AMJ Australasian Medical Journal [AMJ 2019;12(5):138-142]

Time for Australia to revisit antipsychotic use in dementia in residential aged care

Kaye Ervin[1], Malcolm Clark[2], Helen Haines[2], and Irene Blackberry[1]

1. La Trobe University, John Richards Initiative, Wodonga, Vic, Australia
2. Department of Rural Health, The University of Melbourne, Shepparton, Vic, Australia

BRIEF REPORT

Please cite this paper as: Ervin K, Clark M, Haines H, Blackberry I. Time for Australia to revisit antipsychotic use in dementia in residential aged care. AMJ 2019;12(5):138–142. https://doi.org/10.35841/1836-1935.12.5.138-142

Corresponding Author:
Kaye Ervin (PhD candidate)
La Trobe University, John Richards Initiative,
PO Box 252, Cobram, Victoria, 3644, Australia
Email: ervink@humehealth.org.au

ABSTRACT

Background
Research shows that antipsychotic medication is over used and inappropriately prescribed in residential aged care settings. New research suggests trial periods of only two weeks, not twelve weeks, may be sufficient to determine response to treatment.

Aim
This brief report outlines the necessary research and changes to policy and practice in Australian residential aged care facilities to achieve best practice for antipsychotic use.

Conclusion
Experts concur that change is required in antipsychotic use. New findings provide the impetus for further research and robust policy regarding evaluation of antipsychotic use.

Key Words
Antipsychotic, dementia, residential aged care, policy

Implications for Practice:

1. What is known about this subject?
Routine use of antipsychotics for behavioural and psychological symptoms of dementia in residential aged care is concerning.

2. What new information is offered in this report?
A two week, not a 12 week, trial period of antipsychotics may be sufficient.

3. What are the implications for research, policy, or practice?
Further research is needed to determine appropriate and feasible interventions in antipsychotic use, which should be supported by policy and protocol initiatives.

Background

For close to a decade experts in dementia care have proposed the need for stricter regulation of antipsychotic medication in the treatment of behavioural and psychological symptoms of dementia.[1,2] Concerns about antipsychotic use relate to the multiple adverse effects associated with its use, such as sedation, falls and higher mortality rates[3] as well as uncertain effectiveness.[4] There is evidence of inappropriate and overuse of antipsychotic medication for behavioural and psychological symptoms of dementia (BPSD) in residential aged care facilities worldwide,[5] with the US and UK introducing tighter control of antipsychotics at a federal level.[6,7] The reasons for overuse of antipsychotic medication in residential aged care facilities has been cited as poor clinician knowledge of appropriate prescribing and administration[8] and the cost associated with alternative non-pharmacological treatment of BPSD.[9]

In Australia, over half of all residents in residential aged care have a diagnosis of dementia.[10] Previous studies have confirmed that up to 80 per cent of residents with dementia will be prescribed antipsychotics at some point in their

dementia trajectory.[1] Current therapeutic guidelines recommend a 12 week trial of antipsychotic medication in the treatment of some BPSD, such as agitation and aggression, when other non-pharmacological measures have failed and symptoms are severe enough to present a risk to the safety of the patient or others.[11] Guidelines warn that efficacy of antipsychotics in dementia-associated psychosis, agitation, and aggression must be weighed against a growing body of evidence of serious adverse events. Despite this, it has been suggested that antipsychotics continue to be used as first line treatment for BPSD in aged care.[12]

The CATIE-AD study,[13] conducted more than a decade ago, remains one of the largest studies of antipsychotic medication use in patients with dementia. A post-hoc analysis of CATIE-AD data[14] provides important evidence for the need to revisit current prescribing guidelines worldwide. Yoshida and colleagues (2017) found that response to antipsychotic medication at two weeks may be indicative of response to treatment at eight weeks. In response to Yoshida et al.[14] findings, Devanand[15] suggests that response to antipsychotic treatment at two weeks could guide the decision to continue or discontinue the antipsychotic. The current Australian guidelines of a 12 week trial may needlessly expose those treated with antipsychotics to a further 10 weeks of treatment and possible adverse effects.

