

Reducing Falls in Residents With Dementia by Reducing Psychotropic Medication Use: Does It Work?

Sandra Cadwell, DNP, ANP-BC, Valorie Dearmon, DNP, NEA-BC, and Elizabeth A. VandeWaa, PhD

ABSTRACT

Falls in elderly patients with dementia are common and a leading cause of morbidity and mortality. Psychotropic medications used to treat dementia are discouraged and may contribute to patient falls. Evidence-based clinical guidelines for appropriate antipsychotic use in this population exist. A nurse practitioner–led team used evidence-based tools to reduce psychotropic medication use in residents with dementia on a memory care unit and evaluated the effect on patient falls. Despite evidence linking falls to psychotropic medications, a reduction in resident falls was not found.

Keywords: dementia, falls, psychotropic medications

© 2016 Elsevier Inc. All rights reserved.

Falls are a major cause of injury, disability, and even death in the elderly. The elderly with dementia are 2 to 3 times more likely to fall because of gait and postural impairment, medications, neurocardiovascular instability, and environment.¹ Patients suffering from dementia have lower rates of recovery if an injury is sustained from a fall, have higher postoperative complications, and are more likely to die from fall-related hip fractures.¹ Patients in the later stages of dementia are likely to be treated in long-term care facilities; thus, fall rates are typically a major concern in resident populations. A nurse practitioner and leadership team responded to 1 facility's high fall rates of residents by implementing evidence-based recommendations to reduce psychotropic medication use.

BACKGROUND

Contributing to the risk for falls are the neuropsychiatric symptoms of dementia (NPSDs) consisting of cognitive, behavioral, and psychological impairment. The symptoms include, but are not limited to, a myriad of inappropriate behaviors such as sleep disturbances, aggression, depression, agitation, wandering, and psychotic behaviors. Individuals with dementia will experience at least 1 troubling

behavioral and psychological symptom, usually in the latter stages of the disease.^{2,3} If left untreated, NPSDs can lead to faster disease progression² and increased morbidity and mortality.⁴ The complexity of symptoms calls for individualized treatment with nonpharmacologic interventions (eg, music therapy, exercise, and cognitive stimulation) as the first-line treatment of NPSDs,³ yet psychotropic medications are often prescribed despite off-label warnings⁴ without adjunct nonpharmacologic interventions. The effectiveness of psychotropic medications is modest in the treatment of dementia, and side effects are serious, including death.^{2,4} Moreover, an extensive body of evidence indicates psychotropic medications further contribute to fall risk.⁴⁻⁸ Although the exact mechanism is unclear, side effects of psychotropic medications such as disorientation, sedation, orthostatic hypotension, and extrapyramidal effects may explain the increased risk for falls.^{5,6} Psychotropic medications include antipsychotics, antidepressants, mood stabilizers, and sedative/hypnotics. These medications, among others that impair cognition such as benzodiazepine anxiolytics, nonbenzodiazepine hypnotics, and SSRI and SNRI antidepressants, are on the Beers list of high-risk medications for the elderly because they have a high

likelihood of causing adverse effects in this population.⁹

The quality and strength of evidence supporting nonpharmacologic and pharmacologic treatment of dementia vary. However, experts agree that the use of pharmacologic treatment should be limited unless patients fail to respond to nonpharmacologic measures because the risk of antipsychotic use in this population outweighs the benefit.^{10,11} Nonetheless, nonpharmacologic measures are not commonly found to be the standard of care in practice because of insufficient provider knowledge, deficiency of clear guidelines for translation of nonpharmacologic measures, and the perceived notion that drugs are more effective.² A program developed by the Iowa Geriatric Education Center, Improving Antipsychotic Appropriateness in Dementia Patient (IA-ADAPT) provides crucial clinical guidelines and an algorithm for treating neuropsychiatric symptoms of dementia.^{12,13} The program was created through expert panels and tested by long-term care staff for appropriateness of content and usefulness in day-to-day practice.^{2,13-18} The IA-ADAPT program focuses on the reduction of antipsychotic medications through staff education and the use of an algorithm for treating behavioral and psychological symptoms of dementia.

A high fall rate for residents with dementia in the memory care unit (MCU) of a long-term care facility triggered the need for improvement. The fall rate (number of falls divided by number of bed days multiplied by 1,000) for the facility in 2013 was 12.10 compared with an alarming MCU rate of 20.97. In 2014, the rate for the facility (14.76) improved but worsened in the MCU (28.53). A concerned leadership responded by implementing a fall prevention program appropriate for residents in an MCU (fall risk assessment, alerts, prevention safeguards, and music therapy), yet the fall rate did not decrease. With over 50% of patients on the MCU receiving psychotropic medications and literature indicating patient falls are an adverse effect of psychotropic medications, the leadership team set out to reduce falls through the reduction of psychotropic medication use. A nurse practitioner-led quality improvement (QI) project was implemented to decrease falls in long-term care residents with dementia through

the reduction of psychotropic medication use and the implementation of nonpharmacologic management practices.

METHODS

The QI project occurred in a 33-bed MCU. Twenty-seven residents (92% women and 8% men) participated in the 4-month project. All residents were elderly with moderate to severe dementia and had a length of stay equal to or greater than 101 days.

The QI project was reviewed and approved by the university and facility's institutional review boards. Resident-specific health-protected data were deidentified, and findings were reported as aggregate data. The QI team developed a plan to educate staff and providers on the appropriate use of antipsychotic medications and a plan to thoughtfully reduce medications. A weekly medication review process was developed, as recommended in fall prevention literature, to gather real-time data on resident falls and to monitor the use of medications contributing to falls.¹⁵⁻¹⁷ Prescribers used the IA-ADAPT prescriber guide to tailor dosage reduction or discontinuation of psychotropic medications. The IA-ADAPT program was implemented just before reducing dosages of psychotropic medications to offer staff with nonpharmacologic skills to competently manage behavioral symptoms. Staff education was provided using the IA-ADAPT online educational modules. Results of the project were monitored for 3 months.

RESULTS

A 10% reduction from baseline in the total percentage of psychotropic medications and the percentage of true psychotropic medications (psychotropic medications minus those treated with antidepressants alone) was achieved in participating residents. The discontinuation of medications in 4 of the 27 (15%) participants accounted for the greatest decrease in psychotropic medication use. The largest reduction occurred in the category of anxiolytic medications in which a 48% decrease was achieved. A decrease in the percentage of antipsychotics prescribed decreased negligibly from a baseline of 55% to a low of 53% during the 3-month time frame.

Despite a reduction in psychotropic medication use, a decrease in MCU participant falls compared

Download English Version:

<https://daneshyari.com/en/article/5569663>

Download Persian Version:

<https://daneshyari.com/article/5569663>

[Daneshyari.com](https://daneshyari.com)