

Domestic Violence Doubles Risk of Death for HIV-Positive Women

July 31, 2012 By Laura Whitehorn

✖ Episodes of domestic violence dramatically raises the short-term risk of death for women living with or at risk of contracting HIV, according to research announced on Wednesday, July 25, at the XIX International AIDS Conference (AIDS2012) in Washington, DC. The data contribute to a growing body of information on the higher risks of infection, illness and death among women in the United States.

Kathleen Weber, MD, of CORE Center/Cook County Health and Hospital System and Hektoen Institute of Medicine, presented these results from the Women's Interagency HIV Study (WIHS), the largest ongoing study of women living with and at risk for HIV in the U.S. WIHS was established in 1993 and has continued to enroll women in the years since.

"Gender-based violence (GBV) increases the risk of both acquiring and transmitting HIV," Weber told the audience, "and having HIV may increase the risk of abuse. We have found that abuse is high among women with or at risk of HIV—between 24 and 78 percent report a history of GBV."

Based on these observations, Weber and her colleagues set out to investigate correlations between a history of abuse, a recent experience of abuse (within a year) and mortality risk.

Specifically, Weber said, the researchers mined WIHS data to determine whether a recent experience of abuse was associated with a higher incidence of death. Their analysis encompassed 2,222 women—1,642 of whom are HIV-positive—from Chicago, New York City and Washington, DC. African-American women comprise 68 percent of the cohort.

WIHS study visits are performed every six months, collecting clinical data and conducting physical exams and interviews at each visit. The women are between 30 and 55 years of age upon enrollment and are tested for HIV. Women who contracted HIV at birth are excluded.

At each visit, the women were asked about all lifetime abuse and about abuse within the past year, including forced sexual contact, physical abuse or assault, and intimate partner violence (IPV). The researchers qualified IPV as domestic or emotional abuse that involved threats to hurt or kill, along with coercive efforts to prevent women from leaving or entering their home, making phone calls, meeting with friends, attending work or school, or getting needed medical care.

To correlate recent abuse with mortality rates, the researchers accounted for factors such as depression, smoking, recreational drug or alcohol use, CD4 count and viral load, and ARV use and non-adherence—all of which could also contribute to an elevated risk of death.

“Taking all vulnerabilities into account and adjusting for these issues,” Weber said, “recent abuse was independently associated with a two times higher risk of death.”

Specifically, after such adjustments were made, the risk of dying for all women with recent abuse was 1.54 times higher compared with women who did not have recent abuse. For HIV-positive and HIV-negative women, it was 1.42 times and 4.39 times higher, respectively, as compared with women reporting no recent abuse. “Looking at HIV status,” Weber explained, “HIV-positive women reporting recent abuse were 42 percent more likely and HIV-negative women 4 times more likely to die.”

In total, 78 percent of all women in the study reported a lifetime experience of abuse, and 36 percent had a recent experience of abuse. During the study period, 437 WIHS participants died, 411 (94 percent) of whom were HIV-positive women.

The women who died, both HIV positive and negative, had an average age of 39, compared with 34 for the women who survived. But HIV-positive women who died had an average of 34, compared with 43 for HIV-negative women who died.

Seventy-two percent of all those who died were African American.

As a whole, more of the women who died were poor, had engaged in transactional sex (sexual intercourse driven by material exchanges), suffered from depression and had lower levels of education compared with the 1,735 HIV-positive and HIV-negative survivors. 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, Weber said. “The causes of death for the HIV-positive women are both AIDS-related and non-AIDS-related,” she said. “Previously, we have seen that abuse at any point in a woman’s life hurts her ability to begin HIV treatment and to take her medications as needed.”

Some consequences of trauma, such as depression, substance abuse and unemployment, are also associated with poor ARV adherence and other predictors of illness for people living with HIV. Some of those things may also help explain the increased mortality risk. “Explanations could also be found among neuroendocrine and immune regulation mechanisms,” Weber added. “Post-traumatic stress disorders (PTSD) can affect those systems, and any [factor with a] potential impact on health needs to be examined.”

