

SUMMER  
2015



Brought to you by the Chicago WIHS Consortium

Health *WIHS*



INSIDE THIS  
ISSUE:

**Surviving and  
Thriving**

Cover

**Chicago  
WIHS News**

Page 2

**WIHS/NCAB  
Executive  
Meeting**

**Updates**

Page 3

**Current WIHS  
Research**

Page 4

**2015 WIHS  
Findings**

Page 5

**Preventive  
Medicine**

Page 11

**Upcoming  
Events**

Page 12

***"I'M STILL SURVIVING":  
An Oral History of Women's Interagency HIV Study in Chicago***

***By: Jennifer Brier***

*Associate Professor of History and Gender and Women's Studies and History Department*

Women living with HIV have moved from the margins of what was once a deadly epidemic to becoming survivors, storytellers and history makers. In November of 2014, a group of fourteen women with from WIHS met with a team of public historians and designers who make up History Moves, to think about ways to commemorate WIHS' 20th anniversary. Together we created *I'm Still Surviving: An Oral History of the Women's Interagency HIV Study in Chicago*

History Moves is a public history project that works to transform historical subjects into history makers. Through a series of participatory workshops on how to perform interviews with an eye to larger historical context, and listen and make connections with other participants, History Moves encourages people to record stories of their lives in tandem with one another, and in the process imagine, interpret, and map their collective pasts. The interviews are professionally transcribed and supplemented by participants' historical photographs. We then supplement the personal images with images from historical research done after listening to and reading the interviews. Working with graphic designers, we combine all we have collected--the sound, text and images--to produce a multimedia archive and public presentation of the collective history.

*I'm Still Surviving* is the culmination of a six-month collaboration between the women of WIHS and History Moves. In it you will find excerpts from each of the 14 interviews conducted with *and* by the women of WIHS, along side images from their personal collections and historical photos of Chicago found in local archives.

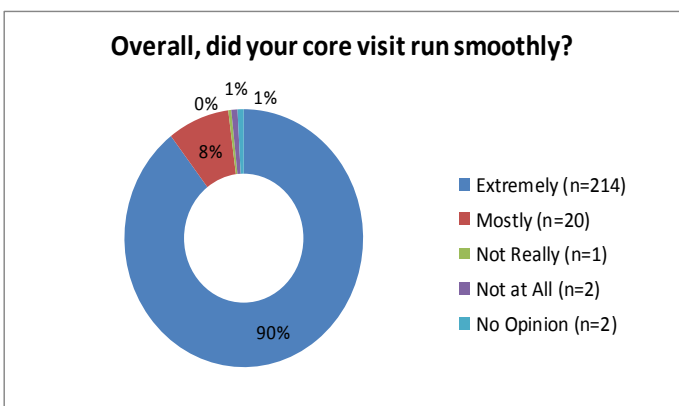
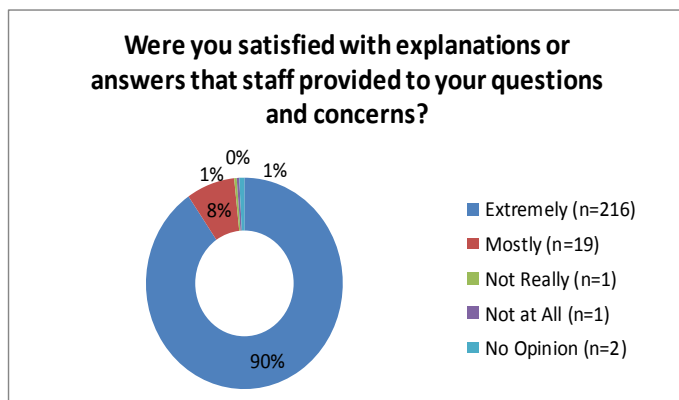
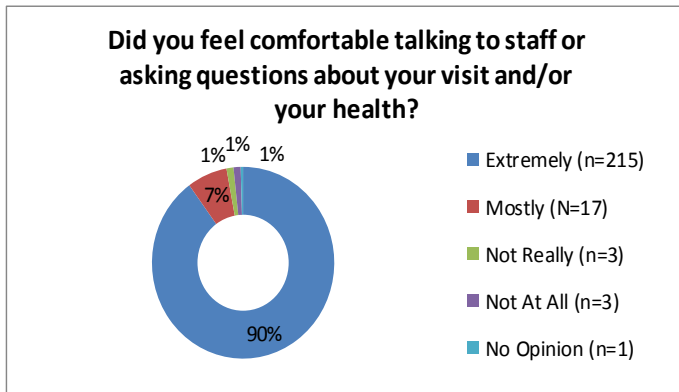
As with the best works of history, the stories far exceed what might be gleaned from the stages in an HIV-positive woman's life. From the grandest and most written about subjects of U.S. history to the most particular yet understudied pieces of women's history or the history of racial formation, the women's experiences detail a truly sweeping narrative about gender, race and class in twentieth century Chicago. In the pages that follow you will read accounts of the Great Black Migration to Chicago as well as the migration of Mexican and Puerto Rican families to the Midwest; you will also read about how women struggled to keep families intact in the face of incarceration, sex work and drug use, just as others made conscious decisions to live their lives without children. Taken together, the experiences of these women with HIV remind us of the profound interconnections between the histories of Chicago, race relations, reproductive justice, and the state as an engine of inequality. At the same time the collection of voices and pictures shows us that women living with HIV/AIDS have been some of the most vocal proponents of comprehensive health care as they insist that health requires much more than the absence of disease. Their stories illustrate that the women of WIHS are more than surviving; many of them are thriving and reminding us that people with HIV need to be at the center of how we deal with, treat and prevent HIV in the twenty-first century.

