

Toronto, Canada between January 2020 and August 2022. CHUU were recruited from the community with similar sociodemographic backgrounds based on residential area in Toronto and parental income levels. Measures of Full-Scale IQ (FSIQ), Verbal Comprehension (VCI), Visual Spatial skills (VSI), Fluid Reasoning (FRI), Working Memory (WMI), and Processing Speed (PSI) were evaluated with the Wechsler Intelligence Scale for Children – Fifth Edition. Core Language, Receptive Language, and Expressive Language skills were assessed with the Clinical Evaluation of Language Fundamentals – Fifth Edition. Perinatal risk factors included birthweight, birth complications (e.g., premature rupture of membranes, jaundice, etc.), maternal smoking and alcohol use during pregnancy, and NICU admission. Analyses of variance and chi-square tests were performed to investigate group differences and multiple regression analyses tested the relation between neurodevelopmental measures and birth factors. Significance was held at  $p < 0.05$ .

**Results:** 36 CHEU (21 female,  $8.74 \pm 1.56$  years) and 26 CHUU (12 female,  $8.53 \pm 1.50$  years) children were included. For both groups, mean standardized scores of the cognitive abilities assessed were in the average range. CHEU had significantly lower birth weight than CHUU, but there were no differences between these groups with respect to maternal smoking and alcohol use, birth complications or NICU admission. There were no between group differences identified for the intellectual and language abilities. In the CHEU group, birthweight was significantly associated with lower VCI, WMI, and expressive language. In the CHUU group, prenatal alcohol and smoking exposure was associated with lower VCI scores. Birth complications were associated with lower WMI, PSI, and FSIQ scores.

**Conclusions:** In this interim analysis, perinatal risk factors impacted neurodevelopmental outcomes of CHEU and CHUU differently. While the groups did not differ in frequency of birth complications and maternal smoking and alcohol use, these factors negatively impacted aspects of intellectual ability in the CHUU group. CHEU with lower birthweight are at greater risk of working memory and language difficulties, supporting the need for early interventions and close neuropsychological follow-up of this population throughout childhood.

**Categories:** Infectious Disease (HIV/COVID/Hepatitis/Viruses)

**Keyword 1:** HIV/AIDS

**Keyword 2:** intellectual functioning

**Keyword 3:** language

**Correspondence:** Leila Kahnami, Department of Psychology, The Hospital for Sick Children, Toronto, ON, Canada, Department of Psychology, York University, Toronto, ON, Canada Email: leila.kahnami@sickkids.ca Email: leilakah@my.yorku.ca

## 60 Differential Benefits of Internal Strengths and Socioemotional Support on Neurocognition and Daily Functioning Among People with HIV

Lillian Ham<sup>1,2</sup>, Maulika Kohli<sup>1,2</sup>, Dilip V Jeste<sup>3,4,5</sup>, Igor Grant<sup>3,2</sup>, David J Moore<sup>3,2</sup>

<sup>1</sup>San Diego State University/University of California San Diego Joint Doctoral Program in Clinical Psychology, San Diego, CA, USA. <sup>2</sup>HIV Neurobehavioral Research Program, San Diego, CA, USA. <sup>3</sup>Department of Psychiatry, University of California San Diego, La Jolla, CA, USA. <sup>4</sup>Department of Neurosciences, University of California San Diego, La Jolla, CA, USA. <sup>5</sup>Sam and Rose Stein Institute for Research on Aging, University of California San Diego, La Jolla, CA, USA

**Objective:** Positive psychological attributes have been associated with better health outcomes and quality of life among people with HIV (PWH). Recently, we identified two latent factors (internal strengths, socioemotional support) among 7 positive psychological attributes through factor analysis (Ham et al., 2022). Depression was inversely associated with both factors. Our current aim was to investigate associations between these latent factors, neurocognition, and daily functioning among PWH.

