Abstract **4CPS-294**

SUSPECTED ADVERSE DRUG REACTIONS IN THE EMERGENCY SETTING: ANALYSIS FOR IDENTIFICATION OF HIGH RISK POPULATIONS AS POSSIBLE TARGETS FOR PHARMACIST INTERVENTION

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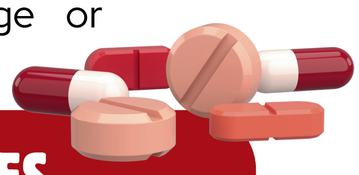
BACKGROUND AND IMPORTANCE

Suspected adverse drug reactions (sADRs) represent a significant cause of Emergency Department visits and hospitalizations, with a clinical and economic impact.

Continuous investigation of sADRs enables the identification of risk patterns, particularly in high-risk populations, due to age or polypharmacy.



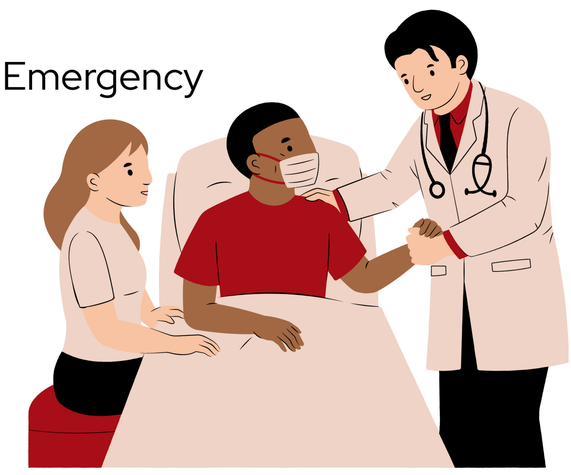
AIM AND OBJECTIVES

- To describe the characteristics of sADRs leading to Emergency Department visits in a University Hospital.
- To identify high-risk populations as potential targets for pharmacist interventions.

MATERIALS AND METHODS

Suspected ADR reports submitted by the Emergency Department to the National Pharmacovigilance Network from January 2023 to July 2025.

- Target population: patients admitted to the Emergency Department because of a sADR.
- Inclusion criteria: adults (⩾18 years old).



Data analysis:
age, sex, suspected drugs,
MedDRA preferred terms, seriousness,
causality (Naranjo algorithm),
hospitalization,
polypharmacy (⩾5 medications),
potential inappropriateness
(Beers Criteria
for ⩾65 years).

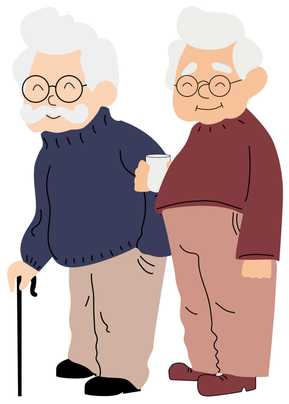
-Categorical variables expressed as frequencies and percentages.
-Continuous variables as means and standard deviations.

RESULTS

416
reports/patients analysed

712
total sADRs

207 (50%)
patients ⩾65 years old

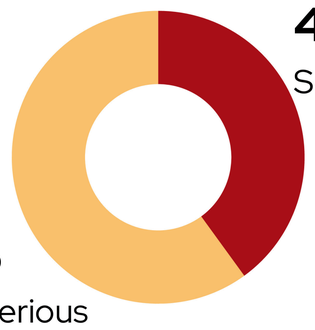


57%
female patients

Mean Age
61 ± 21 years

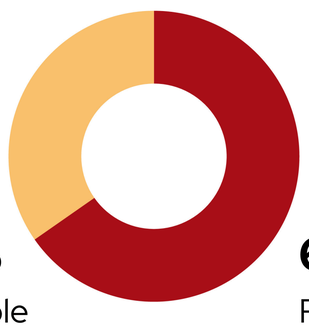
Required **hospitalization**
132 (19%) sADRs
107 (81%) sADRs classified as serious
72 (17%) patients

Seriousness of sADRs



40% Serious
60% Non-Serious

Causality of serious sADRs



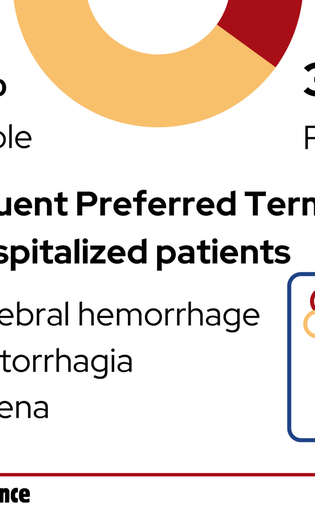
35% Possible
65% Probable

Frequent Preferred Terms
- Allergic reactions
- Nausea
- Hemorrhage
- Rectorrhagia

Most commonly suspected drugs
- Amoxicillin/clavulanate
- Apixaban
- Rivaroxaban
- Ibuprofen

16 (4%)
patients ⩾65 years old with potentially inappropriate medications according to Beers Criteria

Causality of serious sADRs
(potentially inappropriate medications)



65% Possible
35% Probable

48 (12%)
patients with polypharmacy

Causality of serious sADRs
(polypharmacy)

64% Possible
36% Probable

Frequent Preferred Terms in hospitalized patients
- Cerebral hemorrhage
- Rectorrhagia
- Melena

Most commonly suspected drugs in hospitalized patients
- Rivaroxaban
- Warfarin
- Dabigatran etoxilate

CONCLUSION AND RELEVANCE

Characterization of Emergency Department sADRs was essential to detect high-risk populations as possible targets for pharmacist interventions. Approximately 16% of all Emergency Department sADRs requiring hospitalization (12% related to polypharmacy and 4% to potentially inappropriate prescriptions) could represent potential targets for such interventions. Anticoagulants would be the main drug class to attention.

Reference
1. Brandariz-Núñez, David et al. "Prevalence of adverse drug reactions associated with emergency department visits and risk factors for hospitalization." "[Artículo traducido] Prevalencia de reacciones adversas a medicamentos asociadas a visitas al servicio de urgencias y factores de riesgo de hospitalización." Farmacia hospitalaria : organo oficial de expresion cientifica de la Sociedad Espanola de Farmacia Hospitalaria vol. 47,1 (2023): T20-T25. doi:10.1016/j.farma.2022.12.007

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