The Relationship between Loss Due to COVID-19 and Mental Health in Older Adults Living with Cancer

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Our Mission

To ensure that all people impacted by cancer are empowered by knowledge, strengthened by action, and sustained by community.
Our Reach

CSC and Gilda’s Club centers as well as hospital partnerships in the U.S. and around the world.

NATIONAL
CSC ARIZONA
CSC SOUTH BAY
CSC PASADENA
CSC LOS ANGELES
CSC CALIFORNIA CENTRAL COAST
CSC SAN FRANCISCO BAY AREA
CSC VALLEY/VENTURA/SANTA BARBARA
CSC DELAWARE
GC SOUTH FLORIDA
CSC ATLANTA
GC CHICAGO
CSC INDIANA
GC QUAD CITIES
GC KENTUCKIANA
CSC GREATER ANN ARBOR
GC GRAND RAPIDS
GC METRO DETROIT
GC TWIN CITIES
CSC GREATER ST. LOUIS
GC KANSAS CITY
CSC MONTANA
CSC NEW JERSEY
CSC ROCHESTER
GC WESTCHESTER
CSC GREATER CINCINNATI-NORTHERN KENTUCKY
CSC CENTRAL OHIO
CSC GREATER LEHIGH VALLEY
CSC GREATER PHILADELPHIA
GC MIDDLE TENNESSEE
CSC EAST TENNESSEE
CSC NORTH TEXAS
GC MADISON

HEALTH CARE PARTNERS
CSC AT TUBA CITY REGIONAL HEALTH CARE
CSC AT ROCKY MOUNTAIN CANCER CENTERS
CSC AT WHITMAN-WALKER HEALTH
CSC AT ORLANDO HEALTH CANCER INSTITUTE
CSC AT KONA COMMUNITY HOSPITAL
CSC AT MOSAIC LIFE CARE
CSC AT HOLY NAME MEDICAL CENTER
CSC AT PRISMA HEALTH CANCER INSTITUTE

INTERNATIONAL
GC GREATER TORONTO
GC SIMCOE MUSKOKA
CSC JAPAN
TWC TEL-AVIV
TWC BAGHDAD

OPENED IN 2021
CSC AT IFHC (INDIAN FAMILY HEALTH CLINIC)
CSC AT UNIVERSITY OF GEORGIA
CSC WASHINGTON D.C.

OPENING IN 2022- 2023
GC AT METHODIST CANCER INSTITUTE
CSC AT BRECKINRIDGE HEALTH, INC.
GC NEW HAMPSHIRE
CSC SW COLORADO
CSC MASSACHUSETTS
GC NORTHEAST ARKANSAS
CSC AT NORTHERN ARIZONA UNIVERSITY
GC AT ST. AMBROSE UNIVERSITY
Background and Methods
Background

Impact of COVID-19 on older adults living with cancer

The COVID-19 pandemic continues to have substantial, long-lasting impact on individuals, especially those who are already at-risk due to existing physical and mental conditions.

This study aims to characterize the unique COVID-19 experiences of adults aged 65+ who are living with a cancer diagnosis by examining:

- COVID-19 testing and vaccination status
- COVID-19 top concerns
- Change in mental health over the course of the COVID-19 pandemic
- Impact of loss of a loved one on mental health
Methods

Observational, longitudinal survey

115 adults aged 65+ living with cancer in the US completed two online surveys

Time 1: September – December 2020

Survey Content:
- PROMIS-29 Anxiety
- PROMIS-29 Depression
- COVID-19 top concerns

20 items: How CONCERNED are you RIGHT NOW about the following situations, as they relate to the COVID-19 pandemic?
**Scale:** 1(*Not at all*) to 5(*Extremely*) concerned

Time 2: June – July 2022

Survey Content:
- PROMIS-29 Anxiety
- PROMIS-29 Depression
- COVID-19 top concerns
- COVID-19 testing and vaccination
- Loss of family/friends from COVID-19
Participant Characteristics

Time 2 (N=115)

<table>
<thead>
<tr>
<th>Clinical characteristics</th>
<th>Mean/n</th>
<th>SD/%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast cancer</td>
<td>33</td>
<td>29%</td>
</tr>
<tr>
<td>Blood cancers†</td>
<td>28</td>
<td>24%</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>9</td>
<td>8%</td>
</tr>
<tr>
<td>Gynecological cancers†</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>Other cancer†</td>
<td>25</td>
<td>22%</td>
</tr>
<tr>
<td>Ever metastatic</td>
<td>26</td>
<td>23%</td>
</tr>
<tr>
<td>No Current Evidence of Disease</td>
<td>98</td>
<td>85%</td>
</tr>
<tr>
<td>Years Since Diagnosis</td>
<td>M=13.0</td>
<td>SD=9.3</td>
</tr>
<tr>
<td>5 years or less</td>
<td>21</td>
<td>18%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>32</td>
<td>28%</td>
</tr>
<tr>
<td>11+ years</td>
<td>62</td>
<td>55%</td>
</tr>
</tbody>
</table>

† Blood cancers include: AML, CLL, CML, lymphoma (Hodgkin, non-Hodgkin, other), and multiple myeloma. Gynecologic cancers include: cervical, endometrial/uterine, ovarian, and vulvar. Other cancers include: bladder, colorectal, head and neck, melanoma, among others.

