Background and importance

Medication errors at hospital admission are common, increasing morbidity and mortality. The pharmacist helps prevent the occurrence of medication-related problems through medication reconciliation.

Objective

Analyze the pharmaceutical interventions performed during the implementation of a medication reconciliation (CM) program upon hospital admission to reduce medication errors.

Materials and Methods

Observational, prospective study (October 2018- September 2019). Patients older than 65 years who received at least 5 drugs with more than 24 hours of admission in the General Surgery and Urology units were included. Variables considered: age, sex, number of prescribed drugs and medication errors (ME). The best pharmacotherapeutic history was developed, including diagnosis, medical history, and complete list of chronic home medication, consulting the electronic history program of electronic prescription and electronic recipe. This information was completed with the interview with patient/caregiver. In case of finding any discrepancy, the responsible doctor was contacted.

Results

- Median age: 75 years
- 56.6% were male
- 553 patients were conciliated
- 4567 drugs were conciliated
- 8.2 medications/patient at admission
- 4567 drugs reconciliated
- 2404 discrepancies
- 1586 (65.9%) justified
- 818 (34.1%) unjustified or ME

The most frequent ME were: omission (90.17%), dose (2.7%), frequency, schedule or route of administration (1.69%) and therapeutic duplicity (1%).

Others, with a degree of acceptance of 62%, correcting the discrepancy in most cases before 24 hours have elapsed. Communication with the doctor was done by electronic messaging in 91% of cases.

Conclusions

We observe that during the medication reconciliation numerous ME are detected, the majority of omission of medications. The involvement of the pharmacist, integrated in a multidisciplinary team together with doctors and nurses, allows to detect discrepancies, obtaining a high percentage of acceptance of the interventions, thus reducing the ME. The medication reconciliation programs allow detecting and resolving discrepancies, preventing medication errors in healthcare transitions.