44(3):336-343.

Abstr. Background: Daily prophylaxis with trimethoprim-sulfamethoxazole (cotrimoxazole) by persons with HIV reduces morbidity and mortality and is recommended by Joint United Nations Program on HIV/AIDS and World Health Organization (WHO), but there are limited published cost-effectiveness data for this intervention. We assessed the cost-effectiveness of cotrimoxazole prophylaxis for persons living with HIV in rural Uganda. Methods: We modeled the cost-effectiveness of daily cotrimoxazole prophylaxis based on clinical results and operational data from a prospective cohort study of home-based care delivery to adults and children with HIV in

rural Uganda who were older than the age of 5 years. Main outcome measures were net program cost and disability-adjusted life-years (DALYs) gained. We examined the provision of cotrimoxazole prophylaxis for (A) all HIV-infected individuals regardless of immunologic or clinical criteria; (B) those with WHO stage 2 or more advanced disease; (C) those with CD4 cell counts < 500 cells/mu L; and (D) those meeting criteria B or C, the current WHO recommendation. We calculated the costs and effectiveness of these 4 screening algorithms compared with no cotrimoxazole prophylaxis and calculated incremental cost-effectiveness ratios. We performed univariate and multivariate sensitivity analyses. Results: Cotrimoxazole prophylaxis for all HIV-infected individuals (algorithm A) produced 7.3 life-years and 7.55 DALYs per 100 persons over 1 year compared with no prophylaxis. Using this screening algorithm, the intervention saved $2.50 per person-year. The program costs and the DALYs gained by algorithms A, B, and D were more favorable than those for algorithm C. Among algorithms A, B, and D, strategies using screening algorithms for WHO stage or CD4 cell counts were more costly and marginally less effective than providing cotrimoxazole prophylaxis to all HIV-infected individuals. Conclusions: Daily cotrimoxazole prophylaxis for HIV-infected individuals is highly cost-effective in rural Uganda. The use of screening algorithms to identify individuals with advanced HIV disease may result in higher program costs and less favorable cost-effectiveness.

Address: Pitter, C; Elizabeth Glaser Pediat AIDS Fdn; 1140 Connecticut Ave NW, Suite 200; Washington; DC 20036; USA. cpitter@pedaids.org

Rollins NC, Coovadia HM, Bland RM, Coutsoudis A, Bennish ML, Patel D, Newell ML.
Pregnancy outcomes in HIV-infected and uninfected women in rural and urban South Africa. Journal of Acquired Immune Deficiency Syndromes 2007;44(3):321-328.

Abstr. Objective: To describe pregnancy outcomes among clade C HIV-infected and uninfected women in South Africa. Design: A longitudinal cohort study. Methods: Pregnant women attending 9 rural/urban antenatal clinics were prospectively recruited and followed up. Women were seen at the clinic or at home after delivery on 4 occasions after enrollment: 2 times within the first 2 weeks of the newborn's life at home, and every 2 weeks thereafter until their first health clinic visit when the infant was 6 weeks old. Results: A total of 3465 women were enrolled; 615 withdrew after delivery, moved away, or had a missing or indeterminate HIV status, leaving 2850 women (1449 HIV-infected women). Six women died after delivery and there were 17 spontaneous abortions and 104 stillbirths. An adverse pregnancy outcome was independently associated with HIV infection (adjusted odds ratio [AOR] = 1.63, P = 0.015), urban enrollment (AOR = 0.39; P = 0.020), and northospital delivery (AOR = 13.63; P < 0.001) as well as with a CD4 count < 200 cells/mL among HIV-infected women (AOR = 1.86; P = 0.127). Among 2529 singleton liveborn babies, birth weight was inversely associated with maternal HIV (AOR = 1.45; P = 0.02) and maternal middle upper arm circumference (AOR = 0.93; P < 0.001). Early infant mortality was not significantly associated with maternal HIV (hazard ratio [HR] = 1.18; P = 0.52) but was with urban sites (HR = 0.34; P = 0.045). Low birth weight substantially increased mortality (AOR = 8.3; P < 0.001). HIV status of infants by 8 weeks of age (14.6%, 95% confidence interval: 12.5% to 17.0%) was inversely associated with maternal CD4 cell count and birth weight. Conclusions: HIV-infected women are at a significantly increased risk of adverse pregnancy outcomes. Low-birth-weight infants of HIV-infected and uninfected women are at substantially increased risk of dying.

Address: Rollins, NC; Univ KwaZulu Natal; Dept Paediat & Child Hlth; Private Bag 7; ZA-4013 Congella; South Africa. rollins@ukzn.ac.za

Sow PS, Otieno LE, Bissagnene E, Kityo C, Bennink R, Clevenbergh P, Wit F, Waalberg E, de Wit TFR, Lange JM. **Implementation of an antiretroviral access program for HIV-1-infected individuals in resource-limited settings - Clinical results from 4 African countries**. Journal of Acquired Immune Deficiency Syndromes 2007;44(3):262-267.

