



A summary of articles with a women-centred focus on HIV, sexually transmitted infections, prevention issues and more. Please contact the source cited or Positive Women's Network if you'd like more information.

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Headlines

Prevention Issues and Challenges..... page 2

- 🍎 HIV/AIDS Mother to Child Transmission 2
- 🍎 Breast milk defensins may help prevent vertical HIV transmission 2
- 🍎 AIDS Set to Explode on Reserves, Study Warns 3
- 🍎 Birth-Control Gel Also Might Kill HIV 4
- 🍎 More Than 10 Percent of 14- and 15-Year Olds Have Sex 4

Women's' Health Spectrum..... page 5

- 🍎 Cervical Self-Exams Ready for Real World 5
- 🍎 Vaccine Holds Promise in Prevention of Cervical Cancer 5
- 🍎 Women Represent Half of HIV-Positive People Worldwide 6
- 🍎 Study: AIDS Cases Hit American Women Harder than Men 7

Testing, Treatment and Care..... page 8

- 🍎 Sustiva Use During Pregnancy May Cause Fetal Harm 8
- 🍎 Cervical Cancer Virus Reactivates Sometimes 9
- 🍎 Early Therapy Slows HIV Progression in Babies 10
- 🍎 No 'Substantial' Difference Found in Antiretroviral Therapy Benefit by Gender 11

Prevention Issues and Challenges

HIV/AIDS mother-to-child transmission; inadequate counseling stymies prevention of HIV transmission in South Africa

The poor counseling offered to HIV positive pregnant women in South Africa is limiting the effectiveness of the government's program to reduce mother-to-child transmission of HIV, reports the UN Integrated Regional Information Networks (IRIN; www.irin.org).

Counselors failed to communicate all the facts women needed to make an informed choice, and practice that choice safely and successfully, according to a study by the South African Medical Research Council (MRC), Health Systems Trust (HST), and the University of the Western Cape. As a result, only a third of the women who chose to use formula milk were provided with instructions, and none of the women who chose exclusive breastfeeding could define what the term meant, IRIN said.

"Counseling offered at prevention of mother-to-child transmission (PMTCT) program sites falls short of the mark," Tanya Doherty, a PMTCT research officer with the HST, told delegates at the 2nd South African AIDS Conference in the east-coast city of Durban.

Research has conclusively shown that, next to birth, mixing breastfeeding and formula feeding carry the highest risk of HIV transmission. Women therefore have to be advised to choose either exclusive breastfeeding, with early weaning at 3 to 4 months, or formula feeding if they have access to fuel and clean drinking water to prepare the mixture safely.

Source: gender-aids (gender-aids@forums.healthdev.org)

Original Source: Women's Health Weekly 30 June 2005

Breast milk defensins may help prevent vertical HIV transmission

Alpha-defensin, an innate immune factor with documented anti-HIV activity, appears to play a role in the prevention of HIV transmission among breastfed infants, according to a report in the June 1st Journal of Acquired Immune Deficiency Syndromes.

In a nested case-control study of HIV-infected Zambian mothers who breastfed their infants, alpha-defensin concentrations were markedly higher among the 32 mothers who did not transmit HIV to their infants compared to the 52 whose infants did become HIV positive.

"Alpha-defensins appear to be another anti-infective factor present in human milk, among the many other immunologically-active components of breast milk, that augment the newborn's immune defenses," Dr. Louise Kuhn

from Columbia University in New York told Reuters Health.

Alpha-defensins have been detected in breast milk, but their role in mother-to-child HIV transmission has not been studied until now.

Dr. Kuhn's team detected alpha-defensins in 79% of breast milk samples tested. Concentrations of this peptide, they report, increased as breast milk HIV RNA quantity increased. Also, breast milk HIV RNA quantity was a "strong and significant predictor" of HIV transmission.