Australian clinicians in residential aged care are unlikely to respond to the latest evidence of evaluation of antipsychotic use at two weeks given that currently practice frequently does not comply with the recommended therapeutic guidelines of evaluation at 12 weeks.[16] In addition, prescribing rates of antipsychotic medication for treatment of BPSD is likely to remain high without government intervention which regulates its use. Potential reasons for high rates of antipsychotic prescribing in Australian residential aged care includes the lack of mandatory education for staff in residential aged care, under-utilisation of effective screening tools for BPSD or evaluation of effectiveness, appropriateness and adverse effects of antipsychotics, as well as the absence of shared decision making for antipsychotic use in dementia. There is also a dearth of economic studies related to antipsychotics and alternative BPSD therapies.

Discussion

Effective screening tools for BPSD

Current screening for BPSD in Australian residential aged care facilities is usually limited to charting which is required for funding purposes, where wandering, verbal behaviour and physical behaviour which requires staff intervention is recorded hourly for seven consecutive days as evidence to justify a funding supplement for the care provided. Funding is based on classifications of nil, low, medium or high based on the frequency of wandering, verbal and physical behaviours reported. The charting tool is intended for funding purposes only and is not sensitive enough to identify complex BPSD, or changes in response to interventions.

The Australian government briefly introduced a Dementia and Severe Behaviours Supplement in 2013. For residential aged care to qualify for this level of funding, it was recognised that the existing charting would not be adequate and that a more sensitive screening tool would be required, with a panel of experts recommending the Neuro Psychiatric Inventory – Nursing Home version (NPI-NH). The various versions of the NPI are considered the most reliable screening tool to detect changes in the presence, frequency and severity of BPSD as well as the impact of the behavioural disturbance on others.[17] The NPI-NH measures ten separate behaviour domains, and is recommended as a measurement of impact of both pharmacological and non-pharmacological treatment of BPSD.[17] The Dementia and Severe Behaviours Supplement was abandoned within months of its introduction due to a 60 million Australian dollar expenditure above the expected rate, and with it the use of the NPI-NH as a screening tool. Without a tool such as the NPI-NH the effectiveness of antipsychotic therapy is unlikely to be accurately determined, and therefore the evidence required to decide whether to continue or discontinue treatment. The NPI-NH would be invaluable for measuring response to antipsychotic treatment at two weeks and 12 weeks to provide further evidence of the finding from Yoshida et al's.[14] study.

Evaluation of appropriateness and adverse effects

The National Prescribing Service (NPS) in Australia has developed a number of quality improvement audits for medication usage, designed to be used in residential aged care. Drug Use Evaluation (DUE) for antipsychotic use promotes optimal drug therapy by monitoring antipsychotic use, comparing results with predefined best practice guidelines and provides recommendations to address inconsistencies with best practice.[18] The tools required are freely available on line and are intended for multidisciplinary use. The Royal College of Nursing has endorsed the DUE as providing continuing education in appropriate antipsychotic use. The uptake of residential aged care facilities utilising the DUE kits is unknown and use is not mandatory. The information in the DUE kit for

antipsychotics provides valuable evidence for aged care staff in appropriate use of antipsychotics, and has potential to improve best practice in antipsychotic use by raising awareness of symptoms that are unlikely to respond to antipsychotic treatment and monitoring for adverse effects. There is concern that aged care staff are insufficiently trained to recognise adverse effects of antipsychotic medications, such as extrapyramidal symptoms.[12] Currently the DUE for antipsychotics recommends trial discontinuation of antipsychotics after 12 weeks. While this recommendation does not yet support Yoshida et al.[14] finding, it attempts to mitigate the practice of chronic continuation of antipsychotic drugs, which is known to be problematic in residential aged care settings[19] and poses a serious threat of adverse effects. Declerq et al. study[19] shows that antipsychotics can be safely withdrawn in people who have dementia despite taking them for prolonged periods. At a minimum the DUE for antipsychotic use in aged care provides a useful tool for staff education on best practice for antipsychotic use.

Shared decision making and patient decision aids

The Royal Australian and New Zealand College of Psychiatrics has emphasized the importance of informed consent when patients with dementia are commenced on antipsychotic medications.[20] Many jurisdictions in Australia require that a proxy decision maker approves administration of antipsychotics when the person with dementia no longer has capacity, yet this requirement is met in less than seven per cent of cases.[21] The involvement of care recipients and their families in decision making is also required under the Australian aged care accreditation standards.[22] Two recent literature reviews regarding medications, stressed the importance of patient involvement and shared decision making.[23,24] Shared decision making is viewed as imperative when risks clearly exist[25] as clinicians typically overestimate the benefits of treatment and underestimate harms.[26] Patients and their proxy decision makers need evidence based information to fully understand treatment options and likely outcomes of antipsychotic medications to fully engage in shared decision making.