# LOCAL CHICAGO WIHS NEWS

## - VISIT 41 FEEDBACK -

*We asked, You Answered.*

During Visit 41, 242 women evaluated their Chicago WIHS experiences. See some results below:



### Top 3 Reasons why women choose to do WIHS:

1. **Concern for your health and bodies**
2. **A commitment to research**
3. **To help other women**

## Staff Updates

- During the past year, we have said goodbye to three longtime staff members: **Karen Fodor**, **Crystal Winston**, and **Sally Urwin**.
- **Karen Fodor** was the site coordinator at the former UIC site and helped to successfully transfer the UIC site WIHS participants to the Cook County WIHS site at 2225 W. Harrison. We thank Karen for all her efforts at WIHS and wish her well on future endeavors.
- **Crystal Winston** was an interviewer at the CORE/Cook County WIHS site for 12 years and contributed to the majority of the scheduling. We will miss Crystal, and wish her well in her new job at the CORE Center as a health educator. Some of you might still run into her at the Core Center Building.
- **Sally Urwin** has been the Assistant Project Director for 17 years and devoted much of her work to WIHS. We will miss Sally, and we thank her for all that she's done for WIHS.
- Don't forget to say hello to **Debi Brenner** as she welcomes you at the front desk. She is here to assist you with all your scheduling needs and general questions you may have.
- We gladly welcome **Ellen Almirol** and **Catherine Jett** to the WIHS Team. Ellen and Catherine are both recently minted Masters in Public Health in Epidemiology. And we are excited to work with both as they take an integral role in WIHS clinic and research.

# WIHS EXECUTIVE COMMITTEE MEETING UPDATES

## WIHS NATIONAL COMMUNITY ADVISORY BOARD (NCAB) REPORT

By: Marta Santiago

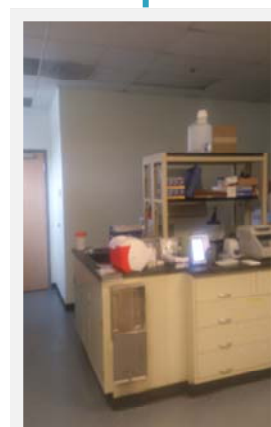
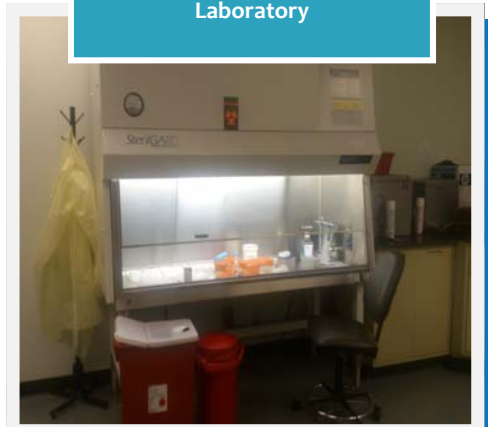
On May 20, 2014 the WIHS National Community Advisory Board (NCAB) had a special and much anticipated tour of the National Institute of Allergy and Infectious Diseases (NIAID) Specimen Repository located in Maryland. This is the storage home of our WIHS visit samples going back just more than 20 years to the present! We were welcomed and accompanied on the tour by the repository's President and COO, Principal Investigator and Senior Director of Operations, and the Senior Project Manager of Operations. We were taken through each department with demonstration and explanation of the process from receiving samples, inventory acceptance, process sample, storage, retrieval, shipping and reporting.