However, after adjustment for milk HIV RNA quantity, a high alpha-defensin concentration significantly reduced the risk of intrapartum and postnatal HIV transmission (odds ratio = 0.3).

continued

2

Prevention Issues and Challenges

Breast milk defensins may help prevent vertical HIV transmission (continued)

Alpha-defensins in breast milk "may help explain why transmission through this route is relatively inefficient, despite the prolonged and extensive exposure of breastfed infants to virus," Dr. Kuhn said.

"However, since much remains unknown about the processes involved," she added, "including why one mother produces high levels of alpha-defensin in her breast milk and another does not, counselors of HIV-positive mothers should continue to offer mothers information

about the risks and benefits of infant feeding options appropriate to their circumstances and based on the availability or not of safer alternatives."

The results of the current study are consistent with prior studies that have documented high alpha-defensin levels in HIV-infected long-term non-progressors as well as in HIV-exposed uninfected individuals.

Source: By Megan Rauscher, NEW YORK (Reuters Health)
Original Source: J Acquir Immune Defic Syndr 2005;39:138-142.

AIDS Set to Explode on Reserves, Study Warns

HIV/AIDS rates among young aboriginal injection drug users (IDUs) in British Columbia show that the problem has moved out of big cities and into small towns where health services are often minimal, according to early data from a new study. "The face of the epidemic is changing," said Dr. Patricia Spittal, lead researcher of the long-term study of 600 aboriginal drug users in Prince George and Vancouver.

"If not addressed aggressively in small reserves and rural areas, it is believed that the virus can potentially wipe out whole communities, as demonstrated in the early phases of the epidemic in sub-Saharan Africa," said Spittal, who works at the B.C. Center for Excellence in HIV/AIDS. "I have worked in Africa and lived in Africa and did most of my HIV/AIDS training in Africa, and there are very real parallels."

The study, which will be published later this year, found that hepatitis C infection among Prince George IDUs was higher than among Vancouver IDUs, 62 percent versus 57 percent.

Researchers also found cocaine injection was more frequent in Prince George and that unsafe sex and needle sharing were common.

Hepatitis C among IDUs is a key warning sign of pending HIV/AIDS infection, and research shows that people who inject cocaine are most at risk. "Hepatitis C is a harbinger, it's a real bad omen," Spittal said. She said it was alarming that investigators found nearly 300 young IDUs in Prince George, a small town with a population of some 72,000, 7,000 of whom are aboriginal.

The study, named the Cedar Project, began after researchers found in 2003 that aboriginal IDUs in Vancouver were contracting HIV at twice the rate of non-aboriginal IDUs.

Source: CDC HIV/STD/TB Prevention News Update 05/10/2005
Original Source: Globe and Mail (05.10.05): Mark Hume

Prevention Issues and Challenges

Birth-Control Gel Also Might Kill HIV

According to doctors worldwide, the spermicide gel C31G could be a breakthrough in birth control and might fight diseases including HIV. The gel contains no hormones, which can cause side effects and require a prescription, is easy to use, and is packaged in an applicator similar to a tampon's.

A disease-fighting female contraceptive would have "a huge public health impact," said Heidi Milliken, manager of the Women's Health Research Unit (WHRU) at the Portland-based Oregon Health & Science University, which is helping test C31G's contraceptive power. The university is part of the Contraceptive Clinical Trials Network (CCTN), a group of 14 health centers financed by the National Institutes of Health.

Although condoms limit the spread of HIV/AIDS, women do not have control over their use. While female condoms might offer limited disease protection, no other contraceptive really fights diseases, according to the Food and Drug Administration.

For years, health experts thought the spermicide Nonoxynol-9 could limit STDs, but tests showed it irritated the body and made it more susceptible to diseases. C31G and Nonoxynol-9 work in similar ways, said WHRU Director Dr. Jeffrey Jensen. Early tests show C31G "highly potent" in fighting viruses and bacteria, but not as irritating as Nonoxynol-9, Jensen said. Scientists are researching C31G's disease-fighting ability in Africa with female volunteers at high risk for STDs.

