

Summer 2010



# Health *WIHS*

## HIV Study Shines Spotlight on Women

Summarized and adapted by Laura Jones and Ellie Stoller

Even as the research community has drawn criticism for overlooking women in clinical studies, one historic initiative focusing solely on women for the past 15 years has gathered a vast range of data regarding the effects of HIV in women. The Women’s Inter-agency HIV Study (WIHS) is the largest prospective multicenter cohort study of HIV-positive and at-risk HIV-negative women in the U.S. and the longest ongoing disease progression study of HIV infection in women. WIHS investigators hope to learn how HIV infection, treatment, environmental factors, and genetics interact to determine the course of HIV disease in a diverse group of women. “We want to come up with research findings that can be put into practice to impact the management and treatment of women infected with HIV,” said Monica Gandhi, MD, MPH, of the University of California, San Francisco and an investigator in the WIHS cohort.

WIHS began as focus on AIDS was shifting from men who have sex with men to include other affected populations. “Our initial funding in 1993 came at a time when the face of AIDS had changed and the United States was realizing that women were an important part of the HIV epidemic—not just for passing it on to men and children but also for their own health, which is affected in a unique way,” said Mardge Cohen, MD, a WIHS principal investigator.

WIHS investigators, as well as other researchers working on HIV related research, can mine a robust set of data: 2625 women (2056 HIV-positive and 569 HIV-negative) were enrolled in 1994 and 1995. In 2001 and 2002, the study enrolled an additional 1143 women. The study population is highly representative of the racial/ethnic and sociodemographic profiles of US women with HIV. About 60% of participants are black and 27% are Latina. Less than one-third are employed, and two-thirds report a history of physical, sexual, or emotional abuse.

### MAKING A DIFFERENCE

WIHS tries to understand all aspects of HIV progression in women, not just specific parts of treatment. This includes the development of HIV infection, how the body handles HIV medications, the impact of drug and alcohol use, and the effects of aging in women with HIV. More than 440 articles based on WIHS data have been published in peer-reviewed journals, and these findings have informed management strategies in HIV-infected women over time.

One finding was the discovery that mental health appears to have a sizable effect on the physical health of women with HIV. “There’s a significant amount of posttraumatic stress and a history of trauma and violence in many women with HIV, and this can have an important impact on how women adhere to medications,” said Cohen.

A variety of other diseases also appear to have certain links with HIV. “We’ve seen increased rates of cardiovascular disease, liver disease, neurocognitive disorders, and malignancies in HIV-infected women,” said Gandhi. Women with HIV are also at increased risk of having abnormal Pap test results, and the WIHS has been involved with investigating the risk factors for precancerous cervical lesions.

“All of these issues make us think that it’s important to ensure that providers not think of women with HIV as only having HIV—they have other issues, especially as they age, such as cancer and liver, kidney, and neurocognitive issues,” said Cohen.

### Inside this issue:

HIV Study Shines  
Spotlight on  
Women  
Cover

Current Chicago  
WIHS Substudies  
Page 2

Vitamin D  
Page 3

NCAB Report  
page 4

Kigali Report  
Page 6

Did you Know?  
Page 7

Chicago Area  
Consortium  
Page 8



## WIHS REFERRALS NEEDED FOR NEW ENROLLMENT!



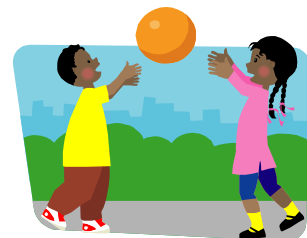
- WIHS expansion has been approved!
- We plan to add 100 new participants.
- We can recruit women who are infected with HIV who were recently diagnosed and are not on antiretroviral therapy or who started ARVs after 2007.
- We also are adding women without HIV who have or are currently engaged in high risk behaviors like unprotected heterosexual sex or substance use/abuse.

**We need your referrals!** If you know a woman who would be interested in joining WIHS and meets the above criteria, please let us know. **Contact Angie Shansky** as soon as possible at 312-733-9065 or 312-550-6192.

---

### Current Chicago WIHS Substudies

Current Chicago WIHS Substudies



**Cardiovascular Sub-Study/Carotid Ultrasound (current):** This national WIHS substudy will have a select group of participants from the Core Center site return for a repeat ultrasound of the carotid artery in the neck. This study will help us understand the reasons why HIV infected individuals have increased risk of heart and vascular diseases such as heart attack or stroke.

