Age Differences in Treatment Response to a Collaborative Care Intervention for Anxiety Disorders in Primary Care

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## Disclosures

<table>
<thead>
<tr>
<th>Source</th>
<th>Grant/Research Support</th>
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<tbody>
<tr>
<td>Forest Laboratories, Inc.</td>
<td>Past</td>
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<tr>
<td>National Institute of Mental Health</td>
<td>Current</td>
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<tr>
<td>National Center for Complementary and Alternative Medicine</td>
<td>Current</td>
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<td>US Veterans Health Administration</td>
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Overview

- Anxiety disorders are the most common mental health problem in older adults
- Lead to poorer health and cognitive decline
- Present in primary care; typically unrecognized and untreated
- If treated, usually benzodiazepines
- Benzodiazepines cause falls and cognitive decline in older people
- CBT is considered very effective for anxiety in younger and middle-aged adults
- Meta-analyses suggest that CBT doesn’t work as well in older individuals
- Most research on Generalized Anxiety Disorder
Effect sizes from meta-analysis of CBT for anxiety in older adults

Meta-analyses comparing psychotherapy and medication for geriatric depression and anxiety

![Graph showing the comparison between psychotherapy and medication for depression and anxiety]

- **Depression**
  - Not significant
  - 89 studies
  - N = 5,328

- **Anxiety**
  - P < 0.001
  - 32 studies
  - N = 2,484

Response to treatment for late-life GAD

Conçalves DC, Byrne GJ. *J Anx Disord* 2012;26:1-11
Effect sizes for CBT for GAD in younger and older adults

Controlling Anxiety with Learning and Management (CALM) Study

- Effectiveness trial in primary care
- Collaborative care intervention vs. treatment as usual
- Algorithm-driven treatment with medications and computer-assisted CBT
- Administered by care manager
- 4 anxiety disorders: generalized anxiety disorder, panic disorder, social anxiety disorder, posttraumatic stress disorder
- 18 month duration
- Age 18-75
- First study to allow for age comparisons within a single trial
The present study

- Compared response to the CALM intervention for younger (age 18-59) and older (age 60-75) adults
- Examined anxiety symptoms (BSI Anxiety) and depressive symptoms (PHQ) in the full sample
- Examined generalized anxiety disorder symptoms among the subsample with GAD
- Used linear mixed models to examine treatment by time interaction within each age group
- Examined intervention/treatment as usual differences at each time point
- Controlled for appropriate medication use
# Demographics

<table>
<thead>
<tr>
<th></th>
<th>Age 18-59 (n = 870)</th>
<th>Age 60-75 (n = 134)</th>
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<tbody>
<tr>
<td>Female</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>Latino</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>&gt; 12 years of education*</td>
<td>79%</td>
<td>70%</td>
</tr>
<tr>
<td>Employed*</td>
<td>76%</td>
<td>40%</td>
</tr>
<tr>
<td>Number of chronic medical conditions*</td>
<td>2.1 (1.9)</td>
<td>3.7 (2.2)</td>
</tr>
<tr>
<td>Number of primary care visits</td>
<td>4.3 (4.2)</td>
<td>5.0 (5.8)</td>
</tr>
<tr>
<td>Number of medical specialist visits*</td>
<td>1.0 (2.4)</td>
<td>1.7 (2.8)</td>
</tr>
</tbody>
</table>

*p < .05
Baseline clinical variables

<table>
<thead>
<tr>
<th>Test</th>
<th>Age 18-59 (n = 870)</th>
<th>Age 60-74 (n = 134)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Symptom Inventory (BSI) Anxiety T-score</td>
<td>65.2 (8.6)</td>
<td>65.7 (8.4)</td>
</tr>
<tr>
<td>Patient Health Questionnaire-9 (PHQ)</td>
<td>12.7 (6.3)</td>
<td>13.4 (6.5)</td>
</tr>
<tr>
<td>SF-12 Physical*</td>
<td>50.0 (11.2)</td>
<td>43.8 (11.6)</td>
</tr>
<tr>
<td>SF-12 Mental</td>
<td>31.7 (10.1)</td>
<td>32.9 (9.8)</td>
</tr>
</tbody>
</table>
| Generalized Anxiety Disorder Symptom Scale (GADS) | 13.9 (3.9)  
 n = 655 with GAD | 13.9 (3.7)  
 n = 100 with GAD |

*p < .001
- **BSI Anxiety**
- Treatment by time interactions significant in both age groups
- Among younger adults, the CALM intervention was superior to treatment as usual on overall anxiety symptoms at all time points, after controlling for appropriate medication use
- Among older adults, the CALM intervention was superior to treatment as usual on overall anxiety symptoms at 12 months but did not differ at 6 or 18 months
- PHQ Depression
- Treatment by time interactions significant in both age groups
- Among younger adults, the CALM intervention was superior to treatment as usual on depressive symptoms at all time points, after controlling for appropriate medication use
- Among older adults, the CALM intervention was superior to treatment as usual on depressive symptoms at 12 months but did not differ at 6 or 18 months
GAD Symptoms

- Treatment by time interactions significant in younger but not older
- Among the younger adults with generalized anxiety disorder, the CALM intervention was superior to treatment as usual on GAD symptoms at all time points after controlling for appropriate medication use.
- Among the older adults, the CALM intervention was not superior to treatment as usual on GAD symptoms at any time point.
Limitations and conclusions

- Insufficient power to examine three-way interactions (age by treatment by time)
- Relatively small number of older adults
- Unable to analyze medications and CBT separately
- No active control condition
- CALM intervention appears to work less well for older adults, particularly for individuals with GAD
- Older adults may benefit from booster sessions at 18 months
Questions?

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  - jwetherell@ucsd.edu