Early tests suggest C31G is about 85 percent successful at preventing pregnancy, approximately the same rate as Nonoxynol-9 used alone. The CCTN testing sites are enrolling healthy women ages 18-40 in long-term sexual relationships with one partner. Two-thirds will get C31G and the rest will receive Nonoxynol-9.

Source: CDC HIV/STD/TB Prevention News Update 07/06/2005
Original Source: Times-Picayune (New Orleans)(06.26.05): Andy Dworkin

More Than 10 Percent of 14- and 15-Year Olds Have Sex: Statistics Canada

Canadian youths are initiating sex at early ages and many are not using condoms, according to two reports released Tuesday by the federal agency Statistics Canada. Among 3,212 youths ages 14-15 surveyed in the 1998-2001 National Longitudinal Survey of Children and Youth, 12 percent of boys and 13 percent of girls reported already having had sex. And in a 2003 Canadian Community Health Survey of 18,000 people ages 15-24, nearly four in 10 sexually active respondents reported not using condoms the last

time of intercourse. The average age for losing one's virginity was 16.5 for both sexes.

Among those ages 15-24, 4 percent reported having been diagnosed with an STD; females were twice as likely to report an STD diagnosis.

The proportion of youths having sex by ages 14-15 was higher in Quebec (18 percent) than among teens in eastern provinces (15 percent) and those in Ontario and the western provinces (10 percent). continued

Prevention Issues and Challenges

More Than 10 Percent of 14- and 15-Year Olds Have Sex (continued)

The earlier sexual debut, the more likely youths were to have had more than one partner, and males were more likely to have multiple partners than females.

Among girls, the onset of puberty, poor self-esteem, having tried smoking or drinking and not being overweight were significantly associated with early sexual activity. For boys, older age (15 rather than 14), a poor relationship with parents, low household income, and having tried smoking were associated with early sexual debut.

Females were likelier to have intercourse without condoms than males. Sixty percent of girls who reported debut by age 13 did not use a condom at last intercourse, compared with 46 percent of females starting to have sex by ages 14-17 and 37 percent of females who started sex at ages 20-24.

By ages 15-17, 28 percent of Canadians surveyed reported having sex, compared with 65 percent of those ages 18-19 and 80 percent of those ages 20-24.

Source: CDC HIV/STD/TB Prevention News Update 05/06/2005
Original Source: Canadian Press (05.03.05): Lorraine Anthony

Women's Health Spectrum

Cervical Self-Exams Ready for Real World; Aimed at Women in Poor Nations

Realizing the difficulties of bringing Pap smears to the developing world, Florida doctor Arthur Fournier started a company to develop a cheap, simple device that allows women to give themselves a cervical exam. Fournier's creation, a plastic, tamponlike device, is set to go into widespread use this fall in South Africa. The device is aimed at women in developing nations who cannot - for logistical, financial, social or cultural reasons - get a Pap smear.

Since the Pap smear was adopted 50 years ago in the United States, cervical cancer rates have fallen by 80 percent. However, the preventable disease remains the leading cause of cancer death among women in the developing world. In those areas, lacking appropriate medical infrastructure and constrained by social taboos, women's opportunities to receive Pap smears are rare.

Fournier's device, which costs about 25 cents, is inserted like a tampon, rubbed against the cervix,

and removed. The device's removable tip is put into a small container and sent off for testing. In a small trial involving 95 women, the device was about as effective as a Pap smear. Experts call for larger trials and note that the lack of trained technicians in the developing world to test the samples could be a barrier to the device's effectiveness. It has not received FDA approval for use in this country.

Fournier's device could be used to take samples for HPV tests if such tests can be made inexpensive enough for use in the developing world. Other researchers are looking into cheaper ways to remove lesions in women with HPV, hoping to create a complete package, from screening to treatment, for women in poor countries.

