

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

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

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**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-

Traumatic Stress Disorder - Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) was administered via clinical interview and the patients were asked about subjective cognitive complaints related to concentration, memory, and word finding.

**Results:** All three women reported persisting cognitive problems, including difficulties with concentration, problems with memory, and word finding difficulties. They also endorsed symptoms of post-traumatic stress, such as avoidance of thoughts and events, as well as recurrent nightmares related to the course of their illness.

**Conclusions:** The CDC notes that there are no tests that specifically evaluate the multitude of post-COVID conditions. Regardless, this case series suggests that emotional and cognitive screeners may assist in treatment planning and support recovery in this population. Future research should examine the exact nature of the relationship between hospitalization, emotional symptoms, and cognitive functioning in post-COVID patients.

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

**Keyword 1:** infectious disease

**Keyword 2:** neuropsychological assessment

**Keyword 3:** post-traumatic stress disorder

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## 62 Cognitive Functioning and Non-Cognitive Symptoms in Post-Acute COVID-19 Syndrome

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**Objective:** Patients with Post-Acute COVID Syndrome (PACS) are reported to commonly experience a variety of cognitive, physical, and neuropsychiatric symptoms well beyond the acute phase of the illness. Notably, concerns involving mood, fatigue, and physical symptoms (e.g., pain, headaches) following COVID-19 appears to be especially prevalent. It is unclear, however, the extent to which such symptoms

are associated with cognitive problems in patients with PACS. In the present study, we examined the prevalence of cognitive impairment in a sample of patients with PACS, as well as the relationship between cognitive functioning and several non-cognitive symptoms.

**Participants and Methods:** Participants were 38 patients with PACS [71.1% female; mean age = 48.03 years (SD = 11.60) and years of education = 15.26 years (SD = 2.60)] seen for a neuropsychological evaluation at a large Northeastern medical center at least three months from the time of COVID-19 diagnosis (per PCR test). As part of a larger battery, patients completed the Hopkins Verbal Learning Test- Revised (HVLRT, learning and delayed recall), Trail Making Test (TMT; time to complete parts A and B), Controlled Oral Word Association Test (COWAT total correct), and Animals (total correct). They also were administered the Chalder Fatigue Scale-11 (CFS-11), Beck Depression Inventory-II (BDI-II), Beck Anxiety Inventory (BAI), and Patient Health Questionnaire (PHQ-15). The percentage of patients with scores in the impaired range ( $z < -1.5$ ) on cognitive tests was determined. Correlations between cognitive and non-cognitive measures were also examined.

**Results:** The most frequent impairment was seen for COWAT (21.2%), followed by TMT-A and TMT-B (both 13.9%), then category fluency (9.1%). No patients were impaired on HVLRT-Learning and only one (4%) for HVLRT-Delayed Recall. Overall, the sample endorsed considerable depression, anxiety, fatigue, as well as physical symptoms. Greater fatigue was associated with worse verbal learning, processing speed, cognitive flexibility, and verbal fluency (letter and category). Worse physical symptom severity was related to poorer verbal delayed recall and cognitive flexibility. Greater anxiety was also associated with worse cognitive flexibility, while more severe depression was related to poorer category fluency.

**Conclusions:** In our sample of patients with PACS, seen for evaluation several months since contracting COVID-19, phonemic fluency was the most common cognitive impairment, though less than a quarter were impaired on any given cognitive test. Importantly, several associations were observed between cognitive test performance and non-cognitive symptoms commonly endorsed by patients with PACS. These findings highlight the importance of