The Association of Medications and Falls in the Home Care Setting: A Systematic Review

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INTRODUCTION

With the recent rise of people older than 65 years old, there is an increase in occurrence of polypharmacy in older adults. Polypharmacy is linked to adverse drug interactions and effects, a functional decline, increased fall risk, cognitive impairment, urinary incontinence, and poor nutrition.

PURPOSE

The purpose of this study was to determine the association between medications and falls in the home health care setting.

METHODS

A literature search of CINAHL, PubMed, Proquest, and Wiley (2007-2017) was conducted to identify studies that report the association between medications and falls in the home health care setting. Search terms included: (Home Health AND Falls) AND (Medication). Search limitations included: human subjects, 2007-2017, and English. Inclusion criteria included: adults >18, receiving home health care, and assessment of fall risk. Two reviewers independently assessed each study for methodological quality and came to a consensus utilizing the MINORS guidelines.

RESULTS

A total of 157 articles were screened for eligibility. 8 articles were selected for further evaluation through the abstract review process. Following a detailed examination, 2 articles were excluded due to bias. Outcomes used to assess fall risk included: Fall Risk Assessment Form (FRAF), Potentially Inappropriate Drug Medication (PIM-ADME), and researcher-developed fall risk evaluation questionnaires. Four out of 5 articles concluded that there was an association between falls and medication use in home care. Two out of 5 articles defined polypharmacy as >4 medications and one out of 5 articles report polypharmacy as >5 medications. Two out of the 5 articles identified benzodiazepines as being high risk for falls.

CONCLUSION

There is weak to moderate evidence to support the association between medication use and falls in the home health care setting. The findings support the association between falls and medication use in homecare. Limitations included varied outcome measures, small sample size, and lack of prior research. Further research is required to determine the impact of medication use on falls utilizing an intervention and control group rather than solely reporting on the intervention group.

CLINICAL RELEVANCE

Medication use has been shown to increase the risk of falls for patients in homecare. Medication reviews are essential in the homecare setting due to decreased direct contact to healthcare professionals. Physical Therapists might have the most interaction with patients receiving homecare. Thus, identifying adverse risk factors for falls related to medication and polypharmacy is crucial. When completing medication reviews it is critical to identify benzodiazepine, as it is reported as being high risk for falls.

REFERENCES


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