MEDICATION-RELATED PROBLEMS AND PSYCHOTROPIC DRUG USE IN VULNERABLE OLDER POPULATIONS

a focus on acute hospital admissions and cognitive impairment

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Akademisk avhandling

som med vederbörligt tillstånd av Rektor vid Umeå universitet för avläggande av medicine doktorsexamen framläggs till offentligt försvar i BIO.A.206 – Aula Anatomica, Biologihuset, fredagen den 20 oktober, kl. 09:00.

Avhandlingen kommer att försvaras på svenska.

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Abstract

Older people encountered in the acute medical care setting and individuals with varying degrees of cognitive impairment are especially vulnerable to medication-related problems and associated clinical outcomes. The aim of this thesis was to describe and understand medication use in vulnerable subgroups of older people.

Paper I presented a clinical pharmacist intervention intended to reduce the risk of medication-related readmission to hospital among people aged 75 years or older during transitions of care. Based on 300 study participants, approximately 50% had been readmitted within 180 days of being discharged from the hospital. Both heart failure and cognitive impairment, the latter identified through a four-item test, were predictors of early readmission. Looking at the same sample of study participants, paper II found that approximately one third of the 300 index hospital admissions were possibly medication related, but those specific admissions were negatively associated with cognitive impairment.

Papers III and IV were registry-based studies and described psychotropic drug use and associated factors among older people with major neurocognitive disorder (NCD). Compared with persons without diagnosed major NCD from the older total population, overall psychotropic drug use was notably higher among people with major NCD. The use of hypnotic drugs was also extensive in the reference group, and deprescribing efforts seem warranted. Individuals with Lewy body dementia had more than twice the odds of antipsychotic drug use than did those with Alzheimer's disease, a worrying figure given that people with Lewy body dementia are extremely sensitive to the adverse effects of those specific drugs. Nursing home stay was also positively associated with psychotropic drug use, and the difference was most prominent for antipsychotic drugs.

Although the relationship with cognitive impairment needs to be further investigated, medicines appear to be involved in many hospital admissions of older people, and care transitions are likely an important focus of pharmaceutical interventions. Efforts to reduce psychotropic drug use seem more relevant to people with major NCD, especially in the nursing home setting. Antipsychotic drug exposure among persons with Lewy body dementia could be one such focus, especially since there are other better-balanced pharmacological treatment options for these individuals in terms of efficacy and safety.

Keywords

older people, cognitive impairment, medication-related problems, psychotropic drugs