

Winter 2012



# Health *WIHS*

## Changes, Changes, Changes - What's New for WIHS-V?

It is that time again! Every five years the WIHS program competes for another funding cycle. Thanks to the dedication of Chicago WIHS women who have provided valuable information about their lives and health and to the efforts of WIHS staff and researchers, **Chicago WIHS is re-funded!** During WIHS-V, we will hit the 20 year mark. So thank you all!

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Of course, this comes with many changes both good and bad. Since HIV infection has become such an issue for women in the Southeastern U.S., the NIH decided to add FOUR new sites -- the University of Alabama, Emory in Atlanta, University of North Carolina, and University of Miami. Unfortunately the WIHS site in LA will not be refunded so we are really sad about that



The waiting area



The reception desk

Other exciting changes here in Chicago include ongoing expansion of both the WIHS program and research at the CORE Center. Not only have we recently added over 100 new women but we've also found a new space that will allow us to have our clinic, lab, and administrative staff in the same location for the very first time. We'll be seeing both UIC and CORE Center participants at the new clinic located at **2225 W. Harrison** just a few blocks west of the CORE Center. Here are

some pictures of our new space which we hope will be ready to open on January 1<sup>st</sup>.



## WIHS National Community Advisory Board (NCAB) Report

Our local Chicago Women's Interagency HIV Study (WIHS) Community Advisory Board (CAB) is part of the National Institute of Health (NIH) funding mandate that all national WIHS sites provide an avenue for WIHS research studies to be shared in the community. Our local CAB meetings take place every few months to ensure that the women stay in tune with the current matters of the national WIHS and that of the home site. The WIHS National Community Advisory Board (NCAB) has a conference call every other month to discuss updates on working group calls, new concepts, and Executive and Project Directors Committee calls. This information is translated over to the local CAB so they are kept updated with the study at large.

There are always new sub-studies and focus groups surfacing within the WIHS, so our women of the CAB are being asked of their opinions on many topics and or to participate in the sub-studies. This is their ammunition of valuable research education to share with other women in their clinic and community settings.

The local CAB's function to this end provides a wealth of information to family and friends by attending regularly scheduled workshops and events. The local Chicago WIHS CAB members and staff sit on the planning committee of a Women's HIV yearly conference, sponsored by CWAP. WIHS researchers and participants help facilitate workshops which touch on current research and findings in our program.

We meet knowing that our ideas as women of the study are given back to the National Community Advisory Board and to the Executive Committee of the WIHS. In short, the local CAB members are the eyes and ears of the WIHS. It's a give and take; we give to the study our ideas and answers to their questions, and most important our participation in the study itself and in turn the educational knowledge results in a positive effect on us, the women of our communities, and to those women of the future.

The Principal Investigator, Dr. Mardge Cohen and staff are tremendously supportive and work very hard to assure that the Chicago local CAB is given every opportunity to be involved and stay involved. It is a job we all take very seriously. The childcare provided by the WIHS has been an integral part in helping us to maintain our ability to be members. The snacks help too!

If you're a WIHS woman wanting to express your voice and interested in participating in the local CAB, let your interviewer or site coordinator know now or at your next meeting.

Always take good care of yourself, and have a great and safe holiday season!

Marta Santiago  
Chicago WIHS NCAB Representative





## **Domestic Violence Increases Risk of Death for WIHS Women** **from Kathleen Weber and Dr. Mardge Cohen**

Women who experience domestic violence or abuse may be at increased risk for contracting HIV and once infected these women may be more like to continue to be abused. With help from WIHS women who have been answering our questions for many, many years we investigated the link between abuse and likelihood of dying

Unfortunately, 3 out of 4 WIHS women experienced abuse in their lifetime and nearly one third report at least one episode of abuse while enrolled in the WIHS study. There is good news though -- each year the number of women reporting abuse has gone down.

We looked at the WIHS data to determine whether a recent experience of abuse was associated with a higher likelihood of death. After we accounted for vulnerabilities such as depression, smoking, drug or alcohol use, non-adherence to antiretroviral therapy, low CD4 count and high viral load, each of which are associated with abuse and may also contribute to risk of death, we discovered that recent abuse was associated with a two times higher risk of death for all WIHS women. When we looked at each HIV group separately, we found that HIV-positive women reporting recent abuse were 42% more likely and HIV-negative women 4 times more likely to die. More of the HIV-negative women who died also reported a history of past abuse, including childhood sexual abuse, than the survivor group.

