



Transcript: Prevention and Women, HIV-Positive and HIV-Negative

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At the 15th Conference on Retroviruses and Opportunistic Infections (CROI) in Boston, Regan Hofmann talks with Harvard's Valerie Stone, MD, about the challenges and opportunities in working with women, both HIV-positive and HIV-negative, to prevent HIV transmission. To see the video [click here](#).

Regan Hofmann: Hello. I'm Regan, and I'm here with Dr. Valerie Stone, who is the associate professor of medicine at Harvard Medical School. She's also the medical director of the Women's HIV/AIDS Program at Mass General Hospital. Thank you for joining us.

Valerie Stone, MD: My pleasure, Regan, it's great to be here.

RH: So we're going to talk about a couple of different issues today, but mostly issues affecting women who are HIV positive. My first question is, at CROI, there's a lot of data being presented from studies done in the developing world. A lot of that is obviously unique to the developing world. But have you seen things at this CROI that are applicable to women in America, in terms especially of prevention or transmission issues?

VS: Well, I think that one of the studies we were most looking forward to actually turned out to be what we call a negative study. That was a study by Dr. Connie Cellum, from the University of Washington, looking at the usefulness of suppressing herpes virus outbreaks in people as a way of preventing them from acquiring HIV if they are exposed to it. That was done in a cohort of patients elsewhere in the world, but in fact, it turned out that it was not effective in preventing acquisition of HIV. It may be that this was because of the fact that not all of the patients took the medicine to prevent herpes, but it also might be that the dose of the medicine they were using might not have been quite high enough—that's what Dr. Cellum said might have been the concern. But I think that we think this whole concept of preventing other sexually transmitted infections as a way of preventing HIV acquisition may be very important, because all of the sexually transmitted infections, such as herpes, syphilis, bacterial vaginosis, have all been shown to increase the likelihood that a woman will acquire HIV if she is exposed to HIV while she has one of these infections.

RH: So reducing the prevalence of those does help.

VS: So that would be very relevant to women in the United States. These important methods of treating and preventing other sexually transmitted infections so that women exposed to HIV are less likely to get it. In some cases, it's because these infections cause ulcers, like herpes or syphilis, but in other cases, it's because they cause a change in the microflora within the vagina, such as bacterial vaginosis. So I think that that concept is important and very relevant to American women, but unfortunately this first study didn't show a difference. But I think maybe with a change in dose it may actually go on to be a very important prevention method.

RH: Right. So for women, it's just good health advice anyway to be checked regularly for all of these STDs, and to protect yourself in every circumstance, whether or not you think HIV is a risk. What about women who have HIV, who, obviously, are protecting themselves against exposing their partners. But co-infection, or in the instance of getting these STDs in their own bodies, is that a problem as well? If you're HIV positive and you contract another disease, it makes it more complicated.

VS: Certainly when a woman with HIV gets herpes or syphilis, it can be more serious, and often a longer course of treatment is necessary. The same thing is true of PID (pelvic inflammatory disease). So it's very important that women with HIV protect themselves, and use safer sex precautions such as condoms, so that they don't acquire these infections.

RH: Right. So, circumcision. That's another issue. The data that has come out recently has been a little confusing to people in terms of the relative risk to women. We know that they're showing the results for reducing the transmission of HIV to a man who is circumcised. What about women; what does that mean for women, and when should a woman be careful having intercourse with a man who is circumcised? You made the excellent point that this is primarily something we're looking at in the developing world, and this isn't really an issue for America. But still, if we could clarify that issue.

VS: There is a lot of confusion about the circumcision data, just going back to the very beginning, not even the newest data. But beginning about four or five years ago, we began to learn that men who were circumcised had a much lower risk of acquiring HIV than men who are not circumcised. And probably most American women who are listening to this will say, "Well, I only know men who are circumcised, so, what relevance does this have?" But in fact, most of this data was collected in the developing world, where the vast majority of men are not circumcised, but some are. And they looked and they found that the relative risk of men who were circumcised, of getting HIV was in the range of four to five times lower. So as a result, studies have now been done that show that if adult men in the developing world are circumcised, it does reduce their risk of getting HIV. This is important. And it may actually have a lot to do with the reason why we've had less HIV in heterosexual men in the United States than in the developing world. So I think it is relevant to the United States because it may have a lot to do with how our epidemic has evolved, because of the higher rates of circumcision. Now, getting to the new data, it turns out that it's not protective for a woman, in terms of acquiring HIV from a circumcised man—if the man is circumcised versus uncircumcised; sorry, I didn't say that very clearly. Bottom line, circumcision is not a protective prevention method for women. But if a woman has sex with a man who has HIV while he is healing

up from a circumcision, it could in fact increase the likelihood that she would get HIV. So this is not something that is protective for women at all. But again, the vast majority of American men are circumcised, and there actually is no proposal to circumcise men in the US who are not circumcised as a way of preventing them from getting HIV; we have other ways, other methods in the US. And just to comment on that, there are now large trials looking at pre-exposure prophylaxis in the United States, both as a method for preventing heterosexual transmission to women or men, and as a way to prevent transmission to men who have sex with men. The drugs being tested are tenofovir (Viread), or the co formulation of tenofovir and emtricitabine, which is Truvada. So those are the most promising methodologies in the US right now.