In this proposal, we will computer-analyze the measurements to determine what kind of materials, such as cells and fats, are in the walls of the arteries of the neck. This will help us better understand the kind of vascular disease that develops in HIV-infected women.

**CIDI (pronounced “seedy”) Sub-Study (starting in Fall):** The CIDI is a questionnaire that will help researchers to better understand how many of the WIHS women are affected by serious mental health issues (like depression and anxiety) and alcohol/drug abuse or dependence issues. This is important to understand because other research tells us that women who have these issues may not seek or follow through with health care services. By using CIDI and WIHS study data, we will explore how these mental health and alcohol/drug issues are related to whether WIHS women receive the most effective treatment available, such as highly active antiretroviral therapy (HAART), whether they take it as prescribed, how their health is affected, and how other aspects of their lives (such as their income, education, health insurance, and family features) influence their overall health and well-being.

**Gender Based Violence Sub-Study (ending soon):** This sub-study was run at all four WIHS sites in Chicago in 2009-2010 and will end in September 2010. With collection of questionnaire data from WIHS participants, this sub-study seeks to understand some of the ways that a woman’s experienced gender based violence (a woman’s experience of childhood or adult physical and/or sexual abuse) is related to substance abuse and sexual risk taking (i.e., sex without a condom).

**Hair Cortisol Sub-Study (coming soon):** Coming soon to the WIHS Core Center site is a hair cortisol study. Serious and on-going (or chronic) stress is known to affect our bodies in negative ways, including speeding up the start of some diseases (infections, diabetes, cardiovascular disease, cognitive impairment, etc.) and affecting the worsening of HIV disease. One way to measure the amount of stress a woman feels is to look at a stress hormone in the body called cortisol, which can be seen in hair. Researchers will look at hair specimens to evaluate the amount of cortisol that the body produced when under stress during the past three months. By collecting hair samples and self reports of stress levels, researchers can reliably measure the amount of stress that WIHS women experience and can see how stress affects their health.

**Imaging Studies-Hippocampal:** Results from a previous WIHS study show that HIV status and recent illegal drug use are predictors of impaired delayed verbal episodic memory (memories of your own life experiences) in the hippocampus (where memories about your life are made). This substudy will look at the influence of drug use on hippocampal function in HIV+ women. To record hippocampal activity, the study will use Functional Magnetic Resonance Imaging (fMRI).

**Intensive PK (or Pharmacokinetics) Sub-study (current):** This sub-study is being run at all four WIHS sites in Chicago until 2012. Eligible WIHS women must be HIV-positive and taking a HIV medication called Isentress or Raltegravir. By having women take their Isentress dose and then by drawing blood periodically over the course of 12 hours, this study seeks to measure how well HIV medication is absorbed and processed in the body for optimal effectiveness. We

(Continues on page 7)

## An American Recovery and Reinvestment Act (ARRA) Grant

# The Vitamin D Substudy

By Dr. Oluwatoyin Adeyemi

Vitamin D is an important vitamin for overall health in addition to its effect on bone health. This vitamin is made by the skin after exposure to sunlight and can also be found in certain foods such as oily fish, dairy products and in vitamin supplements. Vitamin D deficiency (low vitamin D level) is common in adults in the United States. There have been very few studies done on Vitamin D levels in adults with HIV infection and most of these have been in white men. In late 2009/early 2010, a group of investigators from Chicago decided to study how common vitamin D deficiency was among WIHS women seen across all 6 sites with and without HIV infection.

Vitamin D testing was performed by Quest Diagnostics on stored blood from Visit 27 (October 1, 2007-March 30, 2008). Vitamin D deficiency was defined as vitamin D levels of less than 20 ng/ml (nanograms per milliliter).

Our study found that among all 1760 women (of whom 1254 HIV+), 66% (2 out of 3) had low vitamin D levels. HIV-infected women had a lower rate of Vitamin D deficiency. The following factors made a woman more likely to be vitamin D deficient: being African American or Hispanic, being overweight or obese and among HIV-infected women having a CD4 (T-cell) count under 200 or currently taking Efavirenz (sustiva). Women who were from the Los Angeles (LA) or Chicago sites or who had undetectable HIV viral loads had a lower risk of being vitamin D deficient.