The reasons for the strong association between recent abuse and death are not entirely clear. The higher risk of death was not directly related to violence, although there were a slightly greater number of trauma related deaths (accidents, homicides, suicides) among women who reported recent abuse.

Explanations for this finding could be related to factors we did not measure like social isolation or high anxiety symptoms including post-traumatic stress disorder (PTSD) which can also lead to problems with sleep and hormonal balance. PTSD may disrupt neuroendocrine and immune regulation mechanisms which may damage health. Since WIHS recently added studies of stress and hormones, we hope to be able to look at these more closely in the future and thank you for making this possible.

Providers need to learn to identify abuse. Don't be afraid to tell your provider about abuse even if they don't ask because it may be a matter of life or death. Health care systems need to develop interventions and integrate tools and support to help women living with HIV and trauma. Support groups might help women cope with the negative outcomes of abuse and live longer. And we need a national plan to stem this epidemic of violence which fuels the HIV/AIDS epidemic and endangers women's lives.



## **Can Childhood Abuse Affect Heart Health?** **From Sannisha Dale at Dr. Leslie Brody's Lab, Boston University**

We've been working with researchers from the "Emotion, Gender, Culture, and Health Laboratory" at Boston University led by Dr. Leslie Brody, an expert in the study of gender roles. You may remember some of those new questionnaires that ask you about your attitudes about how you think men and women *should* behave. These questionnaires help determine how much of your focus is on caring for others rather than yourself, who makes the decisions and has control in your relationships, how important it is to you to look a certain way and whether you hide your feelings to avoid conflicts (self-silence). Well our Boston collaborators have been working hard to analyze these data.

(continued on page 6)

## Social Support is Good for Your Health

By Cheryl Watson

Social support is beneficial to health and can improve quality of life. The amount of social support needed to stay healthy and thrive differs from person to person and depends on your emotional and material needs and your perception of whether those needs are being met.

If you find that you are struggling with loneliness, feeling misunderstood by others, or feeling neglected or isolated, you should ask for help to make some changes in your life. Abusive/neglectful relationships, trust and personal safety issues, and poor interpersonal skills create difficulty in maintaining adequate social support. When abuse, neglect, substance abuse, mental illness, violence and traumas occur early in life, it is often difficult to develop the skills needed to build a strong social support system.

You cannot change everything at once, so prioritize what is most important by thinking about what makes you most uncomfortable, bored, or resentful about your life. Negative feelings indicate you might benefit from better social interactions or decreasing social interactions that are emotionally draining. You might consider starting counseling, engaging in more productive activities, or improving or possibly eliminating negative relationships.

You also should determine how well your current relationships are meeting your needs. There are a variety of ways to make life changes that improve your social support. Interacting with new people, learning something fresh or helping someone less fortunate are good ways to increase self-esteem and broaden your social network. Counseling or being a part of a spiritual community can help increase your ability to cope and reduce your dependence on unreliable sources.



Successful lifestyle changes often happen one step at a time. The rewards can be tremendous. A strong social support system makes it much more likely that you will have your needs met and enjoy the benefits of good health.

### Here are some suggestions for how to build or strengthen your social support network:

- Start or return to work or school. Even if you receive disability income, Social Security allows individuals to work part-time and continue to receive their income. The Department of Rehabilitative Services (DORS) can assist you in meeting your educational goals.
- Take an Adult Education class. City Colleges of Chicago and suburban community colleges offer many free or low-cost classes that range from learning a new skill (dance, ESL, grant-writing, etc.) to vocational training (CNA, security guard, etc.).



- Adopt a pet. Animals are great at providing unconditional love.
- Volunteer your time. Many organizations are in need of help. You can tutor a child in an after-school program, be an usher and see a free performance, answer phones or help raise funds.

• Take a walk or fitness break. Walk for 30 minutes and improve your health and mood. The Chicago Park District offers free and low-cost fitness classes to persons with disabilities.





