

Characteristics associated with decrements in objective measured cognitive function in older adults from initiation to through cancer chemotherapy

Ann Helen Torstveit¹, Christine Miaskowski², Ellen Karine Grov¹, Steven Paul², Inger Utne¹

1. Department of Nursing and Health Promotion, Faculty of Health Sciences, OsloMet - Oslo Metropolitan University, Oslo, Norway

2. School of Nursing, University of California, San Francisco, CA, USA

Introduction

- Decrements in cognitive function (CF) can cause severe disruptions in quality of life in older oncology patients
- Study purposes were to evaluate the trajectories of objective measures of CF in older patients receiving chemotherapy and determine which demographic, clinical, and symptom characteristics were associated with worse CF trajectories

Methods

- N = 112, age ≥ 60 years, diagnosed with gynecological or colorectal cancer
- CF was assessed using the Montreal Cognitive Assessment (MoCA) test and the Trail Making Test B (TMT-B)
- Tested at initiation, and 1, 3, 6, 9, and 12 months after initiation of chemotherapy
- Hierarchical linear modeling was used to evaluate for inter-individual variability in initial levels and in the trajectories of the two tests

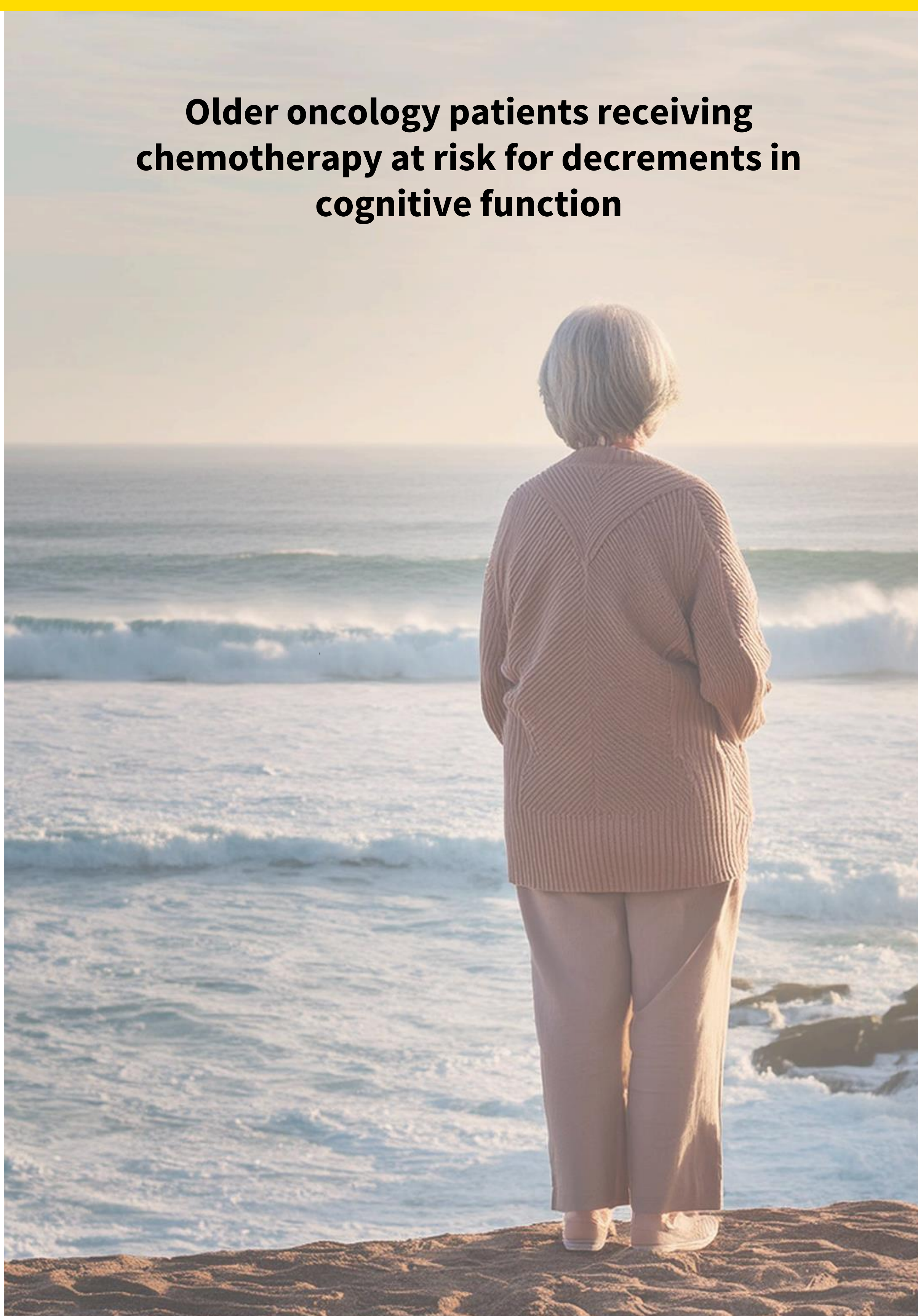
Results

- MoCA and TMT-B scores improved over time
- Inter-individual variability in the trajectories of both MoCA and TMT-B
- Characteristics associated with decreases in MoCA scores:
 - older age and lower level of education at initiation of chemotherapy.
 - appetite loss for the trajectories
- Characteristics associated with decreases in TMT-B scores:
 - older age, living alone, and lower levels of education at initiation of chemotherapy
 - lower TMT-B scores at both enrollment for the trajectories

