A deprescribing intervention to reduce the inappropriate use of antipsychotics to manage BPSD in residential aged care: The HALT project

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Behavioural & Psychological Symptoms of Dementia

• Up to 90% of people with dementia will experience BPSD

• Examples: Agitation and aggression

  Hallucinations and delusions

  Vocally disruptive behaviours (calling out)

  Apathy, depression, night time disturbances

• Significant impact on the person, staff, other residents and families
Antipsychotic use in aged care

- Commonly used to manage behavioural and psychological symptoms of dementia (BPSD)
- Limited efficacy
- Potential for adverse side effects
  - Falls
  - Stroke
  - Death
Psychosocial approaches

- Person Centred Care effective in decreasing agitation
- Fostering personhood
- Need-driven behaviour
- Physical, psychological, social
- Remove the trigger, remove the behaviour
- Focus on individuals life history, experiences, values and preferences
Background to HALT

- Lateline investigation 2012
- Antipsychotic usage up to 50% in some long term care facilities
- Moves internationally to investigate and enforce clinical recommendations
- Recently TGA tightened guidelines on use of risperidone
- % are going down but still a way to go
The HALT Project

• Single arm 12-month longitudinal study
• 5 assessment points
• Eligibility:
  • regular antipsychotic for >3 months
  • ≥60 years old
  • consent / assent
  • GP agreement
  • no psychotic illness
  • NPI scores

Aim: reduce antipsychotic use without re-emergence / escalation of behaviours, or use of substitute medications
Outcome measures

• Standardised tools
  – QoL
  – PAS/RUDAS (cognition)
  – CMAI (agitation)
  – NPI (BPSD)
  – ADLs (function)
  – MOSES (engagement)

• File Audit
  – Demographics
  – Medications
  – Health history
  – Falls
  – Hospitalisations
Facility Recruitment

Facilities assessed for eligibility and invited ($n=58$)

- Declined ($n=23$)
- Agreed ($n=35$)
  - Withdrew ($n=12$)

Total recruited ($n=23$)

Reasons for decline or withdrawal included:
- "No" eligible residents
- Lack of management support
- No suitable champion
- No time
Resident Recruitment

Assent to contact PR
n = 241

Ineligible (n = 88)
PR refusal (n = 50)
Mental health concern (n = 4)
Potential participant deceased (n = 13)
Increased frailty/palliation (n = 3)
Not on antipsychotic (n = 2)
PR not communicating (n = 10)
GP refusal (n = 2)
Other (n = 4)

Consent from PR or participant
n = 145 (60%)

Ineligible (n = 12)
Mental health concern (n = 4)
Potential participant deceased (n = 1)
GP refusal (n = 3)
Not on antipsychotic (n = 4)

Pre-baseline assessments
n = 134

Ineligible (n = 4)
NPI scores above threshold (n = 4)

Baseline assessments
n = 115

Drop out (n = 5)
Withdraw (n = 2)
Deceased (n = 1)
Participant moved facilities (n = 1)
Palliating (n = 1)
Participant flow

- "Premature" deprescribing
  - n = 13

- Deprescribing commenced
  - n = 98

- Cessation achieved
  - n = 86

- Later re-prescribed
  - n = 18 (21%)
  - n = 3 reduction only
  - n = 1 re-deprescribed

Follow-Up

Post + 3 month assessments
n = 85

Post + 6 month assessments
n = 52

Drop outs (n = 26)
Deceased (n = 22)
Withdrew (n = 4)
### Participants

#### SOCIODEMOGRAPHICS

<table>
<thead>
<tr>
<th></th>
<th>% (n) or $\bar{x} \pm SD$ (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong> (120)</td>
<td>86.0 ± 7.3 (65.7 – 101.8)</td>
</tr>
<tr>
<td><strong>Female gender</strong> (121)</td>
<td>68.3 (80)</td>
</tr>
<tr>
<td><strong>Marital status</strong> (120)</td>
<td></td>
</tr>
<tr>
<td>Single, never married</td>
<td>5.8 (7)</td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>57.5 (69)</td>
</tr>
<tr>
<td>Married/de facto</td>
<td>36.7 (44)</td>
</tr>
<tr>
<td><strong>Highest education qualification</strong> (93)</td>
<td></td>
</tr>
<tr>
<td>University level</td>
<td>18.3 (17)</td>
</tr>
<tr>
<td>Apprenticeship/TAFE</td>
<td>7.5 (7)</td>
</tr>
<tr>
<td>High school</td>
<td>30.1 (28)</td>
</tr>
<tr>
<td>Junior high school</td>
<td>19.4 (18)</td>
</tr>
<tr>
<td>Primary school</td>
<td>20.4 (19)</td>
</tr>
<tr>
<td>No education</td>
<td>4.3 (4)</td>
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</tbody>
</table>