This company is currently managing more than 13 million samples from more than 100 protocols. Woman's Interagency HIV Study (WIHS), Multicenter AIDS Cohort Study (MACS) and HIV Vaccine Trials Network (HVTN) are of the larger. WIHS alone has 2,503,685 stored samples here. Try to imagine this state-of-the-Art Bio-repository:

- One floor, 65,0000 square feet
- 207 freezers
- 165 rectangular freezers at a steady -80 Celsius containing 44 racks, each rack holding 13 small boxes, each box able to store 81 tiny vials of specimens that include serum, plasma, and DNA
- 47 tall, round, and shiny liquid nitrogen freezers at -180 Celsius contains 54 racks, holding 13 small boxes, containing 81 small vials within, storing specimens of white blood cells
- 5,895,771 samples as of March 31, 2014
- Approximately 400,000 specimens accumulated, at an average 85,000 samples shipped out / year

The repository never had a group of donors have a walk through. To say the least, I was very impressed. FYI, our Chicago WIHS site has its own high tech repository only in a miniature version.

Inside the Chicago WIHS  
Laboratory



## CHICAGO WIHS CURRENT RESEARCH

### Psychoneuroimmunology (PNI) Substudy

Chicago started a very intensive psychoneuroimmunology study. This is a 3 phase study. Phase 1 started in October 2014 and it is an assessment of physiologic function. To date, nearly 90 women have completed phase 1 which included assessment of hearing, auditory processing, emotional processing using video faces of different emotions, and assessing vagal tone or heart rate variability during various types of stressors including an exercise challenge on the Elliptical machine. The 2nd phase of the study is a home collection of urine and saliva for stress hormones and a watch to assess activity and sleep. The 3rd phase is a randomized controlled pilot that has not yet started. The goal is to examine the associations between measures of different stress response systems and between stress response profiles and markers of immune function and cellular aging. Investigators hope to better understand how WIHS women stress responses systems, both physiological and hormonally, function during every day life. Leah McClellan PNI Coordinator, will contact you if women who are eligible to participate in this study.

### Brain Imaging Sub-Studies

Chicago WIHS is starting two new neuroimaging studies that were funded recently and these will look at chronological and reproductive (menopause) aging and brain function as well as the effect of stress and depression on the brain. These scans are performed across the WIHS Building on Harrison. Recruitment is ongoing and requires certain requirements to be met, which the *staff will contact those who are eligible.*

### Mother-Daughter Study

There are researchers in Boston who are interested in the relationship between the adult daughters of women who are HIV positive and HIV negative. They are interested in daughters who are 18-30 years old and have a mother, regardless of HIV status, as long as your daughter knows what your status is.

If you have daughters who may be interested in participating or know of other eligible women, please pass along this phone number to them: [312-473-9793](tel:312-473-9793) to hear about the study. They can call the researchers in Boston to see if they are eligible to participate in this study. If you think your daughter may be interested, gives us a call and we could mail you a copy of the study brochure that you can provide to your daughter.

### Structured Clinical Interview for DSM Disorder (SCID) and NEO-3

These assessments will be added to our core protocol for all women who consent but due to length of administration may be administered at a separate return visit. We are administering SCID to improve diagnostic accuracy for mental health and substance use disorders already included in the WIHS research agenda. PTSD, anxiety, depression, substance use are part of WIHS core interview.

For those same disorders, we seek to administer the gold standard diagnostic assessment along with the NEO-PI-3 assessment. These assessments will take 1-1.5 hours on average at baseline and therefore, we may schedule additional visits for longer baseline assessment. NEO-3 takes about 30 minutes to an hour. Please call in to schedule your SCID/NEO appointment now! [312-473-9800](tel:312-473-9800)

## 2015 WIHS FINDINGS

### Critical Consciousness

Many women in the WIHS study face discrimination in their lives based on their race or gender. This kind of discrimination can lead to widespread inequalities that make it harder for WIHS women to get the healthcare, income, and education that they need. Studies have shown that people who face racial and gender discrimination are more likely to engage in unhealthy behaviors like smoking, drinking too much, drug use, and not following the recommendations of their doctors. For WIHS participants, this can mean not taking their HIV medications regularly, which is linked to high HIV viral loads and low CD4+ cell counts. This study wanted to understand how an attitude called Critical Consciousness might help women reduce the negative effects that discrimination had on participants' HIV disease progression plus other factors like smoking, depression and drug use.

Critical Consciousness has four parts:

- People must identify, or see themselves as a member of a discriminated-against group (for example: women, people of color, people with HIV)
- People must become aware and unhappy with of the discrimination and the unfair systems that give certain people power over others
- They must become reject unfair systems of power and the discrimination it creates
- They must join with others to fight for social change.

