**Introduction**

- The human immunodeficiency virus (HIV), HIV-associated neurocognitive disorder (HAND), and depression are related through a complex interplay of physiological and social factors. 
- HIV has been known to affect the central nervous system, and can lead to decreased neurocognitive function and/or depression through various biological mechanisms. 
- Additionally, independent of HIV-infection, depression influences level of cognitive function, and vice versa. 
- Despite the high prevalence of HAND and major depressive disorder in HIV patients (50% and 19-43% respectively)1 assessing and differentiating these conditions can be challenging. 
- Although widely accepted and easy-to-use screening tools are available for depression, there is not yet consensus on an appropriate screening tool for HAND. 
- Furthermore, these screening tools have not been validated in patients in the Dominican Republic.

**Objectives**

Instituto de Estudios Virológicos (IDEV) is one of five HIV clinics in the Dominican Republic. Patients at IDEV are neither routinely screened for depression nor HIV associated cognitive decline (HAND). The aims of our project were: 
- To see if a self-reported history of depression or a current major depressive episode are predictors of low cognition 
- To determine the prevalence of depression at IDEV 
- To see if a self-reported history of depression or a current major depressive episode are predictors of low cognition 
- To gage the value of screening tools for HAND and depression for the patient population at IDEV

**Methods**

A convenience sample of 100 HIV patients at IDEV were interviewed by two medical students using the following questionnaires/screening tools: 
1. General questionnaire: demographics, history of depression, history of cognitive changes. 
2. Screens for cognitive decline: (a) Montreal Cognitive Assessment (MoCA) and (b) International HIV Dementia Scale (IHDS) 
3. Screens for depression: (a) Beck Depression Inventory-II (BDI-II) and (b) Mini International Neuropsychiatric Interview (M.I.N.I.) for current Major Depressive Episode 

**Results**

**Prevalence of Depression and Posttraumatic Stress Disorder**

- 59% reported a history of depression, but only 26% had a diagnosis 
- 17% had moderate to extreme depression according to the BDI-II 
- 12% had a positive Major Depressive Episode M.I.N.I. screen 
- 6% had a positive Posttraumatic Stress Disorder M.I.N.I. screen

**Prevalence of cognitive impairment**

- MoCA and IHDS detected a much higher prevalence of cognitive impairment than expected 
- Average MoCA score = 18.6 [≤25 indicates cognitive impairment for high school education or less] 
- 93.3% had a MoCA score of ≤25 
- Average IHDS score = 9.6 [≤10 indicates possible HIV dementia] 
- 80% had an IHDS score of ≤10

**Conclusions**

- The prevalence of depression in HIV patients at IDEV is high (23%) and there is a large discrepancy between the number of patients reporting depression and diagnoses of depression. 
- As expected, the Montreal Cognitive Assessment is positively correlated with education level and negatively correlated with age. 
- The MoCA screen suggested that 93% of patients interviewed had abnormal cognition. This could be because: 
  - The MoCA is not an appropriate cognitive screen for the HIV population in the Dominican Republic. 
  - Prevalence of HIV-associated neurocognitive decline is very high, though difficult to identify amidst a population with widely varying education levels. 
- Using the MoCA as an indicator of cognitive decline and the BDI-II as an indicator of depression, there was no correlation between cognitive decline and depression in this population.

**References**


**Acknowledgements and Contact**

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