People With HIV Diagnosed with Dementia 13 Years Earlier

In the context of universal health care, this may be a result of more frequent access to care.

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People living with HIV in Canada had eight times the risk of Alzheimer's disease and other non-AIDS-related dementia as their HIV-negative counterparts, and they were diagnosed 12.5 years earlier, according to an analysis published in BMJ Open. They also had higher rates of several other age-related chronic conditions.

That rates of age-related illnesses were higher among people living with HIV wasn't a surprise, as that's been seen in other studies. Antiretroviral treatment has been associated with kidney damage and cardiovascular disease, and viral hepatitis and alcohol use—both common among HIV-positive people—can cause liver disease.

But Ni Gusti Ayu Nanditha, PhD, a candidate in epidemiology at the British Columbia Centre for Excellence in HIV/AIDS at the University of British Columbia, and colleagues suggested that one of the reasons people with HIV are diagnosed with age-related conditions earlier is that if they are receiving HIV care, they see medical providers more often—particularly in the context of Canada's universal health care system—which can lead to earlier diagnosis of conditions such as dementia, diabetes and osteoarthritis.

This retrospective analysis looked at the health over time of 8,031 people living with HIV who received antiretroviral treatment in British Columbia between 2000 and 2012. The participants were all at least 19 years old and were followed for at least a year. The study also included 32,124 HIV-negative people as a control group.

The researchers looked for medical codes denoting diagnosis of nine chronic health conditions associated with aging: cardiovascular disease, diabetes, hypertension (high blood pressure), kidney disease, liver disease, chronic obstructive pulmonary disease (COPD), non-AIDS-defining cancers, osteoarthritis and Alzheimer's or non-AIDS-related dementia.

The participants were disproportionately male (82%) and had a median age of 40; 12% were under 30, and 18% were 50 or older. Data on race were not available for nearly half of the participants, but 38% were known to be white.

While hypertension was the number one cause of age-associated comorbidities among HIV-negative people, liver disease dominated the health issues of people living with HIV. One in four HIV-positive people had liver disease, compared with just 2.1% of HIV-negative people, making for a 10-fold higher rate among people with HIV.

Indeed, people living with HIV had a higher prevalence of nearly all age-related health conditions besides hypertension and osteoarthritis: four times the rate of COPD (12% versus 2.8%), seven times the prevalence of kidney disease (15% versus 1.9%) and eight times the rate of Alzheimer's disease or other non-HIV-related dementia (3.6% versus 0.4%). Rates of diabetes were nearly identical for the two groups (11% and 10%).

But these comorbidities were not spread evenly among people living with HIV. Those with a history of injection drug use in particular had higher rates of COPD, liver disease and kidney disease. Meanwhile, people assigned female at birth had much higher rates of liver and kidney diseases.

When it came to age at diagnosis, here again, people living with HIV stood out—but not in the ways they might want to. People with HIV were diagnosed with kidney disease 9.5 years earlier than their HIV-negative peers. They were also diagnosed with COPD six years earlier and liver disease five years earlier. But the most striking difference was seen for Alzheimer's disease and other types of dementia: People living with HIV were diagnosed 12.5 years earlier.

"Overall, these results stress the need for optimized general clinical screening for comorbidities at an earlier age among [people living with HIV]," wrote Nanditha and colleagues. "Future studies should build from this work and focus on the development of evidence-based primary care guidelines that adapt to the changing health care needs of people living with HIV, integrate prevention and management of chronic diseases and ultimately ensure healthy living and successful aging for this population."

Click here to read the full text of the study.

Click here to read more about successful aging with HIV.
