Accessing Palliative and Supportive Care Providers Moderates Association between Concerns and Psychological Distress in Older Adults with Cancer

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BACKGROUND

By identifying the specific issues driving distress in people with cancer, individualized and targeted treatment plans can be developed to connect patients with the members of the interdisciplinary team who are best able to address their concerns.

However, little is known about the specific concerns of older adults with cancer and the relationship between those concerns and distress. Further, the degree to which care from specific interdisciplinary providers is associated with reduced distress has not been examined.

AIMS

The objective was to investigate the relationship between multidimensional concerns and anxiety and depression in older adults diagnosed with cancer in the past five years, exploring variability in these relationships by utilization of various interdisciplinary providers.

METHODS

From October 2018-August 2021, **277 older adults (65+ years) diagnosed with cancer in the past five years** completed the Cancer Experience Registry online research survey.

Participants reported sociodemographic and clinical characteristics and completed self-report measures of the severity of concerns across multiple domains (CancerSupportSource-25; CSS), whether they received care for "symptoms and side effects" from various providers, and anxiety and depression (PROMIS-29).

Using linear regression analysis, a series of multiplicative interaction terms between CSS domain specific scores for (1) symptom burden and impact, (2) body image and healthy lifestyle, (3) healthcare team communication, and (4) relationships and intimacy and each of 6 indicators of provider type were included to test for moderation. Outcome variables were continuous T-scores for anxiety and depression.

PARTICIPANTS

	n	%
Age group		
65-74 years	201	73%
75+ years	76	28%
Insurance type		
Medicare only	152	55%
Medicare plus private	63	23%
Medicare plus other government	20	7%
Employer only	21	8%
Other	5	2%
Currently receiving treatment	164	59%
Annual household income		
<$40K	61	22%
$40-79.9K	64	23%
$80K or more	62	22%
Prefer not to share/don't know	90	32%
Time since diagnosis		
<1 year	63	23%
1 year	94	34%
2 to 5 years	120	43%
Had advanced/metastatic cancer	95	34%
Number of comorbidities		
None (out of 12 possible)	39	14%
One	71	26%
Two	68	25%
Three	48	17%
Four or more	51	18%
Received treatment at an academic or comprehensive cancer center	165	60%

Percentages may not total 100% due to missing data.

RESULTS

Fig 1: Interdisciplinary Provider Utilization in the Past Year for Management of Symptoms and Side Effects

Proportion of respondents who reported sometimes, often, or always

Fig 2: Moderation of the Association Between Concerns and **Anxiety**

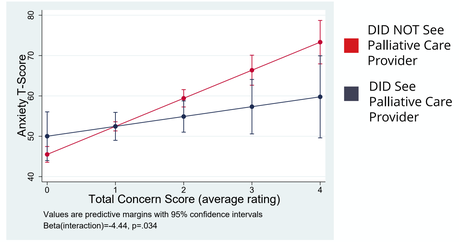
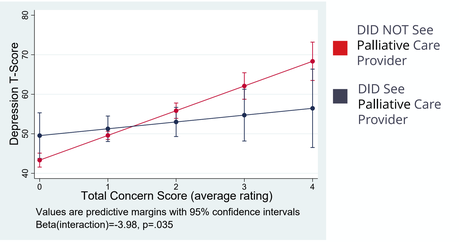


Fig 3: Moderation of the Association Between Concerns and **Depression**



For every 1 unit increase in average CSS total concern rating, the rate of change for the anxiety T-score was 4.44 less for those who saw a palliative care provider vs. those who did not; the effect on depression was 3.98 less.

