Factors Influencing Emotional Distress in Cancer Pain Patients

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Prevalence of Pain

Pain is experienced by

- 25% of newly diagnosed cancer patients
- 50-70% of patients undergoing active treatment
- 60-90% of patients with advanced cancer
Psychological Distress

• Chronic cancer pain associated with increased psychological distress (i.e., anxiety, depression, mood disturbance) across all stages of cancer
• Cognitive theory suggests that mood is impacted by the way in which a person interprets the pain experience
"Johnson, if you're going to have negative thoughts, I suggest you get rid of that thought balloon."
Purpose

• To examine the relationship between pain intensity and emotional distress in cancer patients

• To examine the relationship between perceived caregiver strain and emotional distress in cancer patients
Participant Eligibility Criteria

Patients

• Stage I - IV cancer
• Scheduled for an appointment at Moffitt Cancer Center Pain and Palliative Care Clinic
• Average pain intensity score of $\geq 3$
• Have a designated primary caregiver
• Not in hospice at enrollment
• At least 6 weeks post surgery
Participant Eligibility Criteria

- At least 18 years old
- At least 6th grade education
- Proficient in English
- No documented or observable neurological or psychiatric disorders that would interfere with study participation (e.g., dementia, psychosis)
- Provide written informed consent
Procedures

- Screen patients for eligibility
- Approach in clinic
- Consent
- Administer baseline questionnaire
- Each participant received $25 for baseline assessment
- Continued participation in intervention and later assessments
Baseline Measures

**Pain**
- Assessed with 2 items from Brief Pain Inventory
  - Average pain and worst pain intensity
- Scale (0=no pain to 10=worst imaginable pain)

**Anxiety**
- Profile of Mood States - Anxiety subscale (POMS - Anx)
- 7 items summed to form total score
- Rate feelings during the past week
- Scale (0=not at all to 4=extremely)
Baseline Measures

**Depression**
- Center for Epidemiologic Studies - Depression scale (CES-D)
- 20 items summed to form total score
- Rate mood over the past week
- Scale (0=none of the time to 3=most of the time)

**Perceived Caregiver Strain**
- 2 items
  - How much physical strain for the caregiver is involved in your care?
  - How much emotional strain on the caregiver is involved in your care?
- Scale (0=no strain to 10=very much strain)
<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>N = 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>47% men, 53% women</td>
</tr>
<tr>
<td>Age</td>
<td>M = 53, Range: 25 - 71 yrs</td>
</tr>
<tr>
<td>Education</td>
<td>M = 13 years</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>86% white, 6% black</td>
</tr>
<tr>
<td></td>
<td>8% Hispanic</td>
</tr>
<tr>
<td>Caregiver type</td>
<td>86% spouses or partners</td>
</tr>
<tr>
<td></td>
<td>8% children, 6% siblings</td>
</tr>
<tr>
<td>Stage (N = 27)</td>
<td>15% I or II, 22% III, 63% IV</td>
</tr>
</tbody>
</table>
## Relationship between Pain and Emotional Distress

<table>
<thead>
<tr>
<th></th>
<th>Average Pain ( r )</th>
<th>Worst Pain ( r )</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES-D</td>
<td>.20</td>
<td>.44*</td>
</tr>
<tr>
<td>POMS-Anx</td>
<td>.35**</td>
<td>.47*</td>
</tr>
</tbody>
</table>

*p < .01  
**p < .05
<table>
<thead>
<tr>
<th></th>
<th>Perceived CG Physical Strain (r)</th>
<th>Perceived CG Emotional Strain (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CES-D</strong></td>
<td>.67*</td>
<td>.55*</td>
</tr>
<tr>
<td><strong>POMS-Anx</strong></td>
<td>.43**</td>
<td>.43**</td>
</tr>
<tr>
<td><strong>Average Pain</strong></td>
<td>.20</td>
<td>.24</td>
</tr>
<tr>
<td><strong>Worst Pain</strong></td>
<td>.14</td>
<td>.43**</td>
</tr>
</tbody>
</table>

*p ≤ .0001
**p < .01
Higher levels of pain were associated with greater symptoms of depression and anxiety.

Patients who believed their caregivers were experiencing more physical and emotional strain reported more symptoms of depression and anxiety.

Perceptions of caregiver physical strain were not associated with pain intensity.

Perceptions of caregiver emotional strain were associated with worst pain intensity but not average pain intensity.
Limitations

• Small sample size
• No information on actual caregiver burden
• Cross-sectional data
Conclusions

• Patients with greater levels of pain experience more psychological distress
• Patients’ perceptions of caregiver strain may contribute to the emotional distress experienced by cancer patients with pain
• Interventions to improve cancer patients’ emotional well-being should address patient beliefs about caregiver burden
Pain is inevitable; suffering is optional.

-Unknown