## Update on the Vitamin D Substudy

### From Dr. Oluwatoyin Adeyemi

Dear WIHS participants,

As you may recall, in fall 2009, we began studying Vitamin D in the WIHS. We found that among 1778 women from all 6 WIHS sites, 2 out of every 3 women had low vitamin D levels. These results were sent back to the sites in 2010 and since then many of you may have been counseled on how to increase your vitamin D levels through diet, outdoor activities, vitamins and in some cases with prescriptions for vitamin D supplements.



The vitamin D study also explored how vitamin D levels affect CD4 (T-cell) counts among HIV-infected women in the WIHS. Our study found that among women who started HIV treatment with low CD4 counts, those with low vitamin D levels had a slower rise in CD4 counts after 2 years of HIV medications. These findings suggest that low vitamin D levels may affect T-cell recovery after HIV medications are started.

The last part of the vitamin D work was a study on vitamin D supplementation which was conducted from late 2010 to early 2012 at Chicago WIHS sites. The goals of this sub-study were to find out the best ways to replace low vitamin D levels and if getting vitamin D levels up to normal levels lowered insulin resistance (high insulin resistance increases the risk of diabetes) and lowered inflammation in women with HIV. We enrolled 127 of 133 eligible HIV-infected women at 3 Chicago sites: CORE Center, Rush and UIC and followed them for a total of 12 months. They had vitamin D levels checked and results were given to the women and their primary care providers.

For those with low vitamin D levels, we gave their primary care providers recommendations on how to correct these low vitamin levels. We are now in the process of evaluating our results and look forward to sharing the results of this study with the WIHS participants by the spring of 2013. We thank our Chicago women for participating in this important study (95% of those who were eligible agreed to participate). We hope the results from these vitamin D studies will be useful in the management of all women with or without HIV infection.



## HIV and Drug Use are a Bad Combination for Verbal Memory

### From Vanessa Grauzas at Dr. Pauline Maki's Lab, UIC

HIV infection can have a negative effect on certain brain functions, including verbal memory and executive function. Verbal memory is the mental ability to remember a list of words once it is read to you. Executive function is a broad term that includes a lot of mental abilities such as planning and problem solving. People who use drugs, such as cocaine or heroin, can also show problems with verbal memory and executive function. A recent Chicago WIHS study looked at the combined effects of HIV infection and drug use on verbal memory and executive function.

We found that women with HIV performed worse on the verbal memory task than women who do not have HIV. In addition, women who had used cocaine or heroin in the past 6 months before their WIHS visit also performed worse on the verbal memory task than women who had not recently used cocaine or heroin. What we also found was that when HIV infection and recent drug use occurred together, the effect on verbal memory abilities was very bad. We didn't observe this for women who were not infected with HIV though. This interaction was not seen on the executive function task.

These findings are important because drug use may be worse for brain health in women who have HIV compared to uninfected women.

## Can Childhood Abuse Affect Heart Health?, continued

In a recent analysis Sannisha Dale, a doctoral student in Dr. Brody's lab, found that women who experience childhood sexual abuse tended to adopt non-traditional female gender roles and this led to an increased risk of cardiovascular disease in women with HIV infection.

These findings are not unexpected since earlier research has shown a link between being abused and adopting nontraditional gender roles. It is also known that traditional female gender roles are associated with lower risk of heart disease but that more traditional male roles, like being aggressive and "tough," are associated with higher risk of heart disease. We also found that childhood sexual abuse is associated with drug use and non-adherence to HIV medications.

More than one in 4 women reported childhood sexual abuse and these women were more likely to have a higher heart disease risk than women who were not abused. Women who were sexually abused as children adopted less traditional gender roles, with less self-silencing and higher sexual relationship power, which was somewhat surprising to us.

Because we saw a trend that gender roles might be related to heart disease risk in women who did not experience childhood abuse but no difference in women who reported childhood abuse, we wondered if being more dominant is what led to an increase in heart disease risk while caring for others tended to protect women from heart disease. It is also possible that women may develop nontraditional female gender roles (be more expressive of needs, more independent, care for themselves, etc.) as a protective response to being victimized.

It is important for health providers to learn about how abuse affects women's health and to make sure women get the best care to address these health concerns. WIHS women and investigators are making a very special contribution to this area.