Source: CDC HIV/STD/TB Prevention News Update 06/23/2005
Original Source: Chicago Tribune (06.22.05): Jacob Goldstein

Women's Health Spectrum

Vaccine Holds Promise in Prevention of Cervical Cancer, Researchers Say

At the 22nd International Papillomavirus Conference in Vancouver on Tuesday, researchers presented study findings that Merck Frosst's GARDASIL vaccine prevented HPV types 16 and 18 - responsible for 70 percent of all cervical cancer. "We've finally come to the crossroads where we can prevent a viral-induced infection by simply vaccinating women against the viruses that cause the vast majority of cervical cancer," said Alex Ferenczy, a study co-author and head of gynecologic pathology and cytopathology at Montreal's Jewish General Hospital. Cervical cancer is the third-most common cancer in women. Annually, some 1,350 Canadians are diagnosed with the disease and about 400 die of it.

In the double-blind, placebo-controlled trial involving 552 women ages 16-23, the vaccine also prevented 90 percent of genital warts caused by two types of HPV. GARDASIL showed 90 percent more protection than a placebo and is now in Phase III testing. Some 250,000 women are enrolled in the vaccine studies worldwide, said Lucy Gilbert, principal investigator and gynecology oncologist at Montreal's McGill University Health Center.

The head of the Society of Obstetricians and Gynecologists, Dr. Gerald Stanimir, applauded the findings but said many more tests must be completed before the vaccine is publicly available. Prevention efforts that emphasize HPV screening would be a better way to stop cervical cancer, said Abby Lippman, professor of epidemiology at McGill University. "What about all the women for whom the vaccine would be too late?" asked Lippman, co-chairperson of the Canadian Women's Health Network. Most poor or aboriginal women already are not getting Pap tests, she said. "Why not go after the women who are being missed already? Because these women are not going to rush to the doctor to get a vaccination."

The GARDASIL study, "Prophylactic Quadrivalent Human Papillomavirus (Types 6, 11, 16 and 18) L1 Virus-Like Particle Vaccine in Young Women: A Randomised Double-Blind Placebo-Controlled MultiCentre Phase II Efficacy Trial," was published in *Lancet Oncology* (2005;6 (5):271-278).

Source: CDC HIV/STD/TB Prevention News Update 05/04/2005
Original Source: Edmonton Journal (05.04.05): Charlie Fidelman

Women Represent Half of HIV-Positive People Worldwide; Disease Spreading Fastest Among Women, Review Says

Women represent about half of all HIV/AIDS cases worldwide, and the virus is spreading fastest among female populations, especially in developing countries, according to an article published in the June 10 issue of the magazine *Science*, the [New York Daily News](#) reports (Shin, *New York Daily News*, 6/10). Approximately 60% of HIV cases in sub-Saharan Africa are among women, and 75% of the HIV-positive people between the ages of 15 and 24 in the region are

female. In addition, women represent half of all HIV/AIDS cases in the Caribbean and one-third of all cases in Latin America.

Poverty, gender disparities, domestic violence, lack of education, and cultural and sexual norms contribute to women's increased vulnerability to HIV, and women also are more biologically vulnerable to HIV infection (Quinn/Overbaugh, *Science*, 6/10). Continued

6

Women's Health Spectrum

Women Represent Half of HIV-Positive People Worldwide; Disease Spreading Fastest Among Women, Review Says (continued)

In the United States, the number of AIDS cases among women increased by 15% between 1999 and 2003, compared with a 1% increase among men (King, *Seattle Times*, 6/12). In addition, women represent a growing percentage of new HIV cases in the United States.

"This is going to continue on the same trend until we get much more targeted prevention to women," Thomas Quinn, an author of the article and a professor of medicine at [Johns Hopkins School of Medicine](#), said.

Four out of five HIV-positive U.S. women are infected through heterosexual sexual activity,

with the remainder contracting the virus through contaminated needles (*New York Daily News*, 6/10). The researchers called for prevention efforts targeting women, the *Scotsman* reports. "Societal changes will help over the long run, but immediate and faster action requires coordinated efforts to focus on women, develop effective microbicides that women can use themselves and a gender-specific vaccine program that takes into account the different immune responses between women and men," Quinn said (von Radowitz, *Scotsman*, 6/12).

