

Community Pharmacy promoting appropriate sedative use in Aged Care: the 'RedUSE' project

Researchers: Peterson GM, Westbury JL, Jackson SL, Robinson A

Key Findings (max. 1 page):

High rates of psychotropic medication use have been reported in Australian and international Aged Care Homes (ACHs) over the past 10 years, particularly rates of antipsychotic and benzodiazepine use. These agents are often prescribed to manage the behaviour of residents with dementia and regulate sleep and anxiety in spite of uncertain efficacy and potentially severe adverse effects, including falls, confusion and increased mortality.

The aim of the project was to evaluate a pharmacy-led, multi-faceted, interdisciplinary intervention to reduce the use of benzodiazepine and antipsychotic medication in aged care homes: the 'RedUSE' (Reducing Use of Sedatives) project. The study design was a controlled trial conducted in 25 aged care homes in Tasmania. The intervention group included 13 Hobart homes and the 12 control homes were located in Launceston. The key strategies of this research project; The RedUSE (Reducing Use of Sedatives) trial, involved two computerised Drug Use Evaluations (DUE) that 'mined' community pharmacy aged care prescribing data, nursing staff education and an interdisciplinary sedative review plan. The strategies were pharmacist-led and targeted at nursing staff, although GP, resident and relative participation was promoted.

The combination of these three strategies worked synergistically to produce the positive outcomes of the project. The DUE measure provided an overall picture of the pattern of antipsychotic and benzodiazepine use in each ACH. This sedative use information was then benchmarked and presented to nursing staff at each home, along with education about the benefits and risks associated with these medications and non-pharmacological strategies to manage challenging behaviours, sleep disturbance and anxiety. The final strategy, the targeted sedative review plan, allowed nursing staff to apply their enhanced knowledge at an individual level to review the actual sedative use of residents.

The RedUSE project led to a statistically significant reduction in the percentage of residents receiving benzodiazepines (31.8% to 26.9%, $p < 0.005$) and antipsychotics (20.3% to 18.6%, $p < 0.05$). The percentage of residents taking multiple sedative agents also declined significantly in intervention homes. In contrast, the rates of sedative use in control homes increased slightly throughout the trial; albeit, non-significantly, i.e. benzodiazepines (30.4% to 33.0%, $p = 0.2$) and antipsychotics (21.9% to 23.9%, $p = 0.2$).

Doses of antipsychotics and benzodiazepines were significantly more likely to be reviewed in intervention ACHs than in control homes. Up to 40% of antipsychotic and benzodiazepine doses were reduced or ceased in residents taking these agents in intervention ACHs compared to a 19% rate in control homes. Significantly fewer residents were initiated on benzodiazepine medication (2% vs. 7%) and a lower proportion of residents were started on antipsychotic medication (2% vs. 4%) in intervention homes than in control homes.

The results from the RedUSE trial showed that the average resident weekly cost of benzodiazepines was 78 cents/week. If this cost was reduced by 15%, as in this study, the potential saving amounts to \$5.72 per resident per year. With almost 6000 residents in Tasmanian ACHs, the total savings could approach \$35 000 for the state alone.

In two focus groups conducted to evaluate the acceptability of the RedUSE project for pharmacists and aged care home nursing staff, a high degree of satisfaction with the project and its QUM strategies was expressed. Specifically, participants felt the project increased the focus on sedative use in aged care, made staff re-evaluate the need for sedatives and refocused the need for regular reviews of sedative use. The RedUSE project also encouraged interdisciplinary practice and improved the education of nurses and pharmacists on sedative use and its possible consequences. Importantly, the project showed that community pharmacists could provide worthwhile education to ACH staff when supplied with suitable training materials, support and background information.

Our findings suggest that a multi-faceted program incorporating QUM strategies, coordinated and led by community pharmacy, and utilising seamless drug use data extraction from pharmacy software, can offer an effective approach in reducing sedative use in aged care homes.

KEY FINDINGS