Views of Cancer Patients and Lay Caregivers of Tablet Use

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Problem
Tablet technologies offer new opportunities to bring the patient’s and caregiver’s voices into hospice and palliative care, but the acceptability of patients and caregivers using tablets as part of hospice care is not documented, especially for minorities.

Aim
To describe tablet interface acceptability reported by adult hospice cancer patients and their lay caregivers.

Methods
Design/Setting
Randomized clinical trial—baseline data

Homes of patients receiving care from two Chicago-area hospices

Measures
• Internet-enabled Samsung tablet with valid, reliable
• PAINReport®
• Pain intensity now, least and worst in the past 24 hours, and average (API, 0-10)
• Symptom Distress Scale (SDS, 0-5)
• Computer Acceptability Scale (CAS, 0-9)

Data
Written to a secure server, extracted from the SQL (structured query language) database, and analyzed with statistical software R.

Results (cont)

Item
Response
% Selecting
Patients
Caregivers
Cas
Yes
96 96
No
4 4
Application
should be
available to all
Yes
94 94
No
6 6
Words easy to
see
Yes
96 96
No
4 4

Conclusions
• Older patients ≥ 65 years (7.6 ± 1.3) reported significantly lower CAS scores than those younger (8.2 ± 1.2, p = .001).
• Similarly, older caregivers ≥ 65 years (8.15 ± 0.99) reported statistically significantly lower CAS scores than younger caregivers (8.52 ± 0.96, p = .016).

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Results

• Missing data were minimal (2.8%)

• Mean SDS score = 2.6 ± 0.6
• Mean CAS scores:
  Patients = 7.8 ± 0.3
  Caregivers = 8.4 ± 1

Results (cont)

Sample
Between April 2014 and August 2016: 3,516 patients with cancer were referred, 1,053 were eligible, and for this study, 237 patients and 235 caregivers had completed baseline data.

- Patients’ mean age: 68.3 ± 14.2 (ranged 20-100 years)
- Caregivers mean age: 53.2 ± 15.0 years

Percentage Response to each Item on the Computer Acceptability Scale (N=237)

Table of Patients' worst pain and symptom distress were higher in past 24 hr

Baseline

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>% Patients</th>
<th>% Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Intensity (0-10 scale, Mean ± SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worst in past 24 hr</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Conclusions

- Patients’ worst pain and symptom distress were higher than desirable.
- Patients were older than caregivers and had more difficulty using the tablet than caregivers, but both groups reported high acceptability of the tablet.
- Findings point to the opportunity for improving the functionality of the tablet-based application.
- Additional usability research is warranted to improve the Android-based user interface for older adults.
- Overwhelmingly positive results support adoption of tablet technology in hospice care to improve cancer pain and symptom management.