Source: Kaiser Daily AIDS Summaries June 13, 2005

Study: AIDS Cases Hit American Women Harder than Men

From 1999 to 2003, estimated US AIDS cases increased by 15 percent among women compared to a much slower 1 percent among men, with younger and minority women particularly affected, a new study shows. In 2003, there were an estimated 31,600 AIDS diagnoses among men, compared with 11,500 AIDS diagnoses among women. That same year, black women had 25 times the AIDS diagnoses rate of white women, and four times the rate for Hispanic women, the study found.

"I think young women are at high risk because of predisposing [physical] factors and because in some situations they have limited abilities to negotiate the terms of sex with their partners," said Dr. Julie Overbaugh, a Fred Hutchinson Cancer Research Center HIV expert who coauthored the report with Dr. Thomas Quinn of the John Hopkins University.

The authors said that among factors that make young women more vulnerable are higher rates of STDs, which can cause lesions that can facilitate HIV transmission; and still-developing cervixes that can expose more vulnerable cells to infection.

The researchers suggested that gender differences in treatment responses should be considered in designing HIV vaccine trials. They advocated better condom access and more research into microbicides.

The full report, "HIV/AIDS in Women: An Expanding Epidemic," was published in *Science* (2005;308:1582-1583).

Source: CDC HIV/STD/TB Prevention News Update 06/13/2005
Original Source: Associated Press (06.12.05)

Testing Treatment and Care

Sustiva Use During Pregnancy May Cause Fetal Harm

June 14, 2005 — The U.S. Food and Drug Administration (FDA) and Bristol-Myers Squibb have warned healthcare professionals via letter against the use of efavirenz (Sustiva) during pregnancy due to the potential risk of fetal harm, especially during the first trimester, according to an alert sent last Friday from MedWatch, the FDA's safety information and adverse event reporting system.

The change in pregnancy category from C to D was based on four retrospective reports of neural tube defects in infants born to women with first trimester exposure to efavirenz, including three cases of meningomyelocele and one of Dandy Walker Syndrome.

The FDA recommends that women of childbearing potential undergo pregnancy testing prior to initiation of efavirenz therapy and that pregnancy be avoided during treatment through use of barrier contraception in combination with other contraceptive methods.

In animal studies of efavirenz, malformations were observed in 3 (15%) of 20 fetuses/infants (vs 0 in placebo controls) born to cynomolgus monkeys treated throughout pregnancy with a daily dose of efavirenz that yielded plasma concentrations similar to that of human adults receiving the recommended dosage of 600 mg per day.

In these monkeys, efavirenz crossed the placenta to produce fetal blood concentrations similar to that of the mother. The fetuses showed anencephaly plus unilateral anophthalmia, microphthalmia, and a cleft palate, respectively.

An increase in fetal resorptions was observed in rats administered efavirenz doses that produced peak plasma concentrations and area under the curve (AUC) values equivalent to

or lower than those achieved in humans receiving a 600-mg dose per day. No reproductive toxicities were observed in pregnant rabbits at doses that produced peak plasma concentrations similar to and AUC values approximately half of those achieved in humans receiving 600 mg of efavirenz per day.

According to the FDA, limited data are available regarding birth defects occurring after intrauterine exposure to efavirenz. Of pregnancy outcomes in 206 women (207 fetuses) exposed to efavirenz-containing regimens (mostly in the first trimester), birth defects occurred in 5 (5.68%) of 188 live births with first-trimester exposure, and in 0 of 13 live births with second- or third-trimester exposure.

Although none of the defects in the prospective study were neural tube defects, four such cases have been reported retrospectively in women exposed to efavirenz-containing regimens during the first trimester. While a causal role for efavirenz has not been established, the FDA regards the combined findings as a reason for concern and cautions against the use of efavirenz during pregnancy.

