Co-occurring symptoms in older oncology patients with distinct attentional function profiles

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BACKGROUND

Attentional function (AFI) is an extremely important outcome for older oncology patients. In previous work, we identified three distinct attentional functional profiles (i.e., low (36.7%), moderate (37.3%), and high (26.0%)).

The aims of this study were to:

- Evaluate how subgroups of patients with distinct AFI profiles differ on the severity of nine common symptoms, and
- Determine demographic and clinical characteristics and symptom severity scores associated with membership in the AFI classes.

Distinct attentional function profiles

METHODS

Inclusion criteria patients

- Adults > 65 years old
- Breast, gastrointestinal, gynaecological, or lung cancer
- Received Chemotherapy (CTX) the preceding four weeks
- Scheduled to receive at least two additional cycles of CTX

Participants

- Patients (n=365) with mean age 71.4 (+5.5)

Statistics

- Descriptive statistics
- Logistic regression analysis

Instruments

- Demographic questionnaire
- Attentional Function Index (AFI)
- Self-Administered Comorbidity Questionnaire (SCQ)
- Center for Epidemiological Studies-Depression Scale (CES-D)
- Spielberger State Anxiety Inventory (STAI-T)
- Spielberger Trait Anxiety Inventory (STAI-T)
- General Sleep Disturbance Scale (GSDS)
- Lee Fatigue Scale (LFS)
- Brief Pain Inventory (BPI)

RESULTS

For most of the symptoms, differences in severity scores followed the same pattern (i.e., low > moderate > high class). No age, education, or gender differences.

For the regression analysis - Patients in the low AFI class were less likely to be married and employed, had lower annual household income, had higher level of comorbidity, reported more depression and back pain, and had higher CTX toxicity score.

Co-Occurring Symptom Severity Scores

Symptoms	Low (0) 36.7% (n=134)	Moderate (1) 37.3% (n=136)	High (2) 26.0% (n=95)	Statistics
	Mean (SD)	Mean (SD)	Mean (SD)	
Trait anxiety	40.5 (11.0)	32.7 (8.1)	26.2 (6.2)	F=71.71, p<.001 0>1>2
State anxiety	38.9 (13.2)	30.8 (9.9)	24.7 (6.9)	F=50.15, p<.001 0>1>2
Depressive symptoms	16.8 (10.0)	9.9 (7.3)	4.6 (4.0)	F=69.89, p<.001 0>1>2
Sleep disturbance	58.8 (17.2)	47.6 (16.1)	36.4 (15.3)	F=50.52, p<.001 0>1>2
Morning fatigue	3.8 (2.2)	2.3 (1.9)	1.3 (1.5)	F=49.22, p<.001 0>1>2
Evening fatigue	5.6 (2.0)	4.7 (2.0)	3.7 (2.1)	F=21.41, p<.001 0>1>2
Morning energy	3.6 (2.0)	3.9 (2.3)	5.7 (2.9)	F=23.07, p<.001 0 and 1 < 2
Evening energy	3.3 (2.0)	3.6 (2.0)	4.7 (2.1)	F=14.01, p<.001 0 and 1 < 2
Worst pain	6.4 (2.3)	5.3 (2.5)	5.4 (2.5)	F=4.39, p=.014 0>1

CONCLUSION

Phenotypic characteristics associated with membership in the low AFI class can be used by clinicians to identify vulnerable older patients.