

PREVENTION OF DISPENSING MEDICATION ERRORS IN ELECTRONIC PRESCRIPTIONS

Cantudo Cuenca MR, García Valdés MM, Caballero Romero A,
González Sánchez B, García López Á
Pharmacy Unit. Hospital Virgen de las Nieves, Granada (Spain)



COP
ENHA
GEN 20
25

Background and Importance

Although electronic prescribing systems offer many advantages, including reduced medication errors, numerous studies indicate that errors in drug prescription remain prevalent. These lead to important consequences, including patient safety issues and increased healthcare-related costs. It is therefore necessary to implement tools that prevent the incorrect dispensing of medication

Aim and Objectives

To implement an **electronic tool to preventively discontinue potential errors** in home medication prescriptions and alert the prescribing physician so that the error can be solved

Material and Methods

Prospective study (