In conclusion, we found that among WIHS participants, 2 out of every 3 women had low levels of Vitamin D. The WIHS has ongoing studies in Chicago and nationwide to study the effects of Vitamin D on many health issues and to determine the best way to correct low Vitamin D levels. The vitamin D test results were mailed to the sites in early June. Since these results are from stored blood, we recommend that primary care providers re-check them before plans are made to correct those levels.

## How You Can Get Involved

### ***New WIHS Substudy***

WIHS will soon be kicking off a new Vitamin D Sub Study to see if low levels of vitamin D can be reversed to improve insulin sensitivity and lower inflammation in women with HIV.

### ***Why?***

Vitamin D is a natural vitamin made by the body after exposure to sunlight and can also be obtained from certain foods and supplements. Many people in the US have insufficient (low) vitamin D levels and people with dark skin or older people are more likely to have low vitamin D levels. This vitamin has several important functions in many organs in the body. Vitamin D supplementation may enhance HIV treatment.

### ***Who is eligible?***

Any current WIHS participant who is HIV positive.

### ***What is involved?***

3 in-person visits for consent, blood draw, and questionnaires, each occurs at baseline, 6 month, and 12 month time points if eligible for full course of study

1 telephone conference for questionnaire at 3 month time point, if eligible

### ***What is the compensation?***

\$25 cash, snack, and CTA vouchers for baseline and 12 month visits

If eligible, \$10 cash for 3 month telephone interview

If eligible, \$25 cash, snack, and CTA vouchers for 6 month visit

*Once the study has started and if you are eligible, you will be contacted at the end of your upcoming WIHS visit with more information.*



## WIHS National Community Advisory Board (NCAB) Report

Hey Ladies, here's hoping that you're having a great summer as the weather so far has been unusually and unforgettably tolerable.

I just want to share a brief update on the WIHS National Community Advisory Board (NCAB). The NCAB agreed to hold a call every two months instead of having a monthly call beginning in June. Chicago will synchronize the local CAB meetings to follow the NCAB calls. Chicago is still working on a grant to conduct stress reduction techniques for the local Chicago WIHS women.

Unfortunately the NCAB abstract submitted to last years United States Conference on AIDS, **What motivates WIHS (Women's Interagency HIV Study) women to keep coming back year after year?**, was not accepted for presentation. The abstract was excellent but the astounding number of abstracts submitted (I was told in the thousands) made the decision making very difficult. But not to fret, our NCAB abstract is ready for submission to the next United States Conference on AIDS. I have lots of hope for this abstract for the vital signs are extremely good!

The WIHS NCAB and Executive Committee will have its bi-annual meeting in the fall. Chicago will host this years meeting. The NCAB members will attend a special Women's Conference co-sponsored by Chicago WIHS. The NCAB will continue to look for ways to improve to advocate for and engage other women in their local CABS. Other topics included strategies for decision making, listening skills during conference calls, following through with goals, and establishing a better relationship with local WIHS principal Investigators and project directors.

Hoping you're having a wonderful Summer! See you in October!

Marta



**Save The Date!**

**Saturday 10/23/10**

**8:30 AM to 4:30 PM**

**A Conference for Women Living with HIV**

**Our third incredible year! (see flyer on pg. 5)**

**Don't miss this wonderful and inspiring event sponsored by Chicago Women's AIDS Project and WIHS. Cathy (participant) said "I wasn't going to come, but I made myself come, and I'm so happy I did. I feel so lifted!" And why wouldn't you? We learn together, eat and share together. Our own Dr. Mardge Cohen, shares our research from WIHS and answers all our questions. Lots of sisterly love going around. You don't want to miss out on that!**

A Conference For Women Living With HIV

# POSITIVE AND POWERFUL

## WE'RE STILL STANDING!

October 23rd, 2010 8:30am-4pm 1853 W. Polk - UIC College of Medicine West

Come for a day of workshops, dancing and sharing  
Get inspired by local and national advocates  
Learn from women serving on the WHS CAB  
Breakfast and lunch included  
Raffle Massage and makeovers  
Childcare and bus cards available  
To sign up call CWAP 773-262-5566

Sponsored by the Chicago Women's AIDS Project and the Women's Interagency HIV Study at COPE

## WIHS Women Connect to Kigali

By Dr. Mardge Cohen



Dear friends and supporters,

Five years ago during a conversation with the Minister of Health of Rwanda, I was struck by the contrast of the matching socks, tie and handkerchief worn by this attentive physician, and our experience in the clinic where the women patients had no underpants. We budgeted money for underpants and added their distribution to the gynecology protocols for abnormal pap smears or exams.