**Participants and Methods:** 106 PWH and 90 HIV- participants were included in cross-sectional analyses ( $M_{age} = 51.3$ , 77% men, 60% White). Seven positive psychological questionnaires, a neuropsychological battery covering 7 domains, two daily functioning questionnaires (Patient's Assessment of Own Functioning (PAOFI); Independent Activities of Daily Living (IADL)), and a depression symptom questionnaire (Center for Epidemiologic Studies Depression Scale) were administered. Internal

strengths and socioemotional support composite z-scores were calculated using HIV- participants' scores as reference. Outcomes included global and domain-specific neurocognitive T-scores (demographically-adjusted), global deficit score (GDS), number of functional impairments (PAOFI), and number of functional declines (IADL). Main effects of HIV status, latent factors, and their interaction were included in linear (neurocognition) and Poisson (daily functioning) regressions. Significant interactions were followed up by simple effects analyses and non-significant interactions were removed. Depressive symptoms and demographics associated with daily functioning were included as covariates.

**Results:** PWH exhibited worse neurocognitive performance (global, executive functioning, processing speed, learning, recall, GDS) and reported greater functional difficulties and depressive symptoms compared to HIV-counterparts ( $p < 0.05$ ). For neurocognition, there were socioemotional support x HIV status ( $B = 2.39, p = 0.04$ ) and internal strengths x HIV status ( $B = 2.70, p < 0.05$ ) interactions on verbal fluency, accounting for depressive symptoms, such that only PWH had a positive association between socioemotional support and verbal fluency ( $B = 1.97, p = 0.01$ ). Removing non-significant interactions, there was a main effect of socioemotional support on global cognition ( $B = 1.01, p = 0.04$ ) and psychomotor speed ( $B = 1.83, p = 0.02$ ), independent of HIV status and depressive symptoms. For daily functioning, there was a socioemotional support x HIV status interaction on IADL declines ( $B = 0.42, p = 0.02$ ), accounting for depressive symptoms and education, such that only HIV- participants had an inverse relationship between socioemotional support and IADL declines ( $B = -0.64, p < 0.001$ ). Removing non-significant interactions, there were main effects of internal strengths on PAOFI impairments ( $B = -0.36, p < 0.001$ ) and IADL declines ( $B = -0.38, p < 0.001$ ), independent of HIV status and depressive symptoms.

**Conclusions:** Among PWH, both positive psychological factors were associated with better neurocognition, even after adjusting for depressive symptomatology. Though internal strengths were associated with better daily functioning regardless of HIV status, socioemotional support was not related to daily functioning in PWH. While mechanisms underlying these associations cannot be established cross-sectionally, it is possible that

among people with medical illnesses complicated by cognitive disturbance, positive psychological factors relate to improved health-related behaviors (e.g., better disease management). Additionally, better neurocognition, including cognitive reserve, may engender greater resilience and improved ability to marshal social support.

**Categories:** Infectious Disease (HIV/COVID/Hepatitis/Viruses)

**Keyword 1:** HIV/AIDS

**Keyword 2:** cognitive functioning

**Keyword 3:** activities of daily living

**Correspondence:** Lillian Ham, San Diego State University/UC San Diego Joint Doctoral Program in Clinical Psychology, HIV Neurobehavioral Research Program, liham@health.ucsd.edu

## 61 Subjective PTSD and Cognitive Complaints in Middle Aged Women who were Hospitalized with COVID-19: A Case Series

Lori DiBlasi, Sarah A Mandelbaum, Carina JohnKlein, Alexandra Ossowski, Yocheved Keren, Dina Cottone, Katherine E Russell, Rosemarie Basile  
Staten Island University Hospital, Department of Rehabilitation Medicine, Staten Island, NY, USA

**Objective:** Though there is much that is unknown about "post-COVID conditions" the Center for Disease Control (CDC) recognizes that these conditions represent a wide array of new, returning, or ongoing health issues in individuals who have been infected with the novel coronavirus, COVID-19. This case series describes the emotional and cognitive screening of three females in their 50's who contracted COVID-19, and were hospitalized during the course of their illness. This case series hopes to provide an initial framework to discuss the recovery trajectory of post-COVID patients who were hospitalized, who have experienced residual post-traumatic stress and cognitive symptoms.

**Participants and Methods:** Three middle-aged female patients (ages 52, 53, 55) were screened in an outpatient post-COVID recovery center for initial and post-COVID emotional, cognitive, and physical symptoms. All three women reported being hospitalized during their illness. The Post-