Decision aids are a useful way to provide patients and families with structured information about clinical choices and are designed to provide balanced, evidence based information about risks, benefits and alternatives.[27] Many decision aids incorporate pictographs, as visual formats explaining risks and benefits is thought to enhance understanding of numerical risks.[26] Despite the existence over 500 patient decision aids currently available,[28] none exist for the use of antipsychotics in dementia care. Development of such a decision aid is vitally important if we hope to engage proxy decision makers in shared decision making, and have them fully understand the risks and benefits of antipsychotic use.

Involvement of residents and proxy decision makers in the decision making process for the prescription of antipsychotic medications is preferred practice for compliance with aged care standards and has important legal considerations, given the substantial risks of adverse effects. Development and research in the use of a patient antipsychotic decision aid and acceptability of shared decision making is a gap that requires attention in antipsychotic use in dementia care.

At a minimum, residential aged care policies and protocol should include continuing education for staff in appropriate prescribing and use of medication, specific to residential aged care. For general medical practitioners servicing residential aged care, education could be tied to Practice Incentive Payments available from the government.[29] Therapeutic guidelines for the most frequently used medications in residential aged care have been developed by the National Prescribing Service and are available electronically, at no cost, so no barriers to their use exist. Residential aged care protocols could consider a prescribing hurdle that prevents changes to residents medications without documented consent, including review of medications by a pharmacist in a robust shared decision making process. Such a protocol makes prescribing safer for the resident and affords some legal protection to the prescriber too.

Economic considerations

While the Australian government has not responded to concerns about antipsychotics from the perspective of resident's health outcomes and quality of life, perhaps robust regulation could be borne from an economic perspective. An economic evaluation conducted in the UK[9] found economic evidence of the benefits of non-pharmacological alternatives to antipsychotic drug use for BPSD, in short, behavioural interventions are a more efficient use of public money than antipsychotic drugs. The economic evaluation found that although antipsychotics are a cheaper alternative than alternative behaviour therapies, the serious adverse effects of antipsychotics requiring treatment (and wasted ineffective treatment) result in costs that far outweigh the cost of behavioural interventions.[9]

A cost benefit analysis of antipsychotics compared to non-pharmacological interventions in dementia care has not been conducted in Australia, but may provide the government with the impetus needed if the findings reflect that of the UK study of a cost benefit of over £82 million. The high health expenditure related to adverse events, such as falls and fractures requiring surgical interventions, coupled with the limited efficacy of antipsychotic medications[30] suggests that regulation makes both moral and economic sense.

Conclusion

While Yoshida et al. study contributes considerable evidence, useful for early identification of residents who will likely respond, and thereby avoid unnecessary exposure (and associated health and economic costs) for those who will not, Australian aged care facilities must first address a number of basic principles in quality use of antipsychotic medications. The gaps identified in education, appropriate screening of BPSD, evaluation of antipsychotic use, economic savings and the legal right of residents (and proxy decision makers) to share in decisions about antipsychotic use provides essential starting points for judicious use of existing evidence in antipsychotic prescription for people with dementia.