This study's investigators thought that WIHS women with Critical Consciousness might be more resilient to the discrimination in their lives and have stronger immune systems. Sixty-seven HIV+ African-American WIHS participants were chosen for the study. They were asked questions about how often they take their HIV medications and questions about racial and gender discrimination that they have experienced. They were also asked 24 questions about their Critical Consciousness that were specifically relevant to African-American women with HIV. The results showed that Critical Consciousness was linked to higher CD4+ cell counts and low HIV viral loads. In addition, among women facing very high levels of racial and gender discrimination, those who showed strong Critical Consciousness CD4 counts that were much higher than before those women went on HIV medication. Since African American women are a group that typically have poor health outcomes, the study shows that Critical Consciousness might be an important tool that could help women with HIV fight both the physical and mental effects of HIV. It is also a tool that can be taught to women through workshops and classes.

*Kelso GA, Cohen MH, Weber KM, Dale SK, Cruise RC, Brody LR. Critical consciousness, racial and gender discrimination, and HIV disease markers in African American women with HIV. AIDS Behav 2014 Jul;18(7):1237-46. PMC4010552*

## 2014-15 WIHS FINDINGS

### Minority Sexual Status and Abuse

Unfortunately, many women with or at-risk for HIV experience violence in their lives. Bisexual and lesbian women often report violence in their lives as well. We looked at sexual identity and whether women had sex with men, with women or with men & women to see if some women were at higher risk for abuse. Compared to straight women, bisexual women were more likely to experience sexual abuse, physical violence, and emotional partner abuse.

On the other hand, women who only had sex with women were less likely to be sexually or physically abused. Using cocaine, trading sex, and having lots of sexual partners might explain why some bisexuals experienced more abuse – but there are other reasons that still need to be explained. This information can help health care providers ask better questions to find out if a woman is experiencing abuse and what kind of help she needs.

*Pyra M, Weber K, Wilson TE, Cohen J, Murchison L, Goparaju L, Cohen MH. Sexual minority status and violence among HIV infected and at-risk women. Journal of General Internal Medicine 2014 [Accepted for publication] PMC 4099466*

### HIV and HPV

HIV+ women are at higher risk than HIV- women of having abnormal Pap tests. WIHS has shown that the risk over time of having an abnormal Pap test is over 75% for HIV+ women. However, most of those abnormal Pap tests show only minor changes, and the chance that HIV+ women with abnormal Paps actually have cervical changes that might become cervical cancer is unclear. We looked at HIV+ and HIV- women in WIHS who had at least 1 abnormal Pap, at least one colposcopy, and at least a year of follow-up. As expected, risk for precancer was higher for increasingly abnormal Pap results. For example, among women with the most abnormal Pap result (HSIL), risk for precancer (CIN3+) reached 50% by 5 years, suggesting these women might benefit from treatment regardless of colposcopic biopsy results. Curiously, risk for true precancer was not increased among HIV+ women with HSIL, though HSIL is more common among HIV+ women. On the other hand, the risk of precancer for HIV+ and HIV- women with the least abnormal Pap result (ASCUS) was less than 15%, suggesting that these women can be observed carefully and only treated when precancer is confirmed. These results suggest that for most HIV+ women with abnormal Paps, rapid development of cervical cancer does not occur.

Human papillomaviruses (HPV) are sexually transmitted viruses that are very common, but most women's immune systems clear HPV within a year or so after infection. Persisting HPV infections put women at risk for cervical cancer. HIV+ women are at higher risk for having HPV. But most research in HIV+ women has focused on heterosexual women. Among 3766 WIHS women studied, 73 reported sex with at least one female and no male sex partners during 5 years (49 HIV+, 24 HIV-). Most women who had sex with women had normal Paps, but 20% had abnormal Paps, and 21% had HPV infections that could cause cervical cancer. Women who have sex with women have about half the risk of risks compared to women who have sex with men, as well as a lower risk for high grade Pap abnormalities. HIV+ women had higher risks than HIV- women for HPV and abnormal Pap tests. These differences didn't seem to be enough to allow women with HIV who have sex with women to skip Pap screening.

*Massad LS, Xie X, Minkoff H, Darragh TM, D'Souza G, Sanchez-Keeland L, Watts DH, Colie C, Strickler HD. Abnormal pap tests and human papillomavirus infections among HIV-Infected and uninfected women who have sex with women. J Low Genit Tract Dis. 2014 Jan;18(1):50-56. PMC 3905442*



## 2014-15 WIHS FINDINGS

### Sexual Minority Women and Depressive Symptoms Throughout Adulthood

Lesbians, bisexuals, and women who have sex with women often say they have more depressed feelings than straight women; this may be because they face additional stress in their lives. We found that, in WIHS, lesbians, bisexuals and women who have sex with women did report more depressed feelings, but only in early adulthood – about ages 25-35. By middle age, all women reported about the same amount of depressed feelings, and lesbians actually reported the least depressed feelings from ages 50-60. We also found that straight women generally reported more depressed feelings as they got older. This information can help us target women who most need mental health care and help us understand what makes some women less depressed as they get older.