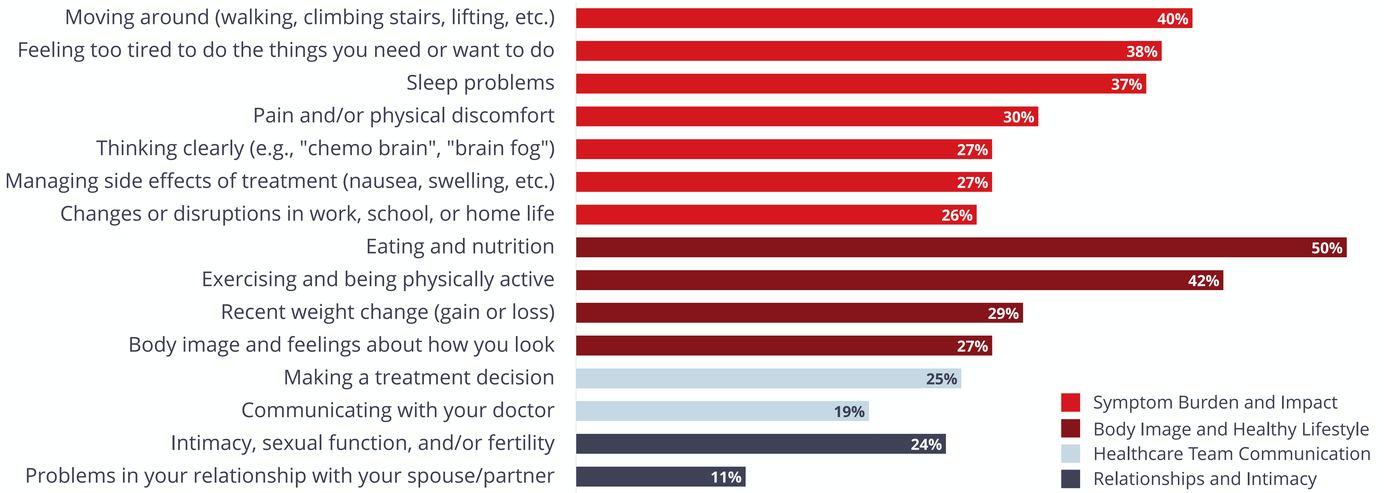
Accessing interdisciplinary providers for assistance with symptoms and side effects in the past year significantly attenuates relationship between cancer-related concerns and symptoms of anxiety/depression

		Oncology doctor or nurse	Palliative care doctor or nurse	Mental or behavioral health	Physical or occupational therapist	Pharmacist	Primary care doctor or nurse
	Main Effect β DV=Anxiety/Depression	**Interaction β DV=Anxiety/Depression**					
Total concern score (15 items)	**6.32**/5.93****	-2.51/-1.35	**-4.44*/-3.98*** (see Figures 2 and 3)	**-5.59**/-5.67****	-2.93/-2.76	-3.50/-2.32	**-3.37***/-2.15
Symptom burden and impact	**5.20**/5.02****	-2.05/-1.52	-2.34/-2.32	**-3.94*/-4.16****	-2.54/**-3.16***	-1.83/-0.79	-2.29/-0.90
Body image and healthy lifestyle	**4.09**/3.74****	-0.28/0.65	**-4.31***/-3.14	**-3.86*/-3.93****	-1.01/0.15	-2.36/-1.90	-2.53/-1.66
Healthcare team communication	**3.64**/3.62****	-2.67/-0.47	**-3.53*/-2.77***	**-4.59**/-3.40***	**-3.34***/-2.52	**-5.17**/-3.31****	-2.11/**-2.32***
Relationships and intimacy	**3.27**/2.56****	-2.18/**-2.88***	-1.30/-1.35	-1.34/-1.96	-1.99/-1.80	-1.23/-1.93	-2.17/-1.68

***p<.05; **p<.01**

Note: Adjusted for age, income, insurance type, currently receiving treatment, time since diagnosis, advanced disease status, number of comorbidities, and whether care received at academic or comprehensive cancer center. The coefficient of the interaction term (β) is the difference in effect on PROMIS anxiety/depression of a 1 unit increase in CSS total score or domain score for those who saw a provider versus those who did not.

Prevalence of Concerns in Older Adults Diagnosed with Cancer in Past 5 Years



Anxiety and Depression

Mean (SD) symptom burden PROMIS T-scores for **anxiety** and **depression** were **52.1 (SD=10.2)** and **49.4 (SD=9.0)**, respectively.

Anxiety:

45% reported at least mild symptoms of anxiety;

22% of those experienced moderate-severe levels

Depression:

31% reported at least mild symptoms of depression;

16% of those endorsed moderate-severe depressive symptoms.

CONCLUSIONS AND IMPLICATIONS

Identifying and treating specific concerns endorsed by OACs may reduce distress in this large and growing population. A triage system in which distressed OACs are referred to the interdisciplinary provider best able to address diverse support needs may be an efficient strategy for reducing distress in this population and remains an important practice and policy opportunity.

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