Study: Life Expectancy Still Shorter for People With HIV

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Life expectancy for people with HIV has improved significantly during the past 15 years, but on average it might still be as much as 21 years shorter than for people not infected with HIV, according to a study published online September 4 in the *Journal of Acquired Immune Deficiency Syndromes*.

Working with life expectancy calculations can be tricky. While they can be useful for making policy and resource allocation decisions involving large populations, they aren't always helpful for the individual. They can, however, provide information to researchers about health interventions that may be needed to increase life expectancy across the board, or to determine whether some groups fare more poorly than others.

Thus far, only two studies have examined life expectancy in people with HIV since the introduction of potent combination HIV therapy in the late 1990s. Both of these studies found increased mortality in people with HIV compared with a similar group of people not infected with HIV. They were based, however, on European cohorts of patients.

To determine life expectancy for people with HIV in the United States, Kathleen McDavid Harrison, PhD, MPH, and her colleagues from the Centers for Disease Control and Prevention (CDC) in Atlanta, looked at data from 25 states reporting new HIV diagnoses—not just AIDS cases—as far back as 1996.

A total of 220,646 people were included in the analysis, 10,366 of whom died from any cause by the end of 2007. Seventy-four percent of the group was male, 55 percent was black, 36 percent was white, and 9 percent was Hispanic. The group of HIV-positive individuals was compared with age-, sex- and race-matched HIV-negative people participating in other studies.

Overall, Harrison's team found that life expectancy after an HIV diagnosis had more than doubled between 1996 and 2007. People diagnosed in 1996 were estimated to live an average of 10.5 years after diagnosis, while people diagnosed in 2005 were estimated to live an average of 22.5 years after diagnosis. The largest one-year increase in life expectancy occurred between 1996 and 1997, when three-drug combination antiretroviral therapy was introduced. It is important to keep in mind that these statistics are averages and include substantial numbers of people who did not get tested until their CD4 counts were very low, people who have substance use problems, and

people who did not routinely access care after diagnosis.

Broken down by sex, estimated life expectancy after an HIV diagnosis increased for women from 12.6 years to 23.6 years, and for men from 9.9 years to 22 years. Black and Hispanic men and black women had the least gains in life expectancy. There were, however, too few white and Hispanic women in the study to draw firm conclusions.

When compared with people not infected with HIV, the differences in life expectancy were substantial. On average, HIV-positive men were estimated to have a lifespan 19 years shorter than their HIV-negative counterparts. HIV-positive women were estimated to live 23 years less than HIV-negative women. The most years of life lost were estimated to occur in people diagnosed at a young age, and the least years of life lost were estimated to occur in people diagnosed in their 50s and 60s.

The authors concede that a number of factors that can dramatically shorten life expectancy are far more common in people with HIV than in their HIV-negative peers. These include hepatitis C virus (HCV), poverty and lack of access to care. Also, a significant proportion of people with HIV do not find out that they're positive until after they have sustained a lot of damage to their immune systems. This can make comparisons with the general population both difficult and potentially less meaningful.

While the study might not provide the kind of information that's useful for the individual living with HIV, it does add further evidence that public health efforts to get people tested and into care earlier, and to understand and overcome racial disparities in health outcomes, are vital.