*Pyra M, Weber K, Wilson TE, Cohen J, Murchison L, Goparaju L, Cohen MH. Sexual Minority Women and Depressive Symptoms Throughout Adulthood. Am J Public Health 2014 Dec;104(12):e83-90. PMC 4099466*

### Cigarette Consumption Among WIHS Women

Cigarette smoking is the number one cause of preventable disease and death; in the United States over 400,000 deaths each year are due to smoking. In people with HIV, smoking weakens the immune system and can make it more difficult to fight off serious infections, especially lung disease. Among the women in the WIHS, the rates of cigarette smoking are more than twice as high as the national averages. A recent study of women in the WIHS also found that both HIV-infected and uninfected women have lower smoking quit rates than the general population. The goal of this project was to investigate factors that predict smoking reduction (cutting down the number of cigarettes per day), smoking cessation (not smoking for 12 or more months), and smoking recidivism (starting to smoke again after having quit) among the HIV-infected and HIV-uninfected women in the WIHS.

The annual cigarette smoking rates declined over time, from a high of 57% in 1995 to 39% in 2011. The following factors were associated with a greater likelihood of sustained (>12 months) smoking cessation: older age, HIV-infection, higher income, fewer depressive symptoms, fewer years of smoking, no drug or alcohol use, having childcare responsibilities, and having diabetes. In adjusted analyses among HIV-infected women only, lower HIV viral load was also significantly associated with cessation. In analyses of a reduction in cigarette smoking, being employed and, among HIV-infected women, having health insurance was associated with a reduction in smoking. In adjusted analyses for cigarette smoking recidivism, the following factors were significantly associated with resumption of smoking: younger age, being HIV-uninfected, not living in one's own place, more years of smoking, alcohol and drug use, no history of diabetes and, among HIV-infected women, higher HIV viral load.

Despite declining rates of cigarette smoking over time, more can be done to help women with and at risk for HIV infection to quit smoking. Programs that address drug and alcohol addiction, housing, mental health, jobs, and health insurance - in addition to HAART initiation and adherence among those who are HIV-infected - are needed to further reduce cigarette consumption among these women.

*Hessol NA, Weber KW, D'Souza G, Burton D, Young M, Milam J, Murchison L, Gandhi M, Cohen MH. Smoking cessation and recidivism in the Women's Interagency HIV Study. Amer J Prev Med 2014 Jul;47(1):52-69. PMC 4065848*

## 2014-15 WIHS FINDINGS

### Do HIV-Positive Women Receive Depression Treatment that Meets Best Practice Guidelines?

Research shows that many HIV-positive women struggle with depression and it can affect their use of antiretroviral therapy and illness course. Treatment for depression is critically important for both mental and physical well-being. But often times, HIV-positive women don't receive any treatment for their depression, or the treatment they do receive is not adequate. Adequate treatment is made up of several factors like the person's satisfaction with treatment and whether it reduces symptoms. Researchers often define adequate treatment by looking at standards called "best practice guidelines." These guidelines specify whether depression treatment is long enough, given by the right kind of therapist, and whether it's done with the right kinds of medications or psychotherapy.

We conducted a study to look at the kinds of mental health treatment depressed women in the WIHS cohort received. We also wanted to see what factors were related to getting good treatment. We found that adequate treatment for depression was reported by almost half (46%) of WIHS participants with diagnoses of major depression, Major depression is an especially severe type that interferes with the person's ability to work or socialize. Surprisingly, this percentage is *much higher* than that in the general population. *Only about 20% of the general population with major depression receives treatment meeting best practice guidelines.* We also learned that good depression treatment was more common in women who saw the same primary care provider on a regular basis, who had more problems with daily functioning, who paid out-of-pocket for healthcare, and those who were *not* African-American or Latina. Our findings highlight the importance of involving healthcare providers of HIV-positive women in screening for depression (with women's permission of course), and helping them get access to effective mental health treatment. Our results also suggest how important it is to address the mental health concerns of African-American and Hispanic/Latina women. Finally, we learned that it's important to offer help to those women who are depressed, but don't feel their functioning is impaired as a result. That's because some women try to "tough it out" when dealing with all the issues associated with being HIV-positive. They may need help and encouragement to recognize that their feelings of sadness and low energy can be helped with best practice depression treatment. Everyone deserves to have good mental health, and it's especially important for women who are living with HIV