It is now 2009, and Rwanda and WE-ACTx have changed significantly in these 5 years: over 1700 WE-ACTx patients take effective antiretroviral medications daily; 270 children with HIV play at our weekly WE-ACTx Sunday support group; Rwanda boasts that 70% of pregnant HIV infected women take prophylaxis to prevent HIV transmission (one of the highest rates in Africa where most countries have only 20% uptake of prenatal HIV prophylaxis). Yet, each week Anne Marie Bamukunde, the recently hired WE-ACTx psychiatric nurse appeals for funds for patients to buy underpants or some food prior to prescribing anti-depressants for those referred to her. She told me this week that in all her previous work in Rwanda she had never seen families with so many needs and vulnerabilities until she came to work at WE-ACTx. This is the refrain that we continue to hear, echoing Dr. Jonathan Mann's words on human rights and social determinants of health from two decades ago, "No matter how and in whom it starts, HIV always finds the most vulnerable in any country."



But we are responding. On June 16, 2009, over 400 children with HIV and their families attended our 4th annual celebration of Day of the African Child (DAC)

(commemoration of the 1976 child uprising in Soweto against apartheid). We were lucky to have volunteers helping us from Israel, Canada, and the U.S. The program included traditional dancing by the WE-ACTx dance troop, singing by WE-ACTx rock star Noah Mushimiyimana, speeches by local leaders and ministers and the U.S. ambassador to Rwanda. There was a large buffet lunch. Even though it took hours to serve everyone, no one really minded or wanted to go home afterwards. Our annual WE-ACTx celebration of this Africa-wide holiday was extensively covered in the local Rwandan media.

Our PMTCT (prevention of maternal to child transmission) program at Nya-cyonga clinic is going well. Irene, the trauma counselor, facilitates the weekly post partum group for women with HIV who have taken antiretroviral medications during pregnancy. Only one child in this group is infected.

Irene is starting an income generation program with 30 of these mothers who have bonded together to deal with high food and transport prices. Epiphanie, the peer educator, seems stronger and more confident each time I come to visit. Here she is using the Kinyarwandan version of the HIV counseling and testing flipchart to explain the importance of getting tested for HIV during pregnancy and the best ways to prevent HIV and other sexually transmitted diseases. Some of you will remember when we first used this flip chart (in English) at Cook County Hospital and other hospitals in 1999.



We've made a major change by combining the Icyuzuzo and Centre Ville

Clinics into one clinic with the conclusion of two large donor grants. It has been very difficult of course, as the association that housed the clinic will lose this activity. In terms of patient care, all patients will continue to receive at Centre Ville, though it will be more crowded and space for some support groups will be lost. We have thought long and hard about this necessary consolidation. We have learned that there is a major gap that still needs to be filled—providing a woman-, youth- and family-centered program which is particularly sensitive to and addresses the mental health concerns, psychosocial needs and other health problems facing Rwandans with HIV. This is the need we hope to continue to address at Centre Ville, with your continued help and support.

We are making interesting and valuable headway integrating psychosocial support and legal issues into our health care program. Working with the Kigali Health Institute Nursing School, we have introduced a screening tool for domestic violence. We're finding that nearly two thirds of women screen positive, reporting physical, sexual or emotional abuse. The scenarios that the trauma counselors and legal team find most difficult are when women have nowhere to go to escape the abusive relationship or when a woman is ill and is unable to leave her husband. WE-ACTx is working with others in Rwanda to begin to address these aspects of gender based violence.

We all come away motivated to make a difference here. Hopefully we can draw on the reserve of energy, goodwill, volunteerism, innovative ideas, resources, and willingness to fight for real change on both sides of the world to see our way forward.