Efavirenz should be used during the first trimester of pregnancy only if the potential benefit justifies the potential risk to the fetus, such as in pregnant women lacking other therapeutic options. Patients receiving efavirenz during the first trimester or who become pregnant during treatment should be apprised of the potential harm to the fetus.

An Antiretroviral Pregnancy Registry has been established to monitor fetal outcomes of pregnant women exposed to efavirenz. Physicians are encouraged to register patients by calling 1-800-258-4263. continued

Testing Treatment and Care

Sustiva Use During Pregnancy May Cause Fetal Harm continued

Further information regarding efavirenz may be obtained by contacting the Virology Medical Services Department at Bristol-Myers Squibb Company at 1-800-426-7644 (select Option 3).

Efavirenz is indicated for use in combination with other antiretroviral agents for the treatment of HIV-1 infection. Adverse events related to the use of efavirenz should be reported

to the FDA's MedWatch program by telephone at 1-800-FDA-1088, by fax at 1-800-FDA-0178, online at <http://www.fda.gov/medwatch>, or by mail to 5600 Fishers Lane, Rockville, MD 20852-9787.

Reviewed by Gary D. Vogin, MD

Source: Medscape HIV/AIDS Medpulse (HIV.medscape.com) June 22, 2005

Cervical Cancer Virus Reactivates Sometimes: Study

Human papillomavirus (HPV) - the main cause of cervical cancer - can be reactivated after lying latent in the body for years, providing a clue as to why HIV-positive women are vulnerable to the cancer, according to a new study.

Dr. Howard Strickler of New York's Albert Einstein College of Medicine and colleagues at eight other institutions studied 2,500 women who were examined every six months for an average of seven years. Most of the women became infected with HPV at some point, though it eventually became undetectable due to the immune system's ability to control it. But in 29 HIV-infected women, HPV infection cleared and then reactivated - despite the women being celibate for 18 months or longer.

According to the researchers, this fits "a stringently defined pattern highly consistent with HPV reactivation." "That is, an initially detected HPV type was subsequently not detected for at least two sequential visits and then was detected a second time, in a subject who had remained sexually inactive from the time the HPV type became undetectable and then detectable again (minimizing the possibility of new sexual transmission)."

"Our data suggest that undetectable HPV infections become active much more frequently in HIV-positive women, which helps explain the extremely high rates of HPV infection in these women," said Strickler. The findings appear to support regular Pap exams in women with HIV and those with suppressed immune systems, like cancer or transplant patients, the researchers said.

The study also noted that women are much more likely to become infected with HPV after a recent sexual encounter. "Even one male sexual partner among married women (presumably a monogamous relationship with the subject's husband) was associated with risk of incident HPV detection," wrote the authors.

The full study, "Natural History and Possible Reactivation of Human Papillomavirus in Human Immunodeficiency Virus-Positive Women," was published in the Journal of the National Cancer Institute (2005;97(8):577-586).

Source: CDC HIV/STD/TB Prevention News Update 05/03/2005
Original source: Reuters (04.20.05)

Testing Treatment and Care

Early Therapy Slows HIV Progression in Babies

Treating HIV-infected infants younger than 3 months old is associated with better outcomes than delaying treatment, according to a new study by Stanford University School of Medicine's Dr. Yvonne A. Maldonado and colleagues at the California Pediatric HIV Study Group.

In the current issue of the Journal of the American Medical Association (JAMA), the researchers described time trends in early progression of HIV infection among 205 children born between 1988 and 2001 using clinic visit records through age 3. Around two-thirds of the children were treated with some form of antiretroviral therapy (ART). By age 3, 81 had progressed to an advanced disease stage. Absence of ART was associated with increased risk of HIV progression.

Among the 23 children treated with three AIDS drugs, including either protease inhibitors or a nonnucleoside reverse transcriptase inhibitor, none progressed to advanced disease.

