Identifying the Most Prevalent Psychosocial Concerns in Lung Cancer Patients and their Caregivers

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Introduction

Lung cancer (LC) is the deadliest cancer with over 100,000 deaths per year (National Cancer Institute). Because of this high mortality rate, survivorship concerns have not been a primary area of research for many years. However, due to advances in screening and treatment approaches, patients with LC live longer and thus, survivorship care has become a relevant area of investigation. Although previous research revealed that over half of LC patients report concerns were psychosocial in nature (V. Lidstone), such as concerns about the future (Sato), research that identifies specific targets of intervention development is needed for preventing future health issues.

Current Study Goal

Thus, to improve survivorship care and quality of life (QOL) after treatment of an understudied and vulnerable patient population, the current study aims to:

1. identify the most pressing survivorship concerns in LC patients and their family caregivers.
2. determine behaviors and attitudes they hold towards implementing strategies to address their concerns.

These data will inform the development of targeted survivorship care strategies.

Methods

The current study presents secondary analyses of an ongoing parent trial targeting symptom management in LC patients undergoing radiotherapy and their primary family caregiver. Here, we present on 33 dyads randomly assigned to the educational program group (control arm) as part of the program, both patients and caregivers were asked to complete a ‘Concern Inventory’ where they rated their level of concern on 18 items that have been identified as frequent concerns among cancer patients in the US. Then, participants were instructed to discuss their most pressing concern with each other with the goal of problem solving the issue.

First, we conducted statistical analyses (including frequencies, paired sample t-tests, and Pearson correlations) in SPSS to describe the quantitative findings obtained from the Concern Inventory.

Then, using the audio recordings of the session, we performed qualitative data analyses of these qualitative data to identify nuances related to their concerns (e.g., what specific healthy lifestyle changes dyads wanted to make).

We also developed and implemented a coding scheme to rate the qualitative data including codes for each participant’s self and partner’s self-identified facilitators and barriers as well as their partner’s identified barriers and facilitators (Figure 2).

The coding data were used evaluate patient and caregiver attitudes for making a healthy lifestyle change.

Results

Sample Characteristics:

Patients: 53% male; mean age = 66 yrs; 89% White, 5% Asian, 5% Black; 84% not Hispanic/Latino

Caregivers: 58% female; mean age = 62 yrs; 74% White, 11% American Indian or Alaska Native, 11% more than one race, 5% Black; 95% not Hispanic/Latino

Concern Inventory Results:

➢ See Fig 3 for mean ratings on Concern Inventory (0-3) by role.
➢ 19 out of 33 (58%) dyads had at least one member rate ‘making a lifestyle change’ as a moderate to high concern
➢ Of those 19 dyads, 10 (53%) dyads had both members with moderate to high concerns in making healthy lifestyle changes

Figure 3. Results from Personal Concern Inventory.

Lifestyle Change in Lung Cancer Patients and Caregivers

<table>
<thead>
<tr>
<th>Lifestyle</th>
<th>Patient</th>
<th>Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
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<td>7</td>
</tr>
<tr>
<td>Diet</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Staying smoke-free</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>No answer</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Figure 4. Lifestyle change priority in patients and caregivers

Action Plan

➢ No plan ➢ Vague plan ➢ Specific plan

64.2% No plan 35.8% Vague plan 0.0% Specific plan

Figure 5. Extent of an action plan developed by cancer patients and their caregivers

Future Directions

➢ Develop behavioral intervention programs that focus on developing skills for specific action planning and maintaining long term motivation for healthy lifestyle changes in lung cancer patient dyads.

➢ Scientific trials to determine efficacy of an action planning intervention to improve the quality of life and survivorship for the dyads could be an additional next step.

Discussion

About half of the sample had moderate to high concerns in making a healthy lifestyle change, but less than a third of them had a specific action plan for it. Patients also have more facilitators from their partner to make healthy lifestyle changes than themselves.

These findings highlight the need for survivorship programs for lung cancer patient and their caregivers that focus on dyadic level interventions to leverage the support within the family to remove barriers and increase facilitators (i.e., support) to develop and implement action plans for behavioral changes (exercising, staying smoke-free, healthy diet, etc.) that can improve quality of life and survivorship for dyads.

References

