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BACKGROUND

- The emergency departments have operating characteristics that make them especially prone to the occurrence of medication errors (ME). These units represent one of the departments with the highest incidence of errors with serious outcomes.
- ME are associated with variable clinical outcomes that range from inconsequential to death.
- Apart from this pressing safety problem, ME mean an important economic impact that could be avoided with corrective measures.

OBJECTIVES

- To evaluate the occurrence of ME in the prescription charts in an emergency department observation unit (EDOU).
- To identify the associated risk factors.

MATERIAL AND METHODS

- Observational retrospective descriptive study in a general hospital.
- The sample of the study comprised patients later admitted to internal medicine from the EDOU. Patients admitted in a vital emergency situation were excluded.
- 1 month prescription charts were collected. Based on these data, we registered all incomplete prescriptions (missing dosage or administration route). Further analysis for omeprazole, furosemide and nebulised mixture of salbutamol-ipratropium was developed.
- We analysed the treatment prescribed for the acute condition.
- Demographic data (sex and age) were registered. IBM SPSS Statistics-20® was used for the statistics analysis.

RESULTS

- We identified 98 patients, of whom 4 met the exclusión criteria.
- Distribution for sex and age was 52.2% men and 81.6 ±10.32 years. Median number of medications prescribed was 6.8± 3.4.
- Among these 94 patients, **44 (46,8%) presented an incomplete prescription.**
- Results regarding the aforementioned drugs are showed in table 1:

	Omeprazole	Furosemide	Neb. Mixture salbutamol Ipratropium
% Missing dosage	27.08	58.06	48
% Missing administration route	12.50	9.67	
% Missing dosage and administration route	2.3	3.7	

- **Patients aged 80 years or more were more likely to suffer from ME (p < 0.05).**

CONCLUSIONS

- The findings of this study indicated **an important opportunity for improvement.**
- Similar to other published studies, we found a high and potentially **preventable incidence of ME** in the EDOU.
- **Incorporating a pharmacist into an emergency department should be considered as a complement to healthcare in hospitals.**