#### Medical diagnoses (121)

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>% (n) or $\bar{x} \pm SD$ (range)</th>
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<tbody>
<tr>
<td>Dementia</td>
<td>95.0 (115)</td>
</tr>
<tr>
<td>Not otherwise specified</td>
<td>28.7 (33)</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>33.0 (38)</td>
</tr>
<tr>
<td>Vascular dementia</td>
<td>16.5 (19)</td>
</tr>
<tr>
<td>Mixed dementia</td>
<td>9.6 (11)</td>
</tr>
<tr>
<td>Frontotemporal dementia</td>
<td>4.3 (5)</td>
</tr>
<tr>
<td>Dementia with Lewy bodies</td>
<td>4.3 (4)</td>
</tr>
<tr>
<td>Younger onset AD</td>
<td>0.9 (1)</td>
</tr>
<tr>
<td>Depression</td>
<td>52.1 (63)</td>
</tr>
<tr>
<td>Parkinson’s disease</td>
<td>5.8 (7)</td>
</tr>
</tbody>
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#### RESIDENTIAL CARE

| Years since admitted to facility (120) | 2.8 ± 2.4 (0.0 – 15.2) |
# Medications

<table>
<thead>
<tr>
<th>MEDICATIONS</th>
<th>% (n) or $\bar{x} \pm SD$ (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of current psychotropic medications (121)</td>
<td>$2.3 \pm 1.0$ (1 – 5)</td>
</tr>
<tr>
<td>Number of current non-psychotropic medications (120)</td>
<td>$9.0 \pm 4.0$ (2 – 23)</td>
</tr>
<tr>
<td>Class of antipsychotic medication (120)</td>
<td></td>
</tr>
<tr>
<td>Atypical</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>$9.9$ (12)</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>$10.7$ (13)</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>$16.5$ (20)</td>
</tr>
<tr>
<td>Risperidone</td>
<td>$62.8$ (76)</td>
</tr>
<tr>
<td>Typical</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>$87.6$ (106)</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>$12.4$ (15)</td>
</tr>
<tr>
<td>Duration of current course of antipsychotic (years) (118)</td>
<td>$2.1 \pm 1.7$ (0.0 – 8.0)</td>
</tr>
<tr>
<td>Setting of antipsychotic initiation (120)</td>
<td></td>
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<tr>
<td>During hospitalisation</td>
<td>$20.5$ (25)</td>
</tr>
<tr>
<td>Since admission to RACF</td>
<td>$52.5$ (64)</td>
</tr>
<tr>
<td>Living in community</td>
<td>$10.7$ (13)</td>
</tr>
<tr>
<td>Unknown</td>
<td>$14.7$ (18)</td>
</tr>
<tr>
<td>Had prior course of antipsychotic medication (114)</td>
<td>$21.9$ (25)</td>
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NPI and CMAI

NPI Total Score

CMAI Total Score

T1 – Pre-Baseline
T2 – Baseline
T3 – Post +3m
T4 – Follow up +6m

T1 – Pre-Baseline
T2 – Baseline
T3 – Post +3m
T4 – Follow up +6m

p > .05

p < .05
Challenges

• Difficult to recruit
• Lack of education around BPSD for care staff, GPs and families
• Task oriented nursing care, change process to implementing PCC, family expectations
• Presence of “nurse led” prescribing of antipsychotics
Discussion

• Champion – management partnerships essential to success
• Knowledge, awareness and shared confidence in non-pharmacological approaches
• Deprescribing successful – some started early!
• However small sub-group re-prescribed – reason why to be analysed
• Total BPSD remain stable, up to 6 months after deprescribing
• Data collection on-going, see you in 2016!
Acknowledgements

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