The Impact of COVID-19 on Psychosocial Distress and Quality of Life Among Rural Cancer Survivors

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BACKGROUND AND RELATION TO CANCER PREVENTION

- Cancer survivors and rural residents are two groups burdened with high risk of COVID-19 infection and mortality.
- During the COVID-19 pandemic, health behaviors and physical and mental wellbeing have declined, and cancer survivors and rural adults have reported disproportionately higher levels of psychosocial distress and poorer quality of life (QOL).
- Increased levels of psychosocial distress negatively impact lifestyle habits, but few studies have explored the impact of COVID-19 on psychosocial distress and QOL among rural cancer survivors.
- Understanding how COVID-19 impacted psychosocial distress can inform interventions (e.g. stress management, physical fitness) to improve lifestyle behaviors and reduce cancer health disparities among rural cancer survivors.

OBJECTIVES AND HYPOTHESES

Objective 1: To examine changes in psychosocial distress and QOL in rural cancer survivors from pre- to post-pandemic (2017-2020).
- Hypothesis 1: Rural cancer survivors will report increases in psychosocial distress and decreases in QOL from 2017-2020.
Objective 2: To explore associations between changes in psychosocial distress and QOL and health behaviors among rural cancer survivors in central Pennsylvania.
- Hypothesis 2: Changes in psychosocial distress and QOL will negatively impact health behaviors (e.g., physical activity, diet, sleep).

METHODS

- Participants were invited to the initial Partnering to Prevent and Control Cancer (PPCC) study by mail in 2017-2019 and completed a questionnaire.
- In April 2020, a subset of PPCC participants were invited to complete the COVID-19 follow-up survey.

RESULTS

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Pre-COVID Mean (SD)</th>
<th>Post-COVID Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychosocial Wellbeing</td>
<td>Perceived Stress</td>
<td>12.6 (6.8)</td>
<td>12.3 (6.9)</td>
</tr>
<tr>
<td></td>
<td>Depressive Symptoms</td>
<td>8.8 (8.7)</td>
<td>10.2 (9.4)</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>7.2 (8.2)</td>
<td>7.7 (9.0)</td>
</tr>
<tr>
<td></td>
<td>Positive Affect</td>
<td>33.8 (7.6)</td>
<td>33.4 (7.7)</td>
</tr>
<tr>
<td></td>
<td>Negative Affect</td>
<td>15.3 (5.6)</td>
<td>15.6 (5.5)</td>
</tr>
<tr>
<td></td>
<td>General Health</td>
<td>60.2 (21.9)</td>
<td>61.0 (24.3)</td>
</tr>
</tbody>
</table>

CONCLUSION

Community-based interventions are needed that address mind-body relaxation and sleep quality to enhance survivorship and improve QOL among rural cancer survivors. Future research is needed to compare findings from this study with those in nonrural groups to further understand the impact of the pandemic on psychosocial wellbeing and health behaviors and to address health disparities.

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- We considered the ethical needs and protections related to working with all PPCC participants.
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