*Cook JA, Burke-Miller JK, Grey DD, Cocohoba J, Liu C, Schwartz RM, Golub ET, Anastos K, Steigman PJ, Cohen MH. Do HIV-Positive Women Receive Depression Treatment that Meets Best Practice Guidelines? AIDS Behav. 2014 Jun;18(6):1094-1102. PMC4020946*

### Promoting Resilience among HIV-Positive Women may improve HAART medication adherence

The study investigated the relationships between resilience, abuse, HAART medication adherence, viral load, and CD4+ cell count among a sample of women with HIV. The sample consisted of 138 women, mostly African American, at the Chicago CORE Center site of the Women Interagency HIV Study. Resilience is the ability to function well in negative environments or after negative experiences and was assessed with the Connor-Davidson Resilience Scale. Abuse and HAART medication adherence were reported during structured interviews. HIV viral load and CD4+ cell count were measured with blood specimens. Women with higher resilience had higher HAART adherence and undetectable viral load. Women with both high resilience scores and a history of sexual abuse reported higher HAART adherence, but not women with low resilience scores and a history of sexual abuse. Interventions to promote resilience among women with HIV, especially women with sexual abuse history, might assist women in improving HAART medication adherence and achieving undetectable viral loads

*Dale S, Cohen M, Weber K, Cruise R, Kelso G, Brody L. Abuse and resilience in relation to HAART medication adherence and HIV viral load among women with HIV in the United States. AIDS Patient Care STDs. March 2014;28(3):136-143. PMC 3948478*



## 2014-15 WIHS FINDINGS

### Resilience, gender roles, and social economic status

The study investigated the relationship between resilience, gender roles, education, employment, and income among a sample of women with HIV and uninfected women. The sample consisted of 120 women (85 HIV+ and 35 HIV-), mostly African American, at the Chicago site of the Women Interagency HIV Study. Resilience is the ability to function well in negative environments or after negative experiences. Resilience was measured with the Connor-Davidson Resilience Scale -10 item scale (CD-RSC) and was also coded from personal narratives told by participants. Gender roles are social expectations for acceptable female and male behaviors, attitudes, feelings, thoughts, career choices and personality traits. Gender Roles were measured using five questionnaires. Participants showed high levels of resilience. Women with higher egalitarian (less traditional) gender role scores had higher resilience scores compared to women with more traditional gender roles, as shown both by their autobiographical narratives and CDRISC-10 scores. Employment and higher levels of education and income, were related to higher resilience as measured by the CD-RISC. Prevention and intervention strategies for HIV+ women and HIV-uninfected women should promote more non-traditional gender roles, such as higher decision-making in sexual relationships.

*Dale S, Cohen M, Kelso G, Cruise R, Weber K, Watson C, Burke-Miller, J, Brody LR. Resilience among women with HIV: Impact of silencing the self and socioeconomic factors. Sex Roles: A Journal of Research 2014 Mar1;80(5-6)221-231. PMC4051411*

### GENDER ROLES AND MENTAL HEALTH AMONG WOMEN WITH AND AT-RISK FOR HIV

One hundred and one women with HIV and 42 uninfected women from the same community, predominantly low-income and African-American, were compared on multiple aspects of gender roles, including attitudes toward women's roles, the amount of power they hold in their sexual relationships, and the degree to which they silence their own needs in deference to their partners' needs (self-silencing). Gender roles were investigated in relation to depressive symptoms and health-related quality of life assessed both currently and as an average of 23 data collection visits (range = 6 – 34 visits) occurring during an average of 11 years (range = 7 – 17 years). Results indicated that women with HIV had significantly higher levels of self-silencing and significantly lower sexual decision-making power than uninfected women, controlling for age, income, enrollment wave, and education. Averaged over time (M = 11 years), they also had lower health-related quality of life and higher levels of depressive symptoms. Higher levels of traditional gender roles, including higher self-silencing and lower sexual relationship power, related to higher depressive symptoms and lower quality of life. Results suggest that interventions targeting traditional gender role behaviors are important as an HIV prevention strategy and could minimize depressive symptoms and enhance quality of life in women with HIV

*Brody LR, Stokes LR, Dale SK, Kelso GA, Cruise RC, Weber KM, Burke-Miller JK, Cohen M. Gender roles and mental health in women with and at risk for HIV. Psychology of Women Quarterly 2014;38(3):311-326. PMC4258411*

