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## 5 The Relationship Between Perceived Cognitive Impairment and Various Psychosocial Factors Following Cancer Treatment

Alexia J Davelaar, James Garbanati  
Alliant International University, Alhambra, CA, USA

**Objective:** From diagnosis to remission, a patient's journey with cancer can be long and tiresome, riddled with many adjustments and challenges. Because the stressors of the disease continue into remission, the battle is far from over when the cancerous cells are eradicated. The stress placed on cancer patients due to the disease and the treatments to control it causes many patients to experience cognitive impairment, also known as cancer-related cognitive impairment (CRCI). Researchers have long been baffled by CRCI and the mechanisms through which it takes place. Some explanations that have arisen include the cancer treatment, the cancer itself, the psychological distress, or a combination of all three. The objective of this study was to understand the mechanism through which CRCI occurs and what factors, including psychosocial, treatment, and demographic variables, exacerbate or reduce the cognitive symptoms.

**Participants and Methods:** Cancer survivors (n=39) with various types of cancer were recruited from support groups to complete an online survey, which was comprised of a series of self-report measures. These measures included perceived cognitive abilities, psychological distress, fatigue, social support, and demographic and treatment questionnaires.

**Results:** Cognitive reserve ( $p < .05$ ) and the presence of chemotherapy ( $p < .01$ ) were the only variables that predicted perceived cognitive impairment. As expected, it was found that the length of time in remission led to lower levels of perceived cognitive impairment ( $p < .001$ ). However, psychological distress was not found to be a significant predictor of perceived cognitive impairment as hypothesized. Remarkably, psychological distress was found to be a mediator in the relationship between perceived cognitive impairment and fatigue ( $p < .001$ ).

**Conclusions:** This relationship indicates that how an individual copes with the cognitive impairment following cancer treatments can lead to the development and exacerbation of fatigue. A failure to manage psychological health can lead to the worsening of these secondary symptoms. Further research must examine the link between psychosocial factors as they relate to the subtle effects of CRCI.

**Categories:** Cancer

**Keyword 1:** neuro-oncology

**Keyword 2:** quality of life

**Keyword 3:** cognitive functioning

**Correspondence:** Alexia Davelaar, Alliant International University, [adavelaar@alliant.edu](mailto:adavelaar@alliant.edu)

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## 6 Feasibility and Perceived Benefit of an Interdisciplinary Rehabilitation Approach within a Tertiary Pediatric Hematology/Oncology Setting

Darcy Raches, Jason M Ashford, Martina Bryndziar, Taylor Mule, April Huggins, Sherry Lockett, Allison Harris, Hannah Taylor, Ellen Bursi, Regina Winfrey, Sue B Lynn, Amar Gajjar, Giles W Robinson, Heather M Conklin  
St. Jude Children's Research Hospital, Memphis, Tennessee, USA

**Objective:** Medulloblastoma is the most common pediatric malignant brain tumor. Approximately 29% of medulloblastoma patients experience postoperative posterior fossa syndrome (PFS) characterized by impairments in speech, motor, and mood. An interdisciplinary rehabilitation approach is associated with greater rehabilitation gains than a single discipline approach for brain injury patients with significant rehabilitation needs. However, literature regarding the feasibility and utility of this approach within a tertiary care pediatric hematology/oncology setting is lacking. The Acute Neurological Injury (ANI) service was developed to coordinate care for neurologically complex hematology/oncology patients receiving active cancer treatment, including those with PFS. ANI care coordination includes bimonthly interdisciplinary team meetings, interdisciplinary goal implementation for each patient, parent psychoeducation about applicable brain-behavior relationships (including PFS) at