Prevalence and Course of Depression among Cognitively Intact and Cognitively Impaired Nursing Home Residents

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RATIONALE

• High prevalence
  – Approximately 10% for Major Depression (MD)

• Restricted sample
  – Exclusion of a proportion of residents with dementia

• Course of depression unclear

• Limited Australian longitudinal data
METHODS

• Six Victorian metropolitan facilities

• Two phase recruitment process:
  – Referral by DoNs (consent to release name)
  – Researchers determined eligibility
METHODS: Instrumentation

**Cornell Scale for Depression in Dementia:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Mood-related signs</td>
<td>- Anxiety</td>
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<tr>
<td></td>
<td>- Sadness</td>
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<tr>
<td></td>
<td>- Lack of reactivity to pleasant events</td>
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<td>- Irritability</td>
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<td>B. Behavioural disturb.</td>
<td>- Agitation</td>
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<td>- Retardation</td>
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<td>- Multiple physical complaints</td>
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<td>- Loss of interest</td>
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<td>C. Physical signs</td>
<td>- Appetite loss</td>
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<td></td>
<td>- Weight loss</td>
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<td></td>
<td>- Lack of energy</td>
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<td>D. Cyclic functions</td>
<td>- Diurnal variations of mood symptoms</td>
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<td></td>
<td>- Difficulty falling asleep</td>
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<td></td>
<td>- Multiple awakenings</td>
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<td>- Early morning awakening</td>
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<td>E. Ideational disturbance</td>
<td>- Suicide</td>
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<td></td>
<td>- Poor self-esteem</td>
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<td>- Pessimism</td>
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<td>- Mood-congruent delusions</td>
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</tbody>
</table>
METHODS: Instrumentation

- Mini-Mental State Examination
- Barthel Index
- Resident personal information (inc. Hx of depression)
- Health information
METHODS

• Procedure:
  – 1, 3 & 6 months post-admission
  – Semi-structured clinical interview (resident, staff & family)
  – DSM-IV diagnosis
  – Case discussion
  – Confidence: High, medium & low
RESULTS: Response Rate

- Response Rate:
  - 61% referred by DoNs (ranging from 38 to 86%)
  - 82% of eligible participated
RESULTS: Sample Characteristics

- 51 residents
- 72.5% female
- Mean age 84.41 (8.29)
- Mean MMSE 15.22 (9.27)
- 75% scored ≤23 on MMSE
- Mean Barthel 35.59 (21.40)

- Representative of population (age, gender, marital status, birthplace)
RESULTS: Overall Prevalence

- One Month (51)
- Three Months (44)
- Six Months (41)

- No Diagnosis
- Non-major depression
- Major depression

Graph showing prevalence of diagnoses at different time intervals.
RESULTS: Prevalence by Cognitive Status

- MMSE ≤ 23 (38)
  - Major Depression
  - Non-Major Depression
  - No Depression

- MMSE ≥ 24 (12)
  - No Depression
RESULTS: Course

- No depression
- Chronic depression
- Incident depression
- Remitting depression
- Other course
RESULTS: Treatment

• Antidepressant use:
  – One month = 25.5%
  – Three months = 31.8%
  – Six months = 29.3%

• Proportion of residents with MD receiving antidepressants:
  – One month = 33.3%
  – Three & six months = 83.3%
# RESULTS: Correlates with T1 Cornell

<table>
<thead>
<tr>
<th>Variable</th>
<th>$r$</th>
<th>$n$</th>
<th>$p$</th>
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</thead>
<tbody>
<tr>
<td>Barthel</td>
<td>-.430</td>
<td>51</td>
<td>.002</td>
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<tr>
<td>Pain Duration (Staff)</td>
<td>.359</td>
<td>50</td>
<td>.010</td>
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<tr>
<td>Pain Level (Staff)</td>
<td>.216</td>
<td>50</td>
<td>.132</td>
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<tr>
<td>Number of Diagnoses</td>
<td>.100</td>
<td>51</td>
<td>.484</td>
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<tr>
<td>Number of Medications</td>
<td>.219</td>
<td>51</td>
<td>.123</td>
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<tr>
<td>History of Depressed Mood</td>
<td>.379</td>
<td>51</td>
<td>.006</td>
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<tr>
<td>Prior Diag./Treat. of Mood Disturbance</td>
<td>.333</td>
<td>51</td>
<td>.017</td>
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<tr>
<td>MMSE</td>
<td>-.043</td>
<td>50</td>
<td>.766</td>
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<tr>
<td>Age</td>
<td>-.099</td>
<td>51</td>
<td>.488</td>
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<tr>
<td>Gender</td>
<td>.105</td>
<td>51</td>
<td>.462</td>
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</tbody>
</table>
LIMITATIONS

- Small Sample.
- Bias?
- Replication required.
IMPLICATIONS

• By excluding residents with moderate to severe dementia, previous studies may have underestimated the burden of depression in nursing homes.

• In this study, only the cognitively impaired were diagnosed with Major Depression.
IMPLICATIONS

• Care staff and GPs must be trained in the recognition of depression in residents with dementia
• Early intervention
• Interventions must be tailored to meet the unique needs of this group