ON THE LOOKOUT FOR COGNITIVE PROBLEMS IN PATIENTS LIVING WITH HIV

A new APA resolution recommends ways to provide neuropsychological assessments for patients with cognitive disorders related to their HIV status

BY HANNAH CALKINS
In the mid-1990s, combined antiretroviral therapy (cART) revolutionized the treatment of HIV, enabling people with the virus who receive treatment to live nearly as long as people without it. However, people living with HIV are still at risk for HIV-associated neurocognitive disorders, or HAND, says David J. Moore, PhD, a professor of psychiatry at the University of California San Diego and an investigator at the university’s HIV Neurobehavioral Research Center.

“Impairments caused by HAND are often mild, but they still may impact people’s lives, and so we need to be able to detect them,” says Moore, who is also a member of APA’s Committee on Psychology and AIDS (COPA).

Research suggests that HAND is likely caused by pathogens crossing the blood-brain barrier and setting off a neuroinflammatory response in the brain that may never recede, even if the person is being successfully treated with cART. The resulting chronic low-grade inflammation can cause neurocognitive impairments, says April Thames, PhD, an associate professor of psychology at the University of Southern California and practicing neuropsychologist. According to some reports, about 52% of people living with HIV have some form of HAND. Those over age 50 may be at increased risk for developing these disorders. Additional risk factors for HAND include poor disease control, co-occurring health conditions, and affective symptoms, such as depression and apathy.

In August 2019, the APA Council of Representatives adopted a resolution that seeks to increase awareness of HAND among psychologists and encourages a sensitive and nuanced approach to the neuropsychological assessment of people living with HIV.

“The resolution is intended to increase awareness that HAND can exist, and try and decrease the stigma associated with it,” said Moore. “Now that people with HIV are getting older, how can we make sure that they’re getting the highest quality of life they can in their older years?”

A SUBTLE CONDITION
People with HAND may have trouble performing complex daily tasks, such as driving a car or managing finances, as well as difficulties with multitasking, says Pariya Fazeli Wheeler, PhD, a developmental psychologist and assistant professor in the School of Nursing at the University of Alabama at Birmingham.

However, these impairments generally do not get progressively worse.

“The most common trajectory with HAND is a stable-mild impairment, in contrast to other neurodegenerative conditions, such as Alzheimer’s,” Moore says. In fact, some people with HAND improve over time.

Still, even subtle impairments can have negative effects on an individual’s livelihood, health and relationships. People at risk for HAND should be appropriately and routinely assessed, and those assessments should inform their treatment, says Moore.

According to APA’s resolution, brief screening measures of cognitive status aren’t sensitive enough to detect milder forms of HAND.

Also, neuropsychologists who are used to identifying very clear etiologies—such as
with traumatic brain injuries or non-HIV-associated dementias—may need to readjust their approach to fully appreciate the complexity of how HIV affects the brain, says Thames.

To address this complexity, the resolution calls for “reliable, valid and culturally and linguistically appropriate assessments” to evaluate and diagnose HAND.

That means tests for HAND need to pick up on what may be the “patchy” or fluctuating nature of the impairment, says Maria Marquine, PhD, also at the University of California San Diego and, along with Moore, a researcher in the HIV Neurobehavioral Research Center.

The “culturally and linguistically appropriate” piece of the resolution requires particular attention, she says. HIV disproportionately affects people who are racial and ethnic minorities, and those populations are also at increased risk for HAND. However, they are not well represented in the data many assessment tools rely on, says Marquine.

“We don’t have very good normative adjustments for many cultural groups, but we’re working on developing them,” she says. That’s why practitioners should be culturally competent when “seeing and evaluating persons of diverse racial or ethnic origin, especially when from a different linguistic background than them,” says Marquine.

If a psychologist does not feel that he or she has the cultural competency to work with certain patients, it may be best to make a referral to another practitioner, she says.

Psychologists should also be aware of the high correlation between education level and performance on cognitive tests, say Marquine and Thames. Additionally, Fazeli notes that quality of education can also affect test results, which may be an issue when testing individuals from disadvantaged groups.

Similarly, socioeconomic status plays a role both in the trajectory of HAND and on individual performance on cognitive tests, says Thames. People living with HIV who have little or no access to health care are more susceptible to HAND, but at the same time, typical measures of daily functioning may not apply to them, and therefore may not be good indicators of impairment.

“Whether someone is still managing their finances well, or regularly doing their grocery shopping and cooking, is only a good barometer for functional impairment if they were already doing those things,” she says.

CO-OCcurring CONDITIONS

Co-occurring conditions play a significant role in the development and trajectory of HAND, even though researchers have not yet determined precisely why or how.

According to Moore, metabolic syndrome factors—such as obesity, hypertension and diabetes—seem to put people at greater risk for HAND. People living with HIV are also more likely to have these conditions, along with histories of trauma, anxiety and depression.

In particular, psychologists should be aware that depression and HAND share some symptoms, such as lack of concentration, sleeping difficulties, apathy and psychomotor issues, says Thames.

Furthermore, “depression or apathy may impact reporting or perception of daily functioning difficulties,” says Fazeli.

Treating psychologists who notice these issues “may need to refer the patient for neuropsychological assessment to disentangle what is mood and what is HAND,” Thames says.

At the same time, Moore says that treating suspected depression can have a clarifying effect. “If you treat the depression and have some resolution, then maybe you have a clearer picture of how the cognitive problems related to mood,” he says.

Still, Moore emphasizes that not all patients will have co-occurring conditions. Psychologists should be careful not to overpathologize people living with HIV, he says.

KEY TAKEAWAYS

Marquine says psychologists should be aware that a patient’s overall health isn’t necessarily a good indication of whether they have HAND. “Their HIV may be well controlled, but that doesn’t necessarily mean that their cognitive function is intact,” she says.

Also notable, says Fazeli, is the fact that many older adults living with HIV do not have any neurocognitive impairments.
So, says Moore, the best rule of thumb when working with patients living with HIV is to ask them whether they are having any problems with cognition. If so, they should be referred for assessment, he says. If HAND is diagnosed, that diagnosis can begin to inform treatment.

“We don’t have great interventions, but there is some evidence that increased physical activity can have a positive effect on HAND,” says Moore.

Fazeli agrees, adding that some interventions focused on compensation methods—such as making lists and using medication reminders—can counteract some memory deficits.

“Bolstering health literacy in this population may also be able to buffer some of the effects of cognitive impairment, particularly with respect to treatment management abilities,” she says.

A major takeaway from the resolution, says Moore, is that there is a significant role for psychologists to play in identifying and treating HAND, as well as in improving quality of life for people who have it.

“Make sure your patients know that a diagnosis of HAND doesn’t mean they will get dementia. It can be stabilized or even largely resolved,” Moore says. “Ultimately, the message of the resolution is one of hope and possibilities.”

To read the APA Resolution on Neuropsychological Assessment of Persons Living With HIV Infection, go to apa.org/about/policy/resolution-neuropsychological-assessment-hiv.pdf.

RESOURCES