

Evaluation of Loneliness and Social Isolation in Older Adults with Cancer

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Background

- **Loneliness:** subjective feeling of separation from others
 - Risk factor for depressive symptoms, functional decline and mortality¹
- **Social Isolation:** absence of interpersonal interactions
 - Patients with cancer who experience social isolation have worse outcomes²
- **Social Support:** Qualitative--perceived meaning and values people ascribe to their relationships; Quantitative--social network, including the length and complexity of relationships
 - Lack of social support risk factor for toxicity in breast cancer pts receiving chemotherapy³
- Studies found high rates of stress and symptom burden during COVID-19 pandemic in cancer patients⁴
- Older adults reported lower rates of loneliness during the pandemic compared to younger adults and no change compared to prior pre-pandemic rates^{5,6}
- Another study in older breast cancer survivors found changes in loneliness during the pandemic similar to those reported by individuals without cancer⁷

¹Cacioppo, J.T., et al., Psychology and Aging, 2006, ²Moore, S., et al., Journal of Clinical Oncology, 2018 ³Magnuson, A., et al, Journal of Clinical Oncology, 2021

⁴Miaskowski et al, J Pain Symptom Management, 2020, ⁵Groarke, J.M., et al., PLOS ONE, 2020, ⁶Peng, S. and A.R. Roth, The Journals of Gerontology, 2021, ⁷Miaskowski et al, Cancer, 2021.

AIM: Assess loneliness and social isolation during the COVID-19 pandemic in older adults with cancer

- **Design:**
 - cross-sectional study
 - surveys completed by telephone
- **Sample size:**
 - 100 participants
- **Inclusion Criteria:**
 - Age \geq 65
 - Receiving active systemic treatment
 - Anticipated to receive ongoing care at Siteman Cancer Center
- **Exclusion Criteria:**
 - Anticipated duration of cancer treatment $<$ 3 months
 - Unable to participate in a telephone interview due to significant hearing impairments or lack of telephone access
 - Dementia diagnosis

Results

Outcome Variables in cohort of older adults on chemotherapy completing survey of loneliness and social isolation (N = 100).

BMI (Mean, range)	23.49 (17.54–55.17)
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G-8 geriatric screening tool	
> 14	38
≤ 14 (abnormal)	62
Charlson comorbidity index (Mean, range)	7.66 (4, 13)
Short Blessed Test >9 (frequency, percent)	2/100 (2%)
UCLA Loneliness Scale	
≤ 30	97
> 30 (severely lonely)	3
UCLA Three Item Loneliness Scale	
0	73
≥ 1 (any loneliness)	27
≥ 4 (frequently lonely)	3
PROMIS Bank v2.0 Emotional Support Short Form 4a (T score Mean, range)	56.67 (42.10–62.00)
PROMIS Bank v2.0 Social Isolation Short Form 8a (T score Mean, range)	43.94 (33.90–64.50)
MOS Social Support Score (Mean, range)	82.64 (0–100)

BMI, body mass index; UCLA, University of California, Los Angeles; PROMIS, Patient-Reported Outcomes Measurement Information System; MOS, Medical Outcomes Study.

Results

- **Significant positive** correlation between loneliness and social isolation ($r = +0.55, p < 0.05$)
- **Significant negative** correlation between loneliness and social support ($r = -0.40, p < 0.05$).
- **Significant negative** correlation between loneliness and emotional support ($r = -0.37, p < 0.05$).
- **No significant** association between loneliness, social isolation, social support or emotional support and markers of geriatric impairments, including comorbidities, G8 score or cognition.
- **No significant** association between loneliness, social isolation, emotional support and social support and daily average number of COVID-19 cases.

Open-Ended Questions

Representative responses to the open-ended question: *How has COVID-19 pandemic affected you?*

No effect (N = 41)	Adapted (N = 19)	Affected (N = 57)
Continued to have support system of family, friends, etc. (15)	Found solutions (3)	Changed routines (stopped volunteering, traveling) (29)
Previously accustomed to being alone (5)	Used technology for interacting with others (7)	Physical isolation (stayed at home) (32)
	Participated in indoor hobbies (reading, cooking) (5)	Loneliness (1)
	Interacted outdoors (5)	Made cancer diagnosis more difficult (3)
	Interacted in "pods" (2)	Mental health (depression, anxiety, fear) (6)

"It was awful. It was horrible. I have cancer and low blood counts so I was very careful and in isolation for a whole year. I missed 2 years of my granddaughter's life."

Conclusions

- In a cohort of older adults with cancer undergoing active treatment, there were low rates of loneliness and social isolation and high rates of social support.
- Females, those who live alone, and individuals with lower incomes were at higher risk of loneliness. Living alone was also associated with poorer social support
- Given the important implications of loneliness and social support on both physical and mental health, our study indicates a separate screening for these domains may be necessary, particularly in these higher risk populations.
- Limiting screening to patients with significant comorbidities may fail to capture some patients.
- **Manuscript published** Clifton K, et al.. Loneliness, social isolation, and social support in older adults with active cancer during the COVID-19 pandemic. J Geriatr Oncol. 2022 Nov;13(8):1122-1131.

Thank you!



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