## **HIV AND AGEING OF THE BRAIN**

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**Background:** There is cumulative evidence that various chronic diseases are a risk factor for elderly dementia. Given this context, research is beginning to focus on the possibility of a heightened risk of dementia among chronic HIV+ people who are aging. In many parts of the world, targeted funding has been released, although this is not yet the case in Australia. In this talk, I will present the main sources of evidence and controversies regarding the risk of elderly dementia in chronic HIV infection.

The question of whether chronic HIV+ persons may be at greater risk of elderly dementia is complex given different disease courses and histories, different treatment timelines, and the fact that intricate comorbid factors overlapping with socio-economic vulnerabilities produce different prevalence rates for HIV-associated neurocognitive disorder (HAND). Known risk factors for dementia should be viewed with caution because current HIV populations who are reaching their 60s (the age at which the prevalence of elderly dementia starts to rise) are survivors of the early HIV epidemic era where antiretroviral treatment was suboptimal, and in some instances neurotoxic.

In this paper, I will seek to clarify the issues at stake by offering a critical review of recent research in HIV and ageing of the brain, with a focus on neurocognitive and neuroimaging studies. It will be suggested that anticipatory international research using standard harmonized methods in large samples needs to be conducted to answer these questions with confidence. Due care will be paid to the importance of reconciling the need for further research and related clinical translation to plan for an adequate healthcare response, versus the risk of additional stigma that may be associated with greater dementia risk in chronic HIV+ people.

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