## 2014-15 WIHS FINDINGS

### PSYCHOSOCIAL FACTORS ASSOCIATED WITH GENDER-BASED VIOLENCE

Gender-based violence (GBV) is woman's experience of psychological, physical or sexual abuse at any age. GBV is common among women with and at risk for HIV, yet little is known about psychological factors associated with GBV that could be changed through behavioral interventions. The current study examined the associations between psychosocial variables (i.e., hopelessness, consideration of future consequences, self-esteem), mental health symptoms, substance use, and GBV among a sample of 736 HIV-infected and HIV-uninfected participants in the Women's Interagency HIV Study (WIHS) from the Chicago, Brooklyn and Washington DC sites. Results indicated high rates of lifetime GBV among the sample (58%) as well as high rates of childhood sexual abuse (CSA), specifically (22.2%). HIV-infected women were more likely to be hopeless and to experience lower consideration of future consequences as compared to uninfected women. Multivariable analyses indicated that current non-injection drug use and a history of injection drug use were the main correlates of GBV and CSA. Being born outside of the US was associated with a reduced likelihood of GBV and CSA. Results of this study can be used to develop interventions that simultaneously address trauma and substance use while incorporating cognitive approaches to assisting HIV-infected women, in particular, in working through hopelessness and poor future orientation.

*Schwartz RM, Weber KM, Schechter GE, Connors NC, Gousse Y, Young MA, Cohen MH. Psychosocial correlates of gender-based violence among HIV-infected and HIV-uninfected women in three US cities. AIDS Patient Care and STDs 2014 May;28(5):260-7, PMC 4011431*

### COGNITIVE FUNCTION IN WOMEN WITH HIV

Compared to HIV-infected men, HIV-infected women may be at greater risk for declines in memory and other mental abilities due to poverty, low education, substance abuse, poor mental health, and barriers to health care. In the largest study among HIV-infected women to date, we examined the association between HIV status and cognition in women in the Women's Interagency HIV Status. From 2009 to 2011, 1521 (1019 HIV-infected) participants from the WIHS completed a cognitive test battery. Results showed that there was a difference in cognitive test performance between HIV-infected women and HIV-uninfected women, but that difference was quite small. Women's scores on tests of memory and other cognitive abilities was more affected by age and reading level than by HIV. Of all the cognitive tests that we studied in the WIHS, we found that HIV had the largest effect on a test of memory for words. This finding was interesting because studies of HIV infected men usually find that HIV has its biggest effect on other cognitive measures such as "executive function", and "executive function" was not affected by HIV in our study. In future research studies, we propose to compare the test scores of HIV-infected women and men directly to better evaluate whether HIV affects cognition differently in women and men.

*Maki PM, Rubin LH, Valcour V, Martin E, Crystal H, Young M, Weber KM, Manly J, Richardson J, Alden C, Anastos K. Cognitive function in women with HIV: Findings from the Women's Interagency HIV Study. Neurology 2015 Jan 20;84(3):231-40. PMC4335997*

### GENDER-RELATED RISK FACTORS IMPROVE MORTALITY PREDICTIVE ABILITY

The "VACS Index" uses laboratory information on liver, kidney and blood diseases in addition to CD4 and viral load to predict prognosis and death in treated persons with HIV. This study evaluated the VACS Index in WIHS, and examined whether including other information would improve these predictions. Our results showed that adding information on depressive symptoms and history of transactional sex improved the prediction and that depressive symptoms and history of transactional sex were each associated with dying among WIHS women with HIV. Providing treatment for depression and addressing economic and psychosocial instability in HIV infected women would improve health and perhaps point to a broader public health approach to reducing HIV mortality.

*Cohen, MH, Hotton AL, Hershow, RC, Anastos K, Levine A, Young M, Bacchetti P, Gustafon D, Golub ET, Weber KM*

# PREVENTATIVE HEALTH

## Pre-exposure Prophylaxis (PrEP)

Have you heard about PrEP? PrEP stands for Pre-exposure prophylaxis, which is a method for preventing the spread of HIV infection. The Centers for Disease Control and Prevention (CDC) recently released guidelines for PrEP use., which can reduce the risk of HIV negative individuals from contracting the virus by as much as 92%. (CDC, 2014)

The federal guidelines that were recently released will help health care providers when treating HIV-negative individuals who are at high risk for HIV infection. These guidelines and recommendations are summarized in the chart below:

