A successful approach to reducing antipsychotic medications in long-term care: The HALT project

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Why are BPSD important?

- Ubiquitous, >90% of PWD during Δ course
- Distress to PWD and to caregivers
- Increase rate of institutionalisation
- Higher rate of complications in hospital
- Associated with faster decline & ↑ mortality
Antipsychotics for BPSD

Meta-analysis from 13 studies\(^1\)
- Mean ES in Rx = 0.45
- Mean ES in placebo = 0.32

Side effects
- Sedation
- Dizziness
- Falls
- Orthostatic hypotension
- Anticholinergic
- Weight gain
- Stroke\(^2\)
- Death\(^3\)

\(^1\) Yury C & Fisher J, Psychotherapy and Psychosomatics 2007
\(^2\) Brodaty H et al, J Clin Psychiatry 2003
\(^3\) Schneider L, 2005
Continuing vs stopping antipsychotics in people with dementia?

Ballard 2008: 12 m RCT, continuous use vs PBO

- For most AD pts, withdrawal $\rightarrow$ no detriment
- Continuers: $\downarrow$ verbal fluency ($p<.002$); $\uparrow$ mortality
- Subgroup, more severe symptoms Rx benefit

Devanand 2012

- Responders for psychosis or agitation, & no AEs
- Discontinuation $\rightarrow$ higher rate of relapse
The HALT study
Halting Antipsychotic use in Long-Term care

A single-arm 12-month longitudinal study in 23 aged care facilities of at least 60 beds in urban and rural NSW

Resident participants assessed
- ≈4 wks & 1wk prior to deprescribing (T1 & T2)
- Re-assessed 3, 6 & 12 months later (T3–T5)
HALT protocol

Education

• GPs (academic detailing)
• Train the trainer model, 3-day workshop for nurse champions who trained residential care staff

Recruitment

• Nurse champions identified residents...
• ... & approached families for consent
• If √, GP asked for consent
HALT measures

• Sociodemographics, health
• Medications
  - Antipsychotics: regular, PRN
  - Sedatives
  - Others
• BPSD
  - NPI-NH
  - CMAI
## HALT participants

<table>
<thead>
<tr>
<th>SOCIODEMOGRAPHICS (n = 139)</th>
<th>% (n) or $\bar{x} \pm SD$ (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>$85.6 \pm 7.5$ (59.5 – 101.8)</td>
</tr>
<tr>
<td>Female gender</td>
<td>66.2% (92)</td>
</tr>
<tr>
<td>Marital status ~</td>
<td></td>
</tr>
<tr>
<td>Single, never married</td>
<td>5.1% (7)</td>
</tr>
<tr>
<td>Separated /divorced /widowed</td>
<td>57.2% (79)</td>
</tr>
<tr>
<td>Married/de facto</td>
<td>37.7% (52)</td>
</tr>
<tr>
<td>Born in Australia</td>
<td>46.8% (65)</td>
</tr>
<tr>
<td>Preferred language of English</td>
<td>68.3% (95)</td>
</tr>
<tr>
<td>Education ^</td>
<td>Higher 45%, Lower 55%</td>
</tr>
</tbody>
</table>