Mardge  
[www.we-actx.org/](http://www.we-actx.org/)

**Current Chicago WIHS Substudies, cont.**  
(Continued from page 2)

know that if women do not take their HIV medication as prescribed, the medication may not work as well as it should. We also know that sometimes, even when women take their medication as prescribed by their doctor, the medication does not work as well for them as is hoped. This study may help us to understand the reasons how and why some women's bodies absorb HIV medication better or more effectively than other bodies.

**Metabolic Sub-Study (current):** The Metabolic sub-study is being run at the Core Center WIHS site with eligible women and will likely be completed in the Fall of 2010. Other research studies have suggested that HIV medications cause a change in body shape, diabetes and high cholesterol. This WIHS Metabolic Sub-study (being done at many of the national WIHS sites) includes an oral glucose tolerance test, where women drink a glucose solution and then have blood draws to test their insulin and glucose levels. The participants also have a DEXA bone density scan done at Rush University Medical Center. The results of these visits will help investigators to determine fat distribution and bone density in HIV-infected and HIV-uninfected women of the WIHS, as well as how women's bodies respond to glucose testing.

**Smoking Cessation Sub-Study (recently completed):** Rates of smoking among HIV infected individuals are more than twice the rate in the general population. This has serious implications; as care for HIV improves, a large proportion of death and poor health in HIV infected individuals will likely be caused by smoking. This study will describe predictors of smoking, cessation (quitting) activity, and prolonged cessation in the WIHS cohort over a period of 10 years. The study will help researchers and clinicians better understand how the behavior of smoking develops and changes over time.

**Traditional Gender Roles Sub-Study (current):** This Chicago WIHS substudy at the Core Center, which is currently being conducted and will end this summer, investigates how women in the WIHS feel about male and female gender roles and how those attitudes affect risk-taking behaviors and health-promoting behaviors. Since a large percentage of women contract HIV from male sex partners, it is important for researchers to understand how women view their roles in their relationships with men. The study involves several short questionnaires and narrative tasks where the participant tells a story about a picture of woman looking in a mirror.

**Vitamin D Sub-Study (current):** Please see the article in this newsletter that provides further detail on this sub-study that is currently starting at the Core Center, Rush, and UIC WIHS sites.

**Did you know.....? By Angie Shansky**

- Smelling (not eating) green apples and bananas, helps you lose weight.
- You cannot hum while holding your nose.
- Months that begin on a Sunday always have a Friday the 13<sup>th</sup>.
- Nachos is the food most craved by pregnant women.
- More than 50% of the people of the world have never made or received a telephone call.
- Avocados have more protein than any other fruit.
- Cranberries are sorted for ripeness by bouncing them, a fully ripened cranberry can be dribbled like a basketball.
- Similar to finger prints, everyone has a unique tongue print.
- Humans shed about 600,000 particles of skin every hour. That's about 1.5 pounds a year.
- A pair of feet have 500,000 sweat glands and can produce more than a pint of sweat each day.



**Helpful hints from natural remedies**

- Cover a skin blemish with a dab of honey and place a band aid over it. Honey kills the bacteria, keeps the skin sterile, and speeds healing. Works practically overnight!
- Listerine therapy for toenail fungus. Soak your toes in Listerine mouthwash. The powerful antiseptic leaves your toenails looking healthy again.



## Chicago Area Consortium



### **Chicago WIHS Consortium:**

Principal Investigator	Dr. Marge Cohen
Project Director	Kathleen Weber
Assistant Project Director	Sally Urwin
Consortium Administrator	Angie Shansky

### **Chicago WIHS Lead Site:**

The CORE Center at John H. Stroger, Jr. Hospital of Cook County

Co-Principal Investigator	Dr. Audrey French
Study Coordinators:	Karlene Schowalter Cheryl Watson

### **Chicago WIHS Subsites:**

#### University of Illinois Hospital & Clinics

Site Investigator	Dr. Ron Hershow
Site Coordinator	Karen Fodor

#### Rush Presbyterian St. Lukes Medical Center

Site Investigator	Dr. Bev Sha
Site Coordinator	Joan Swiatek

#### Northwestern University Medical Center

Site Investigator	Dr. Sarah Sutton
Site Coordinator	Donna McGregor