



THE RECOGNITION/RECONCILIATION PROCESS IN ELDERLY PATIENTS: A RETROSPECTIVE STUDY IN GERIATRIC AND INTERNAL MEDICINE WARDS

M.T. Chiarelli¹, S. Antoniazzi², F. Venturini¹, M.C. Lodi¹, V. Ladisa¹, A. Nobili³, L. Pasina³, M. Porzio⁴, P. Santalucia², P.M. Mannucci²

¹ Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, UOC Farmacia, Milano, Italy, ² Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Direzione Scientifica, Milano, Italy
³ IRCCS - Istituto di Ricerche Farmacologiche Mario Negri, Neuroscienze, Milano, Italy, ⁴ Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, UOC Medicina Interna 1B, Milano, Italy.

BACKGROUND

Polypharmacy, commonly used in the elderly, is an important risk factor for drug related problems. In this context, the hospital pharmacist can contribute in supporting clinicians in promoting the safe use of medicines.

PURPOSE

To identify the need of an appropriate medication reconciliation in a sample of hospitalized elderly patients

METHODS

Medical records of patients ≥ 65 years in polipharmacy (≥ 5 drugs) admitted during a one month period in 2014 to 5 general medicine and geriatric wards were retrospectively reviewed. The following data were collected by a hospital pharmacist: number of prescribed drugs, dose omission, frequency, administration route, pharmaceutical form, and potential drug drug interactions, classified by clinical relevance according to the INTERcheck® software.

RESULTS

We analyzed the medical records of 75 patients (36 men, 39 women, mean age 81 years). Overall, patients were admitted with 634 drugs used at home; in the first 24 hours after admission and at discharge, 723 and 645 drugs were prescribed, respectively (Fig. 1).

At the recognition stage, the dosage form was omitted in 17% of prescriptions, the dose in 12%, route of administration in 20%, frequency in 20% (Fig.2).

At discharge rates of omission decreased to 2% for dosage form, 2% for dose, 7% for route of administration, 2% for frequency (Fig.2).

Overall, 1061 potential drug-drug interaction were identified (Fig.3). In 13 medical records medications were not prescribed in accordance with the hospital formulary; allergies/intolerances have not been taken into account in 2 discharge letters and in 2 inpatient prescriptions, while 9 suspected adverse drug reactions were not notified (Table 1).

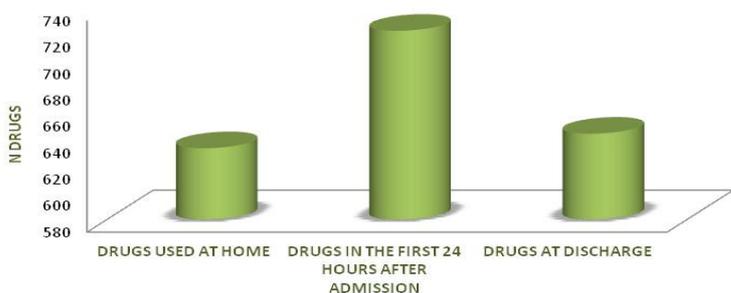


Fig.1: N. Drugs used at home, in the first 24 hours after admission and at discharge

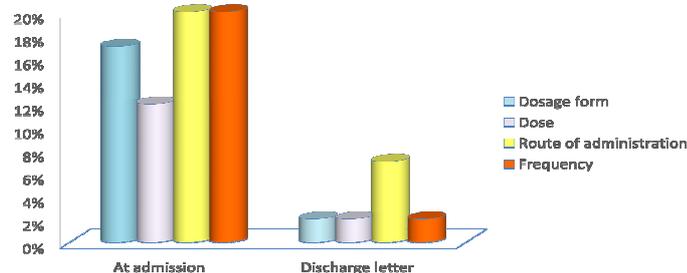


Fig.2: Omitted information in the recognition process, home therapy (n = 634 drugs) and discharge letter (n=645)

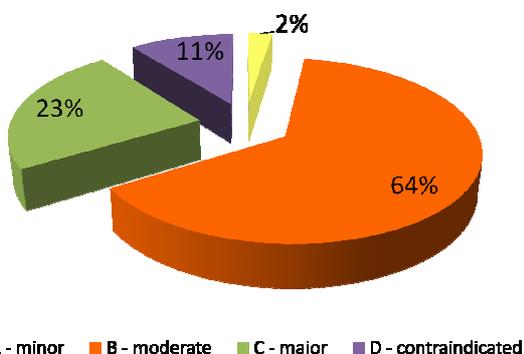


Fig.3: Potential drug – drug interactions detected in the overall prescription profiles (n = 1061 pDDIs on 2002 prescribed drugs)

CONCLUSIONS

The review of the actual process of accuracy of drug registration in the patient's medical record highlights the need of a more structured procedure. An active role for hospital pharmacists is foreseen, in order to ensure a safer use of medicines

| Drug Related Problem | Cases |
|-------------------------|--|
| Unreported allergies | Acetylcholinesterase inhibitors NSAIDs Ketoprofen Sildesam |
| Unreported intolerances | Clopidogrel KCl |
| Unreported ADRs | Anticoagulants poisoning Iatrogenic dermatitis by allopurinol Iatrogenic dermatitis by lenalidomide Diarrhea by clopidogrel Benzodiazepine abuse Hypothyroidism by amiodarone Confusional state by levofloxacin Hypertensive syndrome by piperazine/tazobactam Dermatitis by ciprofloxacin |

Table 1: Drug related problems