

To Temper Effects of Cognitive Decline Among Women With HIV, Address Depression

A new analysis suggests that the impact of HIV-associated neurocognitive disorders differs by sex, race, age and employment status.

May 11, 2021 By [Heather Boerner](#)

[HIV-associated neurocognitive disorder](#) can be a drag on anyone's well-being. But an analysis [published in PLOS One](#) showed that quality of life especially drops among older, unemployed or underemployed women with depression—and particularly Latina or white women.

Many studies have shown that people with HIV experience neurocognitive impairment and are diagnosed with dementia [earlier](#) and that systemic marginalization, like employment opportunities and poverty, contributes to mental dysfunction. For instance, a recent analysis found that [going hungry](#) was more strongly associated with cognitive impairment than HIV was.

But in this current study, Philip Amara, MPH, an epidemiologist at the University of Nebraska Medical Center, and colleagues didn't just want to know the interactions between other conditions and neurocognitive impairment—they wanted to see how that impairment affected the rest of participants' lives.

Amara and his colleagues pulled data from the Central Nervous System HIV Antiretroviral Therapy Effects Research (CHARTER) study that included 1,340 people living with HIV with a mean age of 43 years. Three out of four participants were men, nearly half (47%) were Black, 71% were unemployed and 42% met criteria for cognitive impairment. What's more, 54% had other health issues. Specifically, 30% had what the researchers called contributing comorbidities—brain trauma, epilepsy, major depression, alcohol use disorder, current or past substance use or a low reading level.

The study authors looked at participants' scores on a number of mental and physical health measures, such as pain perception, cognitive function, energy and fatigue, health distress and general quality of life. What they found was that people in the study rated their quality of life at about the same level. But the quantitative measures told a different story.

Overall, those with neurocognitive disorders had a fourfold decrease in quality-of-life measures compared with those who did not have scores that met the criteria for cognitive impairment. But when the researchers adjusted the findings for age, sex at birth, race, employment and psychiatric medicine use, the reduction in quality of life was half that, about 2.5-fold.

Interestingly, it was white participants—particularly under- or unemployed white or Latina women of any race—who experienced the greatest drop in quality of life when neurocognitive impairment was present. For instance, white participants overall had a nearly sixfold drop in quality of life compared with Black peers. And women were twice as likely as men in the trial to experience low quality of life with cognitive impairment.

Health-related quality of life didn't dip much until participants were older: People in their 40s had only a 0.09-fold drop in quality of life. But by the time people were in their 60s or older, quality of life dropped fourfold.

The drops in quality of life were especially steep for people who were unemployed (a full ninefold decline) and those who were taking psychiatric medications (an eightfold drop). As expected, a diagnosis of major depression was associated with worse cognitive function as well as reduced physical and mental quality of life. When researchers took depression out of the picture, neurocognitive disorder was associated only with drops in mental quality of life, not physical. The trial did not measure trauma history or experiences of discrimination.

“These findings suggest that future strategies aimed at improving health-related quality of life among [people living with HIV] with neurocognitive impairment might benefit from concurrent management of depression,” wrote the authors.

Click here to [read the full study](#).

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