Conclusion

- Clinicians can identify older adults at increased risk for decrements in CF using MoCA test or TMT-B
- Interventions need to be implemented to maintain or increase CF in older patients with cancer

Older oncology patients receiving chemotherapy at risk for decrements in cognitive function



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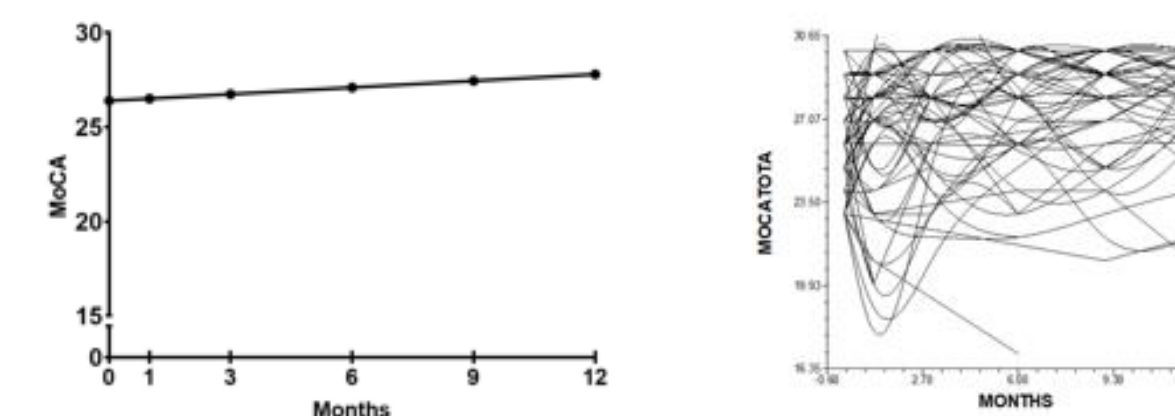
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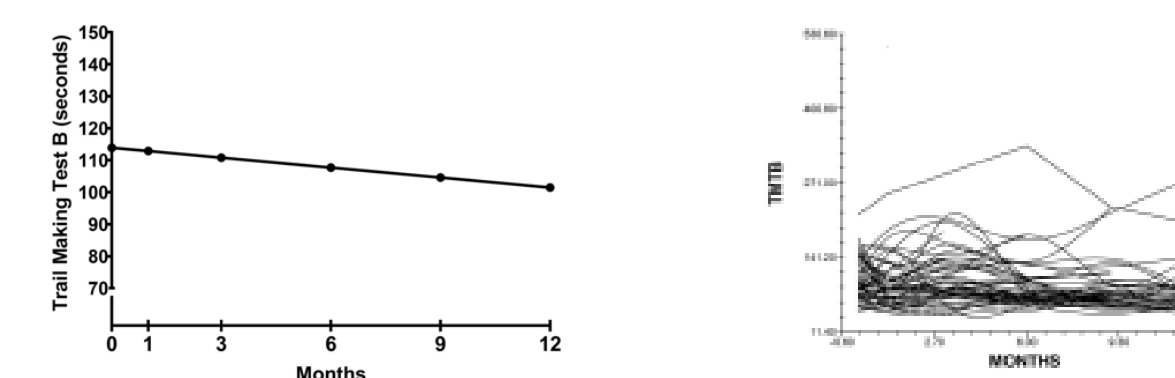
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Mean Scores, and Spaghetti Plot of MoCA and TMT-B Tests from Initiation of Chemotherapy to through 12 Months

MoCA:

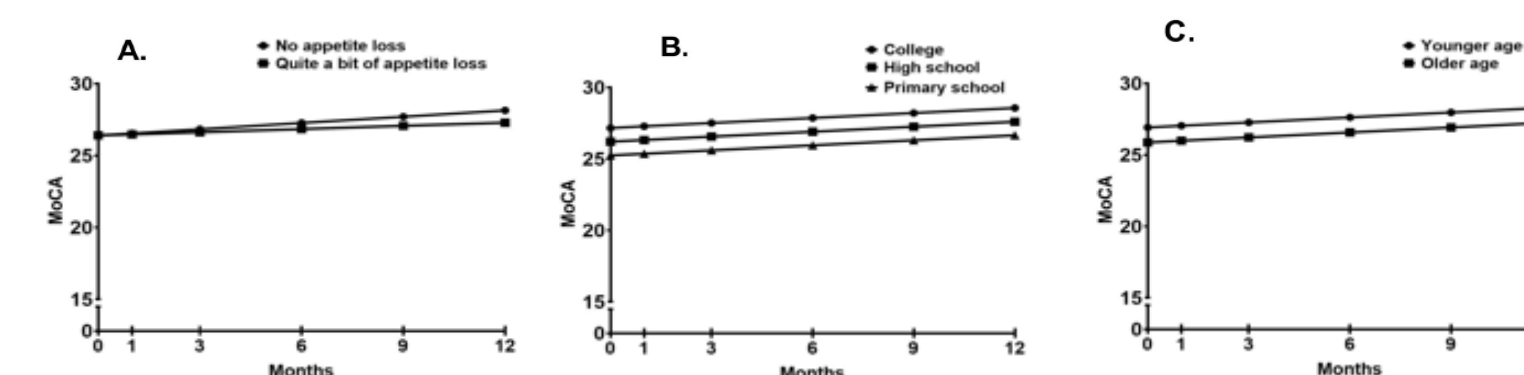


TMT-B:



Characteristics Associated with Decrements in MoCA and TMT-B Scores at Initiation of Chemotherapy and to through 12 Months

MoCA:



TMT-B:

