Assessing depression in older adults in the emergency department: Reliability of the 5-item Geriatric Depression Scale

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Background

• Depression is the most common mental health condition of older adults but is not routinely screened for in the Emergency Department (ED)

• Previous estimates have suggested that approximately 30% of older adults presenting to ED screen positively for depression

• To be clinically valuable, screening tools need to be both valid and reliable
Study aim

- To determine prevalence of depression in older adults in the Emergency Department
- To evaluate the internal reliability of the GDS-5 with older adults presenting to the Emergency Department
Methodology

• GDS-5 administered to 103 patients over the telephone within one week of ED visit

• Patients had been assessed by an occupational therapist and deemed suitable for direct discharge home from the ED

• Patients were required speak English
Results - Demographics

• Mean patient age was 79 ± 9.1 years

• Females = 69, males = 34

• Patients were commonly low medical urgency

• 45% of patients presented post fall

• Patients had an average of 3.7 documented medical co-morbidities

• Highest education level – primary school (n=54, 52%), high school (n=45, 44%), tertiary education (n=12, 12%), not answered (n=1, 1%)
Results - GDS

• 51 (49.5%) of patients screened positively for depression

• Depression only documented as a co-morbidity in 6 cases

• The GDS-5 took less than 5 minutes to administer

• 10 patients (10%) expressed difficulty understanding the questions

• Problematic questions:
  ✷ Do you often feel helpless?
  ✷ Do you feel pretty worthless the way you are now?
Results – Psychometric testing

- Internal reliability Cronbach’s $\alpha = 0.50$

<table>
<thead>
<tr>
<th>Question</th>
<th>Corrected item- Total correlation</th>
<th>Cronbach’s $\alpha$ if item deleted</th>
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</thead>
<tbody>
<tr>
<td>Are you basically satisfied with your life?</td>
<td>0.329</td>
<td>0.413</td>
</tr>
<tr>
<td>Do you often feel bored?</td>
<td>0.390</td>
<td>0.362</td>
</tr>
<tr>
<td>Do you often feel helpless?</td>
<td>0.359</td>
<td>0.381</td>
</tr>
<tr>
<td>Do you prefer to stay at home rather than going out and doing new things?</td>
<td>0.067</td>
<td>0.577</td>
</tr>
<tr>
<td>Do you feel pretty worthless the way you are now?</td>
<td>0.259</td>
<td>0.451</td>
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</tbody>
</table>
Discussion

- Prevalence of positive screening for depression was high at 49.5%.
  - This is higher than previous ED studies with older adults which reported rates of 16.5% (Hustey & Smith, 2007), 17% (Hustey, 2005), 27% (Meldon, Emerman, Schubert, Moffa & Etheart, 1997) and 42% (Lee, Wong & Lau, 2006)

- Internal reliability was low at 0.50
  - Previous reports in other clinical settings have typically been higher – 0.73 (Gómez-Angulo & Campo-Arias, 2011), 0.68 (Lach, Chang & Edwards, 2010), 0.41 – 0.79 (Crawford & Robinson, 2008) and 0.80 (Hoyl, et al, 1999)

- Clients in this study had some difficulty understanding the concepts in the GDS-5.
  - This has been previously reported as problematic (Flacker & Spiro, 2003) and warrants further investigations into clinical utility
Is the GDS5 a good option for ED use?

• The GDS-5 can be recommended with minor reservations...

• Strengths:
  • Freely available
  • Fast to administer
  • Most patients understand the questions
  • In a population of older adults it discriminated between participants

• Weaknesses
  • Some confusion about question meaning
  • Low internal reliability
  • Not comparable with other studies of depression incidence
  • Requires more research regarding reliability, validity and utility in the ED
References