Missing data ~ 1 missing; ^ 20 missing
<table>
<thead>
<tr>
<th>Medical diagnoses (139)</th>
<th>% (n) or x̄ ± SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dementia</td>
<td>93.5% (130)</td>
</tr>
<tr>
<td>Not otherwise specified</td>
<td>30.0% (39)</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>31.5% (41)</td>
</tr>
<tr>
<td>Vascular dementia</td>
<td>15.4% (20)</td>
</tr>
<tr>
<td>Mixed dementia</td>
<td>10.8% (14)</td>
</tr>
<tr>
<td>Frontotemporal dementia</td>
<td>4.6% (6)</td>
</tr>
<tr>
<td>Dementia with Lewy bodies</td>
<td>3.8% (5)</td>
</tr>
<tr>
<td>Dementia in Parkinson’s disease</td>
<td>2.3% (3)</td>
</tr>
<tr>
<td>Younger onset AD</td>
<td>1.5% (2)</td>
</tr>
<tr>
<td>Depression</td>
<td>58.3% (81)</td>
</tr>
<tr>
<td>Parkinson’s disease</td>
<td>6.5% (9)</td>
</tr>
<tr>
<td>Stroke</td>
<td>26.6% (37)</td>
</tr>
<tr>
<td>MEDICATIONS (n = 139)</td>
<td>% (n) or ( \bar{x} \pm SD ) (range)</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Number of current psychotropic medications</td>
<td>2.4 ± 1.1 (1 – 5)</td>
</tr>
<tr>
<td>Number of current non-psychotropic medications</td>
<td>9.0 ± 4.1 (2 – 23)</td>
</tr>
<tr>
<td>Regular antipsychotic medication</td>
<td></td>
</tr>
<tr>
<td>Olanzapine</td>
<td>12.9% (18)</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>18.0% (25)</td>
</tr>
<tr>
<td>Risperidone</td>
<td>61.2% (85)</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>10.1% (14)</td>
</tr>
<tr>
<td>Duration of current course of antipsychotic (years)</td>
<td>2.2 ± 1.8 (0.1 – 8.1)</td>
</tr>
<tr>
<td>Duration of current dose of antipsychotic (years)</td>
<td>1.4 ± 1.3 (0.1 – 6.7)</td>
</tr>
<tr>
<td>Setting of antipsychotic initiation (139)</td>
<td>% (n) or $\bar{x} \pm SD$ (range)</td>
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<tr>
<td>----------------------------------------</td>
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</tr>
<tr>
<td>During hospitalisation</td>
<td>20.1 (28)</td>
</tr>
<tr>
<td>Since admission to RACF</td>
<td>57.6 (80)</td>
</tr>
<tr>
<td>Living in community</td>
<td>10.8 (15)</td>
</tr>
<tr>
<td>Unknown/other</td>
<td>11.5 (16)</td>
</tr>
<tr>
<td>Informed consent?</td>
<td></td>
</tr>
<tr>
<td>No or unknown</td>
<td>84.1 (117)</td>
</tr>
<tr>
<td>Yes – verbal/ written</td>
<td>15.1 (21)/ 0.7 (1)</td>
</tr>
<tr>
<td>Prior regular antipsychotic</td>
<td>21.6 (30) (n = 138)</td>
</tr>
<tr>
<td>Prior recommend review a’psychotic</td>
<td>61.7 (79) (n = 128)</td>
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Resident flow

- Pre-baseline: n = 139
- Baseline: n = 136
- 3 months: n = 124
- 6 months: n = 110
- 12 months: n = 93

133 started deprescribing

- 106 (86.2%) off of regular antipsychotics
- 87 (79.1%) off of regular antipsychotics
- 76 (81.7%) off of regular antipsychotics
Deprescribing

126 completed deprescribing
Deprescribing & represcribing

26 were represcribed
Neuropsychiatric symptoms

No change in total NPI score over time
Agitation/Aggression

No change in total CMAI score over time
Agitation/aggression (NPI)
Challenges

• Difficult to recruit: NHs, GPs, families
• Lack of education re BPSD for care staff, GPs, families
• Task orientated nursing care, change process to implementing PCC, family expectations
• Presence of “nurse led” prescribing of antipsychotics
• Lack of information for GPs, care staff and families adds to fear of deprescribing
Limitations

Selection bias

- 23/58 of NHs approached joined study
- Incomplete list of residents on antipsychotics
- 241 assent → 157 proxy consent → 139 trial

Not RCT but no change in antipsychotic use in prior month

No evidence of regular drug substitution eg BDZ; increase in BDZ prn; infrequent and low doses
Emerging Issues

Inappropriate use of antipsychotics is an old story – why are we still talking about it?

We have the knowledge, it’s time to build the foundations for practice change

Informed consent processes lacking, no accountability

Models of improving PCC in residential care

Needs top down support, bottom up engaged
Next steps

How to make good care *Practice As Usual?*

Top ↓

Incentives for owners, managers, staff
- Accreditation standards, education
- Leadership, training

Bottom ↑

Drive demand: families, residents
- Publicise, communicate
Conclusions

Deprescribing antipsychotics is feasible

• Without re-emergence of behaviours
• Without substitution regular medication

Subgroup of 20-25% may benefit from Rx

Questions remain about identifying who benefits from continuing antipsychotics
Acknowledgements

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• Nurse Training: Lynn Chenoweth  Administration: Linda Nattrass

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