Prevention Programs Curb New HIV Infections In South Africa

July 25, 2012 - RENEE MONTAGNE, HOST:

All this week, with the international AIDS conference underway in Washington, D.C., we're examining the state of the HIV epidemic in the U.S. and around the globe. NPR's Jason Beaubien is in South Africa. He recently spent time with a man who analyzes AIDS statistics at the University of Cape Town.

JASON BEAUBIEN, BYLINE: Leigh Johnson used to be an accountant. Now he crunches numbers on HIV and AIDS.

LEIGH JOHNSON: The work that I do basically involves creating computer programs to simulate the impact that HIV is having in South Africa and also using these models to assess what the impact has been of various prevention and treatment programs for HIV.

BEAUBIEN: More than five and a half million people in South Africa are living with HIV. Johnson combs through government reports and data. And what he finds paints a broad picture of the epidemic in the country with the largest HIV burden in the world.

JOHNSON: We are estimating that HIV incidence has declined quite substantially in South Africa since the year 2000.

BEAUBIEN: And by incidence he means the number of new infections.

JOHNSON: Between 2000 and 2008 there was about a 30 percent decline in HIV incidence. And we attributed most of that decline in incidence to the impact of condom distribution programs and AIDS awareness programs, which have led to increases in condom usage.

BEAUBIEN: The number of new infections peaked in the year 2000, when researchers estimate just over 600,000 South Africans became HIV positive. Last year, roughly 400,000 people were newly infected. Despite this decline in new infections, the total number of people with HIV in South Africa isn't going down. And this is evident by tests of pregnant women.

JOHNSON: What we've seen in South Africa in the national antenatal clinics surveys, which measure the prevalence of HIV in pregnant women, is that antenatal prevalence hasn't changed much in the last few years. It's remained fairly constant at around 29.5 percent.

BEAUBIEN: Twenty-nine point five percent, meaning that roughly one out of every three pregnant women here has HIV. Prevalence measures the overall number of people who are infected with HIV. National prevalence, of course, is hard to measure. Not every person is tested every year. Most pregnant women, however, are, and the rate of HIV among pregnant moms is a decent barometer of the prevalence nationwide.

What Johnson is seeing in these numbers is that the epidemic is reaching a state of equilibrium, with HIV prevalence stuck at an extremely high rate.

JOHNSON: We think that although HIV incidence is coming down, that that effect is being counteracted by the longer survival of patients who are now accessing anti-retroviral treatment.

BEAUBIEN: So the drop in new infections is offset by the fact that people who already have HIV are living longer.

By the middle of last year, South Africa had 1.8 million people on HIV drug treatment. Again, this is far more than any other country in the world.

Johnson started analyzing AIDS data 12 years ago, at a time when President Thabo Mbeki was questioning the link between HIV and AIDS, and activists were denouncing Mbeki's health minister as a murderer for her approach to the epidemic. Johnson says now the whole political landscape around HIV in South Africa is different.

JOHNSON: We no longer feel as if the scientists and the policy makers are at odds with one another. I think we are on the same page. And that's a very encouraging change from what we had back then.

BEAUBIEN: And he says the data in his computer models is starting to show that the country's HIV programs are having an impact on an epidemic that's going to be with South Africa for generations to come.

Jason Beaubien, NPR News.

MONTAGNE: And at NPR.org there's an interactive chart that lets you crunch the numbers on the global AIDS epidemic for yourself.

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