Abstract

South Africa has the most prominent percentage of individuals living with the Human Immunodeficiency Virus (HIV) in the world, with the most prominent form of transmission of HIV in South Africa being vertical mother-to-child transmission. From 1997 until 2004, South Africa had limited access to ARV treatment at and after birth due to the government legislation. As a consequence, treatment of HIV may only have been initiated after clinical presentation of immune deficiency. A paucity of information therefore exists regarding this population in addition to the specific age demographic of adolescents. Adolescents may be negatively influenced by the cortical thinning associated with HIV, and this study therefore aims to investigate the verbal fluency and vocabulary (in English) of 30 bi- or multilingual seropositive adolescents that are currently on a managed anti-retroviral programme in comparison to an HIV-negative contrast group of 70 bi- or multilingual adolescents in South Africa (matched for age, education, and socioeconomic status). The study found that there were no significant results between the HIV-positive and HIV-negative groups on the measures of vocabulary, semantic naming, or phonemic naming in 'F' as determined by their performance on the neuropsychological assessments. Significant results were noted between the HIV-positive and HIV-negative groups on the phonemic naming categories of 'A' and 'S' however, and negative correlations between performance in these categories and current viral load, and viral load at Highly Active Antiretroviral Therapy (HAART) initiation were also noted. This research formed part of a broader study examining the overall neurocognitive effects of HIV-1 infection in adolescents in South Africa.