In addition, the researchers urge care providers to screen and treat their female patients for the effects of gender-based violence. “These findings should push providers to take into account the

question of abuse,” Weber concluded. “Providing interventions and resources to deal with abuse can improve their patients’ chances of survival.”

How Trauma Drives the HIV Epidemic

At a press conference preceding the Weber’s official presentation, she was joined by Mardge Cohen, MD, of Rush University in Chicago; Edward Machtinger, MD, of the University of California, San Francisco (UCSF) Women’s HIV Program; Gina Brown and Kathleen Griffith, both of the U.S. Positive Women’s Network (US-WPN) and both women living with HIV; and Paulette Sullivan Moore of the National Network to End Domestic Violence. The press presentation placed the WIHS data in a larger context.

Naina Khanna, the US-PWN coordinator and policy director at WORLD (Women Organized to Respond to Life-Threatening Disease), who moderated the press conference, said, “Five years ago women had the dubious distinction of surpassing men in the world in HIV. Increasing evidence suggests gender-based violence is a major reason for this distinction.”

Women living with or at risk for HIV suffer from post-traumatic stress syndrome (PTSD) at a rate more than five times that of the general population, Cohen said. She suggested that this could help explain part of the trauma-mortality link. When women are living with PTSD, she explained, they often react to minor stressors with an adrenalin rush—the fight-or-flight reaction. Over time, this could provoke neurological changes that damage health.

Domestic partner violence also plays a very direct role in harming positive women’s health, especially since consistent health care is key for the well-being of people living with the virus. “Women reported having partners who threatened to hurt or kill them, preventing them from seeing friends, family and health care providers,” Weber said. Women typically reported that their partners prohibited them from seeking HIV-related care or services because they thought that would suggest that they, too, were living with the virus.

Gina Brown gave an example of this, telling of an abusive partner who prohibited her from attending an HIV clinic, “because he was afraid people would think he had HIV too.”

UCSF’s Machtinger said the WIHS data confirm and extend his own findings and those from other studies. “All the studies show the terrible results of intimate partner violence,” he said. “Now we know it causes people to die—from consequences like not being able to care for yourself.”

The UCSF program of which Machtinger is director serves women living with HIV. He began to research the connection between trauma and poor outcomes for HIV-positive women, Machtinger told the audience, after providers in the UCSF program had to ask, “Why do one in five of our patients do so poorly? What is missing from our program?”

The answer, he found, was the lack of resources or discussion about intimate partner violence and other forms of abuse. The UCSF staff found that the only factor significantly related to ARV failure

was recent trauma: An incident of abuse within the past month was associated with four times the risk of having an ARV regimen fail to suppress HIV. Among all women in the UCSF program, Machtinger said, “80 percent had a history of abuse and 20 percent reported a recent incident of abuse.” The elevated rates held for transgender and non-transgender women with HIV in the program, he said.

Machtinger was an author of the first multiple-study analysis of this issue in the U.S. The analysis showed that lifetime sexual abuse has a 61 percent prevalence among women in this country. “This is a largely unaddressed, major driver of the epidemic,” Machtinger said. “It’s a big obstacle to the testing and treating goals we have as a way to stem the epidemic.”

As a result, he concluded, “effective strategies to address the problem of abuse could have great power for stemming the epidemic.”

After Brown and Griffith spoke about their own histories of sexual abuse and the risk-taking and health problems that resulted, Machtinger added, “I am inspired by positive women speaking publicly, courageously telling their stories. Their voices will bring the issue of violence for women with HIV to the public, and bring an end to this problem, more than all our studies can.”

Cohen listed some other things that can make change: “Providers need to learn to identify abuse. Health systems need to develop interventions and integrate tools and support to help women living with HIV and trauma. And we need a national plan to stem this epidemic of GBV, which promotes the HIV/AIDS epidemic and endangers women’s lives.”