DRUG-RELATED HOSPITAL ADMISSIONS IN AN ACUTE GERIATRIC UNIT AND ASSOCIATED FACTORS

**Purpose**

To estimate the prevalence of drug-related hospital admissions and most common responsible drugs in an Acute Geriatric Unit, and assess the associated factors.

**Material and methods**

Cross-sectional observational study of over 75 years’ old patients consecutively admitted to an Acute Geriatric Unit in a third-level hospital. A review panel (geriatrician and a clinical pharmacist) registered if the hospital admission was mainly caused by an ADE or it may have contributed to it, according to clinical criteria after a Comprehensive Geriatric Assessment. Socio-demographic and clinical characteristics of included participants were registered from medical records and patient interview. Multivariate logistic regression was used to identify predictors of hospital admissions associated with ADEs. The following factors were included in the analysis: age, sex, number of medications, comorbidities (Charlson Comorbidity Index), functional and cognitive impairment (Barthel Index and diagnosis of dementia), frailty (FRAIL scale) and living in a nursing home.

**Results**

Seven-hundred and sixty-six patients were included, 443 were females (57.8%) and mean age was 86.9 years (SD 5.0). In 217 patients (28.3%, 95% CI: 25.13 to 31.53) the review panel considered that drugs had contributed to hospital admission, and in 115 (15.0%, 95% CI: 12.48 to 17.55) they judged that an ADE was the main cause. Three factors were associated with drug-related admissions: age (OR 0.95, 95% CI: 0.913 to 0.996) and comorbidity (OR 0.81, 95% CI: 0.692 to 0.943) were inversely associated, and total number of drugs (OR 1.15, 95% CI: 1.070 to 1.229) were directly associated. Drug classes most commonly associated with drug-related hospital admissions (main cause) were psychoactive medications (38, 33.0% of cases), antiepileptic drugs (11, 9.6%), opioids and non-steroidal anti-inflammatory drugs (both 10, 8.7%).

**Conclusion**

ADEs are an important cause of hospital admission in Acute Geriatric Units. In elderly people older than 75 years’ old polypharmacy should be carefully reviewed to prevent severe ADE and associated consequences, such as hospital admissions. Hospital pharmacists can play a role in the geriatric teams contributing to Comprehensive Geriatric Assessment regarding medications and detecting ADEs.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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