Using the Icelandic Version of the Distress Thermometer and Problem List to Screen for Distress among Family Members

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Background

• Family members of cancer patients are affected by the illness
• Psychological distress prevalent
• Emphasis on attending to family members needs in health care
• Ability to screen for distress
  – Lack of short and easily administered screening tools for family members
  – Distress thermometer (DT) developed to screen for distress in cancer patients
Purpose

• To evaluate the psychometric properties of the Distress Thermometer (DT) and Problem List in a sample of family members of cancer patients at Landspítalinn-the National University Hospital of Iceland.
Methods

Design and Setting
• Cross-sectional, descriptive.
• Six units at LSH
  – 2 outpatient clinics
  – 4 inpatient units

Sample
• Close family member of cancer patients at least 18 years old.

Procedure
  – Pt identified close family members
  – Family members consented via phone
  – Questionnaire
  – Reminder phone call

Variables and Instruments
• Distress: Distress Thermometer and Problem List
• Symptoms of anxiety and depression: Hospital Anxiety and Depression Scale (HADS).
• Quality of Life: Quality of Life Scale (QOLS).
• Demographic data: Demographic Questionnaire

Statistical Analysis
• Descriptive and inferential statistics
• ROC analysis
Results
Sample

Participants (family members)
• Response rate 57%
• Age
  – 55 ± 13.7 years
  – Range 18-81 years
• Women 61%
• Spouse 65%
• Currently working 68%
• Living in capital area 76%
• Time on daily caregiving
  – 3.3 ± 5.3 hours,
  – Range of 0-24

Patients
• Spread of disease
  – localized 41%
  – metastatic 45%
  – do not know 14%
• Time since diagnosis
  <1 year 53%
  1-5 years 33%
  > 5 years 14%
• Outpatient status 46
## Results

### Scores on the Distress Thermometer

<table>
<thead>
<tr>
<th>Scores on the DT</th>
<th>Number of participants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5 (18.1)</td>
</tr>
<tr>
<td>1</td>
<td>23 (14.9)</td>
</tr>
<tr>
<td>2</td>
<td>29 (15.5)</td>
</tr>
<tr>
<td>3</td>
<td>21 (11.2)</td>
</tr>
<tr>
<td>4</td>
<td>18 (9.6)</td>
</tr>
<tr>
<td>5</td>
<td>18 (9.5)</td>
</tr>
<tr>
<td>6</td>
<td>10 (5.4)</td>
</tr>
<tr>
<td>7</td>
<td>11 (5.8)</td>
</tr>
<tr>
<td>8</td>
<td>14 (7.5)</td>
</tr>
<tr>
<td>9</td>
<td>3 (2.1)</td>
</tr>
<tr>
<td>10</td>
<td>1 (0.4)</td>
</tr>
</tbody>
</table>

- **N=188**
- **Mean ±SD= 3.18 ±2.66**
- **Range 0-10**

### Problem list

- General: Work/School 13.8%
- Family problems: Spouse 11.4%
- Emotional: Worry 58.9%
- Spiritual/religious: 4.2%
- Physical: Fatigue 50.2%
# Results

## Scores on the HADS and QOLS

<table>
<thead>
<tr>
<th>Scores on the HADS</th>
<th>Anxiety N (%)</th>
<th>Depression N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No symptoms</td>
<td>150 (79.8)</td>
<td>113 (60.1)</td>
</tr>
<tr>
<td>Score 0-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible symptoms</td>
<td>25 (13.3)</td>
<td>52 (27.7)</td>
</tr>
<tr>
<td>Score 8-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptoms</td>
<td>13 (6.9)</td>
<td>23 (12.2)</td>
</tr>
<tr>
<td>Score 11-21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>5.42 (2.79)</td>
<td>7.28 (2.79)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **QOLS**
  - Mean (SD) 85.67 13.23
  - Range 16-112
Results

ROC Analysis

Area under curve (AUC) = 0.84 (std. error = 0.03)

- Cut off value of 4
  - sensitivity  0.76
  - specificity  0.74

- Cut off value of 3
  - sensitivity  0.84
  - specificity  0.62
Results

Relationships between DT and HADS & QOL

- Scores on DT based on HADS categories

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>No symptoms</td>
<td>2.48 (2.22)</td>
<td>2.19 (2.22)</td>
</tr>
<tr>
<td>Possible symptoms</td>
<td>5.06 (2.49)</td>
<td>3.94 (2.16)</td>
</tr>
<tr>
<td>Symptoms</td>
<td>7.65 (1.43)</td>
<td>6.35 (2.74)</td>
</tr>
</tbody>
</table>

- QOLS $r = -0.35$ $p < 0.01$
Results

DT and Background Variables

- **Gender:**
  - Mean SD for men 2.71 (2.55) vs. women 3.49 (2.70), p=0.05

- **Time spent on daily caregiving:**
  - r=0.23, p<0.01

- **Spread of patients disease:**
  - metastasis 2.46 (2.26)
  - local 3.49 (2.70)
  - do not know 4.44 (3.05)
Conclusions

• Initial support was found for psychometric properties of the DT
• Optimal Cut Off based on comparison to the HADS
• Identifies those at risk?
  – supports some previously identified relationships but not others
• The instrument could be used in clinical practice—but should it?
  – the family member as the recipient of care
  – legal standing, documentation and more