Note: Percentages may not total 100% due to missing data.

<table>
<thead>
<tr>
<th>Sociodemographic characteristics</th>
<th>Mean/n</th>
<th>SD/%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years) (range 65-89)</td>
<td>M=71.3</td>
<td>SD=5.0</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>81</td>
<td>70%</td>
</tr>
<tr>
<td>Man</td>
<td>33</td>
<td>29%</td>
</tr>
<tr>
<td>Genderqueer/Non-Binary</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Race &amp; Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>98</td>
<td>85%</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>Non-Hispanic other/Multiracial</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Household Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $40K</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>$40K - &lt;80K</td>
<td>39</td>
<td>34%</td>
</tr>
<tr>
<td>$80K+</td>
<td>34</td>
<td>30%</td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single or separated</td>
<td>23</td>
<td>21%</td>
</tr>
<tr>
<td>Married/Partnered</td>
<td>79</td>
<td>69%</td>
</tr>
<tr>
<td>Widowed</td>
<td>13</td>
<td>11%</td>
</tr>
</tbody>
</table>
Results
COVID-19 Testing and Status
Most people vaccinated, low incidence of COVID-19 illness

COVID-19 Vaccination

- 28% additional primary dose
- 32% 1 booster
- 62% 2+ boosters

Time 2 (Jun – Jul 2022)

- 84% Been tested for COVID-19
- 19% Tested + for COVID-19
- 11% Tested + for COVID-19 after being vaccinated
- 3% Were hospitalized due to COVID-19 illness
- 30% Lost friend or family due to COVID-19 illness

n=113 (98%)

Yes  No
COVID-19 Top Concerns

Concerns remain consistent across time, still high at Time 2

1. Others’ lack of adherence to safety recommendations when in public
   - Time 1: 77%, 12%, 10%
   - Time 2: 56%, 23%, 22%

2. Worrying about a loved one’s health
   - Time 1: 50%, 23%, 26%
   - Time 2: 28%, 26%, 23%

3. Getting sick from COVID-19 because I am a cancer survivor or patient
   - Time 1: 49%, 23%, 26%
   - Time 2: 39%, 26%, 34%

Question stem: How CONCERNED are you RIGHT NOW about the following situations, as they relate to the COVID-19 pandemic? Answered on a 5-point Likert scale from 1(Not at all) to 5(Extremely)
Mental Health during COVID-19

Anxiety and depression significantly decreased over time

Anxiety and Depression T-Scores

Time 1 (Sep - Dec 2020)
- 31% above average Anxiety
- 21% above average Depression

Time 2 (Jun - Jul 2022)
- 25% above average Anxiety
- 13% above average Depression

Mean PROMIS-29 Anxiety and Depression T-Scores

*T-score 1+ SD above the Mean T-score (M=50)

*Paired-samples t-tests, Anxiety: Mean difference=2.65, Cohen's $d=.38$, $t(114)=4.104$, $p<.001$; Depression: Mean difference=2.00, Cohen's $d=.34$, $t(114)=3.669$, $p<.001$. 
Impact of Loss on Mental Health

Anxiety higher among those who experienced COVID-19 loss

Anxiety

Having a loved one die from COVID-19 was a significant predictor of Time 2 Anxiety ($\beta=.15, p<.05$) even after controlling for Time 1 Anxiety ($\beta=.75, p<.001$), $R^2=.58, F(113)=75.714, p<.001$

Depression

PROMIS Depression scores did not significantly differ based on loss due to COVID-19

*t(112)=2.685, p<.005; Cohen's $d=.55$; Depression: no significant difference
Conclusions
Conclusions

• More than 2 years into the COVID-19 pandemic, older adults with cancer were **still expressing COVID-19 concerns**, including:
  • Others not following protocols, like wearing masks
  • Getting sick from COVID-19 because they are a cancer survivor or patient
  • Worrying about a loved one’s health

• **Losing loved ones due to COVID-19 could make the threat of the pandemic more salient** in older adults, thus resulting in greater anxiety

• Loss of loved ones due to COVID-19 should be considered when tailoring mental health support for this population
Thank you
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