The authors found that even ART with one or two drugs, if initiated by age 2 months rather than 3 to 4 months, was associated with delayed and decreased progression to advanced stages. "Because there are potential drawbacks of very early therapy, large, prospective clinical trials defining the differences between very early versus delayed institution of therapy are needed," the researchers noted.

A second study in this week's JAMA found that the likelihood of needing to switch therapy is significantly greater among children not treated with protease inhibitors and those who start ART at advanced disease stages.

In that study, Dr. Susan Brogly and colleagues examined change in pediatric HIV treatment in US children from 1987 to 2003. The

authors observed that since pediatric guidelines were released in 1998, 22 percent of the 766 HIV-children in their study were started on a regimen not recommended by the guidelines. Of 753 children treated with ART, 606 were switched to a second regimen.

"Once our results were adjusted for age and year of calendar start, we found that older regimens - those including one or two nucleoside reverse transcriptase inhibitors - were associated with shorter time to first regimen switch," said the authors.

"We also identified that children who start therapy when they are severely immunosuppressed also had a shorter time to regimen switch," Brogly said. This is key, because "more exposure to more drug classes and specific drugs, the more it can lead to drug resistance if not taken properly," she added. "Switching could also result in a reduction of future treatment options."

In an accompanying editorial, Dr. Ram Yogev noted that "while it is possible to celebrate the tremendous change in the outcomes of HIV-infected children treated with HAART, it is even more important to continue to prioritize research for the survivors who are now living with a chronic disease."

"Temporal Trends in Early Clinical Manifestations of Perinatal HIV Infection in a Population-Based Cohort," "Antiretroviral Treatment in Pediatric HIV Infection in the United States," and "Balancing the Upside and Downside of Antiretroviral Therapy in Children" were published in JAMA (2005;293(18):2221-2231, 2213-2220, and 2272-2274, respectively).

Source: CDC HIV/STD/TB Prevention News Update 05/11/2005

Original Source: Reuters(05.11.05): Karla Gale

Testing Treatment and Care

No 'Substantial' Difference Found in Antiretroviral Therapy Benefit by Gender

Amsterdam researchers M. Prins and colleagues of the Municipal Health Service found that the beneficial effects of antiretroviral (ARV) therapy do not differ between the sexes.

The investigators "reviewed the available literature on the potential effects of sex on the course of HIV infection and found that there is little evidence for sex differences in the rate of disease progression" in the pre-highly active antiretroviral therapy (HAART) and HAART era, according to the study.

"Compared to men, women appeared to have lower HIV RNA levels and higher CD4 cell counts shortly after infection with HIV, but studies were inconclusive regarding whether these differences diminish over time. Differences in viral load or CD4+ cell count might cause women to delay initiation of HAART. Nonetheless, we found no substantial sex difference in the benefit of antiretroviral therapy," the authors reported.

"The studies we reviewed failed to find any harmful effect of pregnancy on HIV disease progression. With the availability of effective antiretroviral agents, HIV infected women have increasingly decided to have children," the report stated.

"Conflicting results exist on the effect of HAART on regression of cervical intraepithelial neoplasia (CIN)," Prins and colleagues found. "Unlike CIN, invasive cervical cancer has not been found to be much higher in HIV infected women than in HIV uninfected women. Although publication bias cannot be ruled out, published studies suggest higher rates of adverse events among HIV infected women on therapy as compared to men."

Prins and coauthors noted, "As more pharmacological agents are developed, it is especially important that potential sex

differences in pharmacodynamics are assessed. The relationship between metabolic abnormalities, changes in body habitus, and endocrine perturbations has not been extensively studied. Whether sex differences are due to unalterable genetic factors or social and environmental conditions, it is imperative that all HIV infected individuals have equal access to interventions that can slow disease progression."

The study, "Sex and the Course of HIV Infection in the Pre-and Highly Active Antiretroviral Therapy Eras," was published in *AIDS* (2005;19(4):357-370).

Source: CDC HIV/STD/TB Prevention News Update 06/16/2005
Original Source: *Women's Health Weekly* (06.02.05)