

Cognitive criteria in HIV: greater consensus is needed



A recently published Consensus Statement by Sam Nightingale and colleagues (Nightingale, S. et al. Cognitive impairment in people living with HIV: consensus recommendations for a new approach. *Nat. Rev. Neurol.* **19**, 424–433; 2023)¹ proposes a new approach to classifying cognitive impairment in people living with HIV. Although we applaud the efforts of the authors, other considerations are needed to ensure earlier and more consistent diagnosis, prevention and enhanced patient care. Furthermore, rather than rejecting the current criteria, a careful update of the HIV-associated neurocognitive disorder (HAND) criteria² would avoid an enormous historical loss resulting from new data becoming incomparable.

The inclusion of neuroimaging criteria could improve the diagnosis of HAND³, if standardized. However, the limitation of this inclusion is that concepts regarding ‘active’ and ‘legacy’ HIV-associated brain injury (HABI) are not well defined and would be difficult to implement without access to MRI scanners, advanced neuroimaging expertise and specific MRI sequences or markers.

The current HAND diagnostic criteria³ already include a distinction of HABI from other causes of brain injury by requiring that no other conditions are present that reasonably explain a person’s acquired cognitive impairment – the reason that ‘associated’ is included in HAND. Nightingale and colleagues describe HAND as being a strict dichotomy, either driven by HIV or something else such as a comorbidity. This approach is at odds with the complexity of lived HIV experiences, in which comorbidities interact with HIV⁴. Indeed, this approach could result in people with HAND having their symptomatology minimized as just a legacy effect for which nothing can be done or purely a result of comorbidities; individuals from minorities and/or low-middle income countries would be especially vulnerable to this shortfall.

Regarding active HABI, the Consensus Statement does not do justice to increasing evidence that HIV is active despite effective antiretroviral therapy. Persistent activity has

been observed in the brain⁵ and is associated with brain injury⁶. These findings represent a major challenge in curing HIV⁷. Thus, relying on standard viral suppression in peripheral blood or cerebrospinal fluid is likely to greatly miss the mark in addressing the risk for HAND.

The authors stated that issues with neuropsychological norms are unusual. Norms and cut-offs are essential for all tests in clinical decision making and would also benefit neuroimaging⁸. Consistent with contemporary evidence and diagnostic frameworks focusing on early diagnosis in other neurological conditions, HAND should be harmonized with definitions of mild cognitive impairment that use cut-offs of 1–1.5 standard deviations^{9,10}.

Our group includes people with lived HIV experience, and through our discussions we found that cognitive impairment is commonly overlooked rather than overdiagnosed. We also find a substantial lack of health literacy regarding cognitive impairment, and that insufficient services and trained staff are available to respond to an increasing demand for care. Despite reporting their difficulties to doctors, many individuals report being dismissed, which has resulted in appropriate diagnoses and management being delayed by several years.

We welcome the authors’ desire for further discussion and look forward to working together with ongoing engagement of community members to achieve greater consensus within the field that leads to better health and wellbeing for all people living with HIV.

There is a reply to this letter by Nightingale, S. et al. *Nat. Rev. Neurol.* <https://doi.org/10.1038/s41582-024-00928-0> (2024).

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Competing interests

The authors declare no competing interests.