

Medication errors and their severity detected in the observation area of an emergency department of a tertiary hospital.

G. Romero Candel 1 , J. Marco del Río 1 , N. Martínez Monteagudo , E. Domingo Chiva 1 , M. Díaz Rangel 1 , F. Sánchez Rubio 1 , I. Pérez Alpuente 1 , F. Bautista Sirvent , V . López Martínez , A. Valladolid Wals 1

¹Pharmacy Department.

Complejo Hospitalario Universitario de Albacete. Albacete (Spain).



CP-132

Objetives

To describe the types of medication errors (EM) and severity in the observation area of an emergency department from a tertiary hospital

MATERIAL AND METHODS

It is a one-month descriptive and prospective study. Variables included in the analysis were: Age, gender, medical comorbidities, patient pharmacotherapeutic history, reason for admission, emergency and home medication and preparation and administration of medication. The type of EM was classified according to the "Guidelines on Preventing medication errors in hospitals" issued by the American Society of Hospital Pharmacists(AASHP) and the severity was addressed according to the "Taxonomy of medication errors(1998)" from the Coordinating Council for Medication Error Reporting and Prevention(NCCMERP).

RESULTS

A total of 157 pharmaceutical interventions(PI) were performed in 113 patients, an average of 1.38 ± 1.66 per patient. Mean age was 71 ± 16.4 years. 72% were men. Mean value for comorbidities per patient was 3.34 ± 1.55 . Mean values for home medications were 7.6 ± 4.25 and 5.4 ± 4.25 administration medication in the observation area 5.4 ± 4.25 .

Most frequent causes for emergency admission were: 28% cardiac, 17% respiratory, 13% gastrointestinal, 8% neurological, 8% respiratory infection, 5% metabolic disorders, 5% cardio-respiratory problems, 4% cancer malaise, 3% altered general condition.

Drug groups for which interventions were made were: 30% cardiovascular, 18% respiratory 8% antibiotics, 7% antiepileptics, 7% immunosuppressive, 7% antidiabetic, 4% anticoagulants. The most common types of ME were: prescribing errors (omission of dose, route or frequency)(48%), medication not prescribed(37%), wrong dose(5%), wrong transcription(4%), improper monitoring(3%), omission of treatment(2%) and preparation error(1%).

Regarding severity, 44% of errors impacted the patient but did not produce any damage, 38% the error occurred but did not impact the patient, 6% affected the patient and required monitoring, 4% caused temporary damage to the patient and required intervention, 4% caused temporary harm to the patient and prolonged hospital stay, 2% caused a life-threatening condition to the patient and required intervention to keep him alive and another 2% caused temporary harm to the patient.

CONCLUSION

The presence of a pharmacist in the emergency department positively contributes to detect medication errors and to make recommendations to physicians

No conflict of interest to disclose

Author for correspondence: GOYOFARMA@GMAIL.COM