RH: We did a big piece of PREP and why we don't know the answers yet. It seems to be such an interesting and relevant question, that we have to answer. Obviously, the ethics around the trials are complicated; that's delayed the answer. But I'm asked this question all the time: Does PREP work? Do we think...?

VS: I mean I think everybody thinks it works. I think the real issue is, does it need to be [taken] every day, or could it just be immediately before sex, or the day that sex is planned, or, intermittent. And I think really the goal is to try and figure out the appropriate timing and the right amount of drug that will prevent HIV or give the patient more exposure to the drug than is necessary.

RH: Is there any issue of resistance, if you're taking a drug like that intermittently and stopping? Not if you're not infected with HIV?

VS: No, not if you don't have HIV then you can't have resistance. But, if you do happen to acquire HIV while taking PREP, there could be issues of resistance. But Tenofovir is a more difficult NRTI to become resistant to, certainly the co-formulation of Truvada would be quite difficult to be resistant to from just a one time exposure.

RH: That's interesting, because I am asked what if I took PREP in circumstance A and didn't protect myself and I had sex and I contracted HIV, within a period of time, and then later tried to use the drug again, but had HIV and didn't know it...?

VS: Well it certainly is going to be studied in trials examining the efficacy of PREP, but I think the likelihood is it's not going to cause much resistance because these are drugs that require multiple mutations to develop resistance as opposed to nevirapine (Viramune) which, as you know, is used in the developing world for prevention of perinatal transmission, [nevirapine] only needs one mutation to develop resistance, so resistance is quite common in woman who have been given it once, or to the infants who acquire HIV despite the use of nevirapine.

RH: Let's talk a little bit generally about African-American women and their increased risk of HIV. Lately, I mean we're seeing so many African-American women becoming infected. And anecdotally, as editor of POZ magazine, I'm encountering a lot of particularly young African-American women and women in general who are diagnosed with AIDS when they find out they're HIV positive. These are women who have been in clinical settings, a variety of other things, and

the HIV has just never been picked up along with way. Why are we seeing a big surge in women getting infected in the United States of America, especially African-American women.

VS: In the United States, we've put a big emphasis on people so called at risk for HIV, and doing risk assessments before deciding who should be tested. But in fact, most women in the United States now acquire HIV through heterosexual sex. Which is true in the developing world too. So many women don't know they're at risk because they don't know their partner's history. They don't know that their partner has HIV and sometimes their partner doesn't either. But the bottom line is that the doctors haven't been recommending testing, even when women repeatedly present with things that could be suggestive of HIV, if the physician that the patient is seeing doesn't think that they're someone who has risky behaviors such as using injection drugs, they may never even suggest testing. So women now have to become advocates for themselves and realize that it's really not about risky behavior. If they're having unprotected, heterosexual sex, it all depends on who their partner is and they often don't know their partner's history in great detail. So women need to start getting routinely tested so that women, particularly black women, can be identified early in the time that they have HIV instead of many of the late diagnoses we've been seeing.

RH: It's so interesting because having lived with HIV myself for eleven years, and recently disclosing to my girlfriends, there's a real mindset I think that you have to do something extraordinary or have very high risky encounters to contract HIV. And I often use the analogy, it's like getting pregnant; you might have unprotected sex with someone eighteen hundred times and not get pregnant, or you might have unprotected sex once and become pregnant. So you know, with HIV I think you're right that people make the wrong choices based on perceived, relative risk when there's really no information to be evaluating risk in the first place.

VS: Right. I mean the only reason why more partners makes someone more likely to become HIV infected is that the more partners you have, the more likely it is that one of them has HIV. But in fact, if you have one or two partners and one of them has HIV, that's all you need to get HIV, especially if it's a long-term partner. So I think that women need to become more savvy about that, but I think it's also a reason that the CDC has now recommended that everyone be routinely tested for HIV at least once in their lifetime. Those people who are heterosexually active or who have ever had sex, ages thirteen to sixty-four, and if they're still having unprotected sex next year, to get tested again. And I think that's very important, because I really would like to see women identified more early in the stage of their disease here in the United States.