## How HIV and Genes Might Affect Working Memory From Erin Sundermann at Dr. Pauline Maki's Lab, UIC

We already know that HIV infection can be bad for the brain but we don't know why some HIV infected women are more affected than others. One reason may be related to genetic differences. There is a gene called "COMT" that impacts mental tasks that need good "working memory", which is the ability to store and move around memory in your brain over short periods of time. One variation of the gene, called "Val", has been associated with worse working memory and abnormal brain activity. The COMT gene helps determine how the brain uses dopamine (a chemical messenger in the brain); other research also showed that HIV also impacts how the brain uses dopamine.

We decided to look to see if HIV infection together with any COMT genetic difference would be related to worse working memory and brain function. We studied 67 HIV-infected and 30 HIV-uninfected Chicago women who did a working memory test during their regular WIHS visit and had genetic information. We also scanned the brains of 33 women **WHILE** they were actually doing a working memory task to see what parts of the brain would be most active.

We found that HIV infected women who also carried two copies of "Val" (or "Val/Val") did the worst on the memory task. We also saw abnormal brain activity when women with Val/Val AND HIV infection were doing these working memory tasks in the scanner. Women in our study who were HIV infected but did NOT have Val/Val did NOT perform any worse than women who were not infected with HIV.

The early results tell us that Val/Val, which can change dopamine levels in the brain, could add to the memory problems that some women with HIV report. These findings may help researchers find an early intervention to improve working memory especially for HIV infected women who have this genetic risk related to dopamine.



## WIHS Staff: Hellos and Goodbyes

The good and the bad about life is that it never stays the same. Since our last newsletter, we have said goodbye to some of our wonderful WIHS staff, but we are also glad to welcome some new (and returning) members to our research team.

### WE WILL MISS YOU:

- \* **ANGIE SHANSKY**, Clinic Coordinator and Interviewer at Core Center WIHS: Angie may still pop in once in awhile to do an interviews with some of our Spanish speakers, but she is enjoying her retirement and life with her donkey, Jackson, on her little Texas farm. She misses you all and sends her love.
- \* **KARLENE SCHOWALTER**, nurse practitioner at Core Center WIHS: Karlene has moved on to full-time clinical care work (and is she ever good at that!). We will miss her at WIHS, and will forever appreciate all the care she has given us all.
- \* **DONNA MCGREGOR**, site coordinator at Northwestern WIHS: Thanks for all your years of good work, and best wishes on all your other research studies!
- \* **MARGOT MOINESTER**, CIDI study interviewer and WHAT IF study interviewer: Has left us to pursue studies at Harvard University. Good luck, (future) Dr. Margot!

### WELCOME TO:

- \* **GABRIELLA MEREDITH**, registered nurse at Northwestern WIHS: Welcome BACK! Gabriella was the site coordinator at NMH WIHS when we started the study in 1994/1995. She came back to us in 2012 and is excited to see all her NMH WIHS participants again.
- \* **MARIA PYRA**, Epidemiologist and Data Analyst: Maria joins our WIHS team after graduating with a Masters of Public Health from UIC. She is interested in epidemiology (the study of diseases in our society) and infectious disease research. Maria has worked for Habitat for Humanity in the past and has traveled to Africa and Central America to help build houses there for those in need. She keeps busy behind a computer, analyzing our data, and helping us to get more WIHS research articles published. She is looking forward to meeting and working with the women of WIHS!
- \* **ANNA HOTTON**, Epidemiologist and Data Analyst: Anna joined our WIHS team in September. She has a PhD in Epidemiology from the UIC School of Public Health and her research focuses on how relationship and partner characteristics impact risk for HIV and sexually transmitted infections. She works with Maria and the rest of the team analyzing data and writing research papers to get the word out about the important work WIHS is doing. She is excited to be part of WIHS!



## WIHS Visit 36 Participant Feedback

Over 270 women filled out evaluation forms after visit 36—and the good news is that women overall gave their visit a big thumbs up!



The number one reason women returned to WIHS was concern for their health and bodies.

- 95% of participants felt extremely or mostly comfortable talking to staff or asking questions.
- 98% of participants were extremely or mostly satisfied with answers provided by the staff.
- 96% of participants felt that the visit ran extremely or mostly smoothly.



# Chicago Area Consortium



## Chicago WIHS Consortium:

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Co-Principal Investigator Dr. Audrey French  
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## Cognitive Neuroscience

Dr. Pauline Maki



The front door to our new home,  
with free parking right next door.