Abstr. Background: We assessed the effectiveness and safety of highly active antiretroviral therapy (HAART) in HIV-1-infected patients in resource-limited African countries. HIV-1 screening, therapy, counseling, monitoring, training, and education were provided free of charge. Methods: in an open-label cohort program, 206 antiretroviral-naive HIV-1-infected patients who could not afford HAART were recruited in 4 urban clinics in Senegal, C (o) over cap te d'Ivoire, Uganda, and Kenya and were treated with saquinavir boosted with ritonavir (1600/100 mg once daily), lamivudine (150 mg twice daily), and zidovudine (300 mg twice daily). The primary outcome was a plasma viral load (pVL) of < 400 copies/mL after 96 weeks of treatment. Secondary analyses included CD4 cell count changes and the occurrence of treatment-emergent adverse events. Results: The median age of the patient group was 36 years, 38% were male, 35% of the patients had AIDS, the median CD4 count was 119 cells/mu L, and the median pVL was 304,2 10 copies/mL. Overall, 65%/52% (on treatment [OT]/intent to treat [ITT]) of the patients had a pVL < 400 copies/mL after 96 weeks of follow-up. This proportion varied significantly between sites, however; although in Nairobi and Dakar, 51%/40% and 56%/46% (OT/ITT) were found, respectively, Abidjan and Kampala showed proportions of 69%/54% and 83%/69% (OT/ITT), respectively. The median increase in the CD4 count was 198 cells/mu L (interquartile range: 86-319 cells/mu L), ranging from 191 to 292 cells/mu L between the sites. Fourteen patients (6.8%) died between 8 and 96 weeks of follow-up, whereas 18 (9%) developed an AIDS-defining event between 8 and 96 weeks of follow-up. Non-HIV-related serious adverse events occurred in 55 patients (26.7%), of whom 13 were diagnosed with severe anemia. Thirty-five patients (17%) changed treatment for toxicity reasons. Conclusions: Although a statistically significant difference was observed between sites with respect to virologic success, overall virologic and immunologic responses to HAART in resource-limited African settings can be as good as in Western settings. There were some difficulties (eg, laboratory, logistics, proper training) during the early phase of the program. Therefore, provision of adequate medical care, counseling, proper instruction, and education of patients and medical staff during the entire study is warranted in such programs, with special care in the early phase.

Address: Wit, FWNM; IATEC BV; Pietersbergweg 9; NL-1105 BM Amsterdam; Netherlands. f.wit@iatec.com

Vervoort S, Borleffs JCC, Hoepelman AIM, Grypdonck MHF. **Adherence in antiretroviral therapy: a review of qualitative studies**. AIDS 2007;21(3):271-281.

Address: Vervoort, SCJM; Univ Utrecht; Med Ctr; F-02-126,POB 85500; NL-3508 GA Utrecht; Netherlands. S.Vervoort@umcutrecht.nl

Westreich D, Eron J, Behets F, van der Horst C, Van Rie A. **Survival in women exposed to single-dose nevirapine for prevention of mother-to-child transmission of HIV: A stochastic model**. Journal of Infectious Diseases 2007;195(6):837-846.

Abstr. Background. Single-dose nevirapine (sdNVP)-based regimens reduce mother-to-child transmission (MTCT) of human immunodeficiency virus (HIV) but result in resistance to NVP and may reduce the ability of highly active antiretroviral therapy (HAART) used for prevention of MTCT (PMTCT). The impact that sdNVP has on survival in the era of increasing access to HAART is unknown. Methods. We developed a stochastic simulation model to predict survival and sdNVP-attributable mortality in sub-Saharan African women exposed to different PMTCT regimens. Results. Our model predicts that mortality attributable to exposure to sdNVP is low - 1.1% (interquartile range [IQR], 0.6%-1.5%) and 3.5% (IQR, 3.1%-3.9%) at 5 and 10 years after PMTCT therapy - when

all eligible women receive HAART after PMTCT therapy. Predictions were robust to univariate sensitivity analysis. In the worst-case multivariate sensitivity analysis, the increased mortality attributable to sdNVP was 10.4% (IQR, 10.0%-10.8%) at 10 years after PMTCT therapy. Conclusions. Concern has been expressed that widespread use of sdNVP for PMTCT in resource-poor settings will compromise the effectiveness of HAART in HIV-infected women. Although our model does not address other important outcomes of PMTCT regimens, such as transmission of resistant virus, it provides strong arguments that sdNVP for PMTCT should not be delayed because of fear of compromising the survival of women after PMTCT therapy.

Address: Van Rie, A; Univ N Carolina; Dept Epidemiol; 2104 McGavran Greenberg Hall; Chapel Hill; NC 27599; USA. vanrie@email.unc.edu