RH: Do you think it's fair to say, you know, with breast cancer we told women that earlier detection equals survival. And when we convinced women that that was true, there were no longer afraid to get mammograms. Or they were less afraid, and more women went to get mammograms. Do you think we could convince women that knowing your HIV status earlier is better for your health, that that would help women come forward to get tested and become advocates for themselves?

VS: I think that's a great question, but unfortunately, the answer is much more complicated in HIV infection, largely because of the stigma. I think it may be true that the women will definitely life

longer, but if, for the particular woman, she perceives that there is tremendous stigma to being known to have HIV, then her quality of life may go down. And I think for many women, they have to think through that issue before deciding to get tested. I'm not recommending they think. But that, in my experience, is what many people do, whether it's women or men, is think about whether I even want to know whether I do or not. Many people are very aware that we have incredibly effective treatments right now, but they're still scared to be a person living with this disease. I think we've got a tremendous amount of work to do, in terms of decreasing the stigma. And I think that's one of those community-wide efforts that we need to begin to mount in the United States.

RH: Do you have any thoughts on what we can do to reduce stigma?

VS: I think that people who are living with HIV, such as yourself, who are different than the stereotype of people living with HIV need to be more vocal in talking about it and normalizing having it, just like we normalize having hypertension or diabetes. And I think that the fact that the gay community has been able to do that; that there are so many people that all of us know, men who have sex with men who are living with HIV and don't feel stigmatized, show that it can be done. But in the heterosexual community in the United States, it hasn't happened yet. And I think it's whether you're black or white, it's in the heterosexual community something that we need to work on together, to have people talking about their life as a person living with HIV, that it's a full life and that they're happy, that their quality of life is good. It's something that I'd like to see a lot more emphasis on.

RH: In terms of preventing HIV among women in the United States, of all colors and of all ages, what would be your top recommendations? What could we do better?

VS: I think that women need to become more knowledgeable about the prevalence of HIV in their own community. I think what we're seeing in this surging epidemic among black women, particularly in the south, is that they're not aware that HIV has a prevalence in the African American community, particularly in the south, that is as high as some of the countries in sub-Saharan Africa, or in Haiti. And I think that when they become aware of that, they need to become more proficient at being assertive about empowerment and protecting themselves, and talking with their partner about risk, and about using safe sex precautions. I think that condoms remain the number one way of preventing HIV. Unfortunately, the woman isn't the one who puts on the condom; but I think when women become advocates for themselves and concerned about their own health and aware of the risk, I think that they can decide not to have sex with their partner if he doesn't want to use condoms, or get tested along with their partner and confirm that they're both not infected.

RH: Right. Structural interventions. Is there anything we can do on that front? And could you define that first.

VS: So structural interventions are things that work on the many barriers in the society or in a community that lead to higher HIV risk. Dr. Ada Adamora, of the University of North Carolina, did a

wonderful presentation on the many structural, contextual issues that lead to HIV being higher in the black community in the United States. Those things include poverty, joblessness, boredom, because of inadequate community resources for recreation, drug use, incarceration, many things like that. I think there's a tremendous number of them that should be done. I'm not a legal expert, but if I were able to make a wish, the one that I would work on is decreasing the rates of incarceration among black men in the United States. Black men are much more likely to be incarcerated for the same crime if they commit it as opposed to a white man. And the rates of HIV go up dramatically once a man has gone to prison. Their likelihood of being able to get a job and many other things change once they've been incarcerated, and it doesn't improve anyone's life for the better once someone's been incarcerated. So I think that would be the number one thing to work on. You might ask, "How do you work on that?" I mean, it's a tremendous challenge in the legal community, but there's another side of it too; it's that young men, if you have a young black man who has an issue with substance abuse or mental health, they're more likely to go to prison, while a young white man is more likely to enter the mental health arena and get therapy. So those are the sort of things we would want to think about; how to get young black men who may be dealing with substance abuse or anger issues, to get them help as opposed to getting them into prison. I think that would be the largest thing. The next one would be job opportunity programs for black and other poor women, and black men and other poor men, because I think it would make a tremendous difference in both feeling like it's worth it to get married, to have a family, to have monogamy in relationships. Those sorts of structural interventions could go a long way in decreasing poverty and decreasing HIV, which are co-associated in both the United States and worldwide.

RH: Great. Is there any news that you would like to give women in particular, after this particular CROI? Is there anything that has excited you personally as a doctor treating and specializing in HIV in women?

VS: I think that treatment is looking fabulous. And women who are worried that they may be HIV infected should feel like it's okay to go out and get tested, because this is a disease that's so treatable, like many other adult diseases, such as high blood pressure or diabetes. Actually at this point it's a lot more treatable than cancer, and I think it's so much better for their health to find out early if they have HIV and get into care and get into treatment that is so useful and efficacious today in the United States.

RH: Great. Well thank you so much for being with us

VS: My pleasure.

RH: We appreciate your time.