Summary of Guidance for PrEP Use			
	Men Who Have Sex With Men	Heterosexual Women and Men	Injection Drug Users
<b>Detecting substantial risk of acquiring HIV infection:</b>	<ul style="list-style-type: none"> <li>• Sexual partner with HIV</li> <li>• Recent bacterial STD</li> <li>• High number of sex partners</li> <li>• History of inconsistent or no condom use</li> <li>• Commercial sex work</li> </ul>	<ul style="list-style-type: none"> <li>• Sexual partner with HIV</li> <li>• Recent bacterial STD</li> <li>• High number of sex partners</li> <li>• History of inconsistent or no condom use</li> <li>• Commercial sex work</li> <li>• Lives in high-prevalence area or network</li> </ul>	<ul style="list-style-type: none"> <li>• HIV-positive injecting partner</li> <li>• Sharing injection equipment</li> <li>• Recent drug treatment (but currently injecting)</li> </ul>
<b>Clinically eligible:</b>	<ul style="list-style-type: none"> <li>• Documented negative HIV test before prescribing PrEP</li> <li>• No signs/symptoms of acute HIV infection</li> <li>• Normal renal function, no contraindicated medications</li> <li>• Documented hepatitis B virus infection and vaccination status</li> </ul>		
<b>Prescription</b>	Daily, continuing, oral doses of TDF/FTC (Truvada), ≤90 day supply		
<b>Other services:</b>	<ul style="list-style-type: none"> <li>• Follow-up visits at least every 3 months to provide:</li> <li>• HIV test, medication adherence counseling, behavioral risk reduction support, side effect assessment, STD symptom assessment</li> <li>• At 3 months and every 6 months after, assess renal function</li> <li>• Every 6 months test for bacterial STDs</li> </ul>		
	<ul style="list-style-type: none"> <li>• Do oral/rectal STD testing</li> </ul>	<ul style="list-style-type: none"> <li>• Assess pregnancy intent</li> <li>• Pregnancy test every 3 months</li> </ul>	<ul style="list-style-type: none"> <li>• Access to clean needles/syringes and drug treatment services</li> </ul>

Source: US Public Health Service. Preexposure prophylaxis for the prevention of HIV infection in the United States —2014: a clinical practice guideline.

For additional information, please seek medical advice from your health care provider.

## Improving Bone Health through Diet and Exercise

Many WIHS women are experiencing menopause, and with it can come osteoporosis, a condition where bones become weaker and easily break. What you eat and how much exercise you get can play a role in how healthy your bones are and both reduce your risk for osteoporosis and help improve bone health. Here are some tips:

- Get enough Dairy — Eat at least three servings a day of low and non-fat dairy products such as yogurt, milk, and cheese.
- Other Foods with Calcium - Eat more dark green vegetables like collard greens, spinach and broccoli, soy products like tofu and soymilk, black-eyed peas, almonds, and figs.
- Consider taking a calcium supplement
- Limit your caffeine and alcohol intake - Both can increase bone loss and people who drink excessive amounts of alcohol are prone to bone fractures.
- Increase weight-bearing activities, such as walking, weight training and aerobics. Try to do at least 30 minutes of exercise most days of the week.

*Source: National Osteoporosis Foundation; HealthyWomen.org; DrWeil.com*

# Health *WIHS*

## Annual Luncheon at Leona's

Join WIHS participants and staff for our annual workshop:

**"Thinking About Ourselves and Our History:  
So Many Changes"**

Don't miss out on the fun, good food, and great company!

Location

Leona's - 1936 W Augusta Blvd

Date

Friday, September 18th

**SAVE  
THE  
DATE**

Time

Lunch 12:00 pm

Workshop 1:30pm

A formal invitation will be mailed to you in August, and reservations are required for attendance. Please call to RSVP: **(312) 810-5746** or **(312) 810-6091**

In celebration of the WIHS 20th Anniversary, we will be watching the short-film that was presented at the annual WIHS Executive Meeting, called "HerStory". We will also share the book highlighting portraits and inspirational personal stories of WIHS women. There will be lunch provided, CTA cards for transportation, and childcare services available for you and a guest to enjoy!



**Directions: Bus** - Near the Western bus (49) Transfer to Chicago or Division bus East to Damen. Or Ashland bus (9), transfer to Chicago or Division bus West to Damen. Or to the Damen Bus (50) to Augusta.

**Train** - Closest train is the Blue line - Division stop. Transfer to Division bus head West, off at Damen to Augusta Blvd.

## Comments about the WIHS 2225 W. Harrison Facility

Last year, we combined the Cook County, Northwestern, and UIC WHIS sites. Here are some comments from our valued participants, including longtime Northwestern site participants upon their first visit:

*"The new location is beautiful. Very, very nice!"*

*"Nice facility and extremely nice personnel. This was my first visit to this facility and everyone made me feel very comfortable"*

*"I think the women working here are great. I also like having a facility just for women."*

*"I think the place looks beautiful. Much space and it's quiet. I like coming here."*



### WIHS

2225 West Harrison Street, Suite B  
Chicago, IL 60622

### Chicago WIHS Consortium:

Principal Investigator Dr. Mardge Cohen  
Co-Principal Investigator Dr. Audrey French  
Project Director Kathleen Weber

### Rush Clinical

Site Investigator Dr. Bev Sha

### WIHS Office Contact

Main Number 312-473-9800  
Fax Number 312-803-0693