References

1. Byrne G. Address antipsychotic use in aged care. Aust Nurs J. 2011;19(1):6.
2. Banerjee S. The use of antipsychotic medication for people with dementia: time for action. Inst Psychiatry. 2009.
3. O'Mahony D, Gallagher P. Inappropriate prescribing in the older population: need for new criteria. Age Ageing. 2008;37:138–41.
4. O'Neil M, Freeman M, Christensen V, et al. A systematic evidence review of non-pharmacological interventions for behavioural symptoms of dementia. Heal Serv Res Dev Serv. 2011.
5. Nishtala P, McLachlan A, Bell J, et al. Psychotropic prescribing in long-term care facilities: Impact of medication reviews and educational interventions. Am J Psychiatry. 2008;16(8):621.
6. Shorr R, Fought R, Ray W. Changes in antipsychotic drug use in nursing homes during implementation of the OBRA-87 regulations. J Am Med Assoc. 1994;271:358–62.
7. National Prescribing Centre. Government takes action on reducing the use of antipsychotic drugs in dementia. 2009; Available from: http://www.npc.nhs.uk/rapidreview/?p=847
8. Ervin K, Finlayson S, Cross M. The management of behavioural problems associated with dementia in rural aged care. Collegian. 2012;19(2):85–95.
9. NHS Institute for Innovation and Improvement. An economic evaluation of alternatives to antipsychotic drugs. Matrix Evid. 2011;October.
10. Australian Institute of Health & Welfare. Half of Australians in permanent residential aged care suffer from dementia. 2015; Australian. Available from: www.aihw.gov.au%3Eaged-care%3Edementia
11. National Prescribing Service. Treating the symptoms of dementia. NPS Prescr Pract Rev Prim Care. 2008.
12. Alzheimer's Australia. Quality of residential aged care: the consumer perspective. A Rep Alzheimers Aust. 2013;Paper 37.
13. Schneider E, Tariot P, Dagerman K, et al. Effectiveness of atypical antipsychotic drugs in patients with dementia. N Engl J Med. 2006;355:1525–38.
14. Yoshida K, Roberts R, Takefumi Suzuki T. Lack of early improvement with antipsychotics is a marker for subsequent non-response in behavioural and psychological symptoms of dementia: analysis of CATIE-AD data. Am J Geriatr Psychiatry. 2017;25(7):708–716.
15. Devanand D. Prediction of response to antipsychotics in patients with dementia remains a conundrum. Am J Geriatr Psychiatry. 2017;25(7)717–718.
16. Brodaty H, Arasaratnam C. Meta-analysis of nonpharmacological interventions for neuropsychiatric symptoms of dementia. Am J Psychiatry. 2012;169:946–53.
17. Wood S, Cummings J, Hsu M, Barclay T. The use of the neuropsychiatric Inventory in nursing home residents, characterization and measurement. Am J Geriatr Psychiatry. 2000;8:75–83.
18. National Prescribing Service. Drug use evaluation: Antipsychotic use for behavioural and psychological symptoms of dementia in aged care facilities. 2016; Available from: www.nps.org.au/DUE
19. Declerq T, Petrovic M, Azermai M, et al. Withdrawal versus continuation of chronic antipsychotic drugs for behavioural and psychological symptoms in older people with dementia. Cochrane Database Syst Rev. 2013;3(CD007726).
20. Carmody J, Traynor V, Steele A. Dementia, decision aids and general practice. Aust Fam Physician. 2015;44(5):307–10.
21. Rendina N, Brodaty H, Draper B, et al. Substitute consent for nursing home residents prescribed psychotropic medication. Int J Geriatr Psychiatry. 2009;24(3):226–31.

22. Aged Care Standards and Accreditation Agency Ltd. Accreditation Standards. Quality of Care Principles. www.accreditation.org.au. 2014.
23. Reeve E, Shakib S, Hendrix I, et al. Review of desprescribing processes and development of an evidence-based, patient centred deprescribing process. Br J Clin Pharmacol. 2014;78:738–47.
24. Scott I, Hilmer S, Reeve E, et al. Reducing inappropriate polypharmacy: the process of deprescribing. JAMA Intern Med. 2015;175:827–34.
25. Barry MJ, Edgman-levitan S, Billingham V. Shared Decision Making — The Pinnacle of Patient-Centered Care. N Engl J Med. 2012;366(9):780–1 (doi: 10.1056/NEJMp1109283).
26. Jansen J, Naganathan V, Carter S, et al. Too much medicine in older people? Deprescribing though shared decision making. BMJ Br Med J. 2016;353:i2893.
27. Hanson LC, Carey TS, Caprio AJ, et al. Improving decision-making for feeding options in advanced dementia: A randomized, controlled trial. J Am Geriatr Soc. 2011;59(11):2009–16.
28. O'Connor A, Bennett C, Stacey D, et al. Decision aids for people facing health treatment or screening decisions. Cochrane Database Syst Rev. 2009;3(CD001431).
29. Australian Government Department of Health. Practice Incentive Payments. 2017; Available from: https://www.humanservices.gov.au/organisations/health.../practice-incentives-program
30. O'Brien J. Antipsychotics for people with dementia. Br Med J. 2008;337:602.

PEER REVIEW

Not commissioned. Externally peer reviewed.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

FUNDING

No external sources of funding were provided for this brief report. It is submitted as part of the research for KE's PhD study.