Prescription of sedative drugs during hospital stay: a Swiss prospective study

Laurence Schumacher[1], PharmD; Maria Dobrinas[1], PharmD, PhD; Damien Tagan[2], MD; Annelore Sautebin[2], MD; Anne-Laure Blanc[1], PharmD, PhD*; Nicolas Widmer[1,3], PharmD, PhD*

[1]Pharmacie des Hôpitaux de l'Est Lémanique, Vevey, Switzerland
[2]Internal Medicine Department, Hôpital Riviera-Chablais, Vaud–Valais, Vevey, Switzerland
[3]Division of Clinical Pharmacology, Lausanne University Hospital, Lausanne, Switzerland

*Anne-Laure Blanc and Nicolas Widmer contributed equally to the supervision of this work

Abstract

Background: In recent years, the number of prescriptions for sedative drugs has increased significantly, as has their chronic use. Moreover, sedative use is frequently initiated during hospital stays.

Objectives: This study aimed to describe new prescriptions of sedatives during hospital stays and at discharge.

Methods: This observational, prospective study took place in an internal medicine ward of a Swiss hospital over a period of three months in 2014. Demographic (age, sex, diagnosis, comorbidities) and medication data (chronic use of sedatives, new regular or PNR prescriptions of sedatives, drug-related problems) were collected. Sedative medications included: benzodiazepines, Z-drugs, antihistamines, antidepressants, neuroleptics, herbal drugs, and clomethiazole. McNemar's test was used for comparison.

Results and discussion: Of 290 patients included, 212 (73%) were over 65 years old and 169 (58%) were women; 34% (n = 98) were using sedatives chronically before their hospital stay, and 44% (n = 128) had a prescription for sedatives at discharge – a 10% increase ($p < 0.05$). Sedatives were newly prescribed to 37% (n = 108) of patients during their stay. Among these, 37% (n = 40) received a repeat prescription at discharge. Over half of the sedatives were prescribed within 24h of admission. Drug-related problems were detected in 76% of new prescriptions, of which 90% were drug–drug interactions.

Conclusion: This study showed that hospital stays increased the proportion of patients who were prescribed a sedative drug at discharge by 10% (absolute increase). These prescriptions may generate chronic use and expose patients to drug-related problems. Promoting alternative approaches for managing insomnia are to be recommended.

Published in : Drugs - Real World Outcomes, 4(4), 225-234 (2017) doi: 10.1007/s40801-017-0117-6

Contact: laurence.schumacher@phel.ch