

ABSTRACT

In the context of HIV high infection rate in South Africa, an assumption can be made that there is a high prevalence of HIV-associated neurocognitive disorders or cognitive linguistic deficits. The aim of this study was to determine assess whether highly active antiretroviral therapy (HAART) affected the cognitive – linguistic abilities of individuals living with HIV and AIDS before and after HAART use; and to determine whether their functional performance in terms of engaging in activities of daily living was affected by HAART use. Adults living with HIV and AIDs were recruited through purposive convenience sampling to participate in the study. They were divided into three groups. The experimental and cross sectional group included participants who were HIV infected and initiated HAART. The comparison group included participants who elected not to start HAART. Participants in all three group were assessed using the Cognitive – Linguistic Quick Test and were also required to fill out a structured interview scale at baseline, four and eight months. For the experimental group 55 participants were tested at baseline, 55 at four months and 52 at eight months after HAART initiation. The comparison group included 21 participants who tested at baseline, ten at four months and nine at eight months. The cross sectional group included different participants who recruited at baseline (55) before HAART initiation, then again at four (44) and eight months (42) after HAART initiation.

Descriptive analysis revealed that the mean scores for both the Cognitive – Linguistic Quick Test (CLQT) and the structured interview schedule (IS) in all the cognitive domains increased for all three groups from four and eight months after testing. However the severity ratings provided by the CLQT indicated that neurocognitive deficits were still prevalent among the participants after HAART intiation. The most impaired cognitive – linguistic ability was executive functions and the least impaired was language. One way ANOVA analysis on the CLQT and IS revealed that was a signiifcant difference in performance between the three groups at baseline, four and eight months. Repeated measures analysis revealed significant differences or improvements within participants across the three time periods. The greatest improvement was observed from baseline to eight months especially on the CLQT. ANCOVA analysis on the Cognitive- Linguistic Quick Test indicated that education had a major impact on cognitive – linguistic abilities followed by age and CD4 count. However, ANCOVA analysis on the structured interview scale revealed that the effect of time, participant group and to a lesser extent age influenced the participants cognitive – linguistic abilities when it came to perfroming activities of daily living. Quantitave inquiry using content analysis showed that participants in all three groups cited attention, followed by visual and language problems as hindering their abilities to perform activities of daily living.

The implications from this study revealed that even though HAART improves cognitive – linguistic abilities, neurocognitive deficits were still prevalent. Therefore findings suggest that health professionals need to monitor the neurocognitive impairments of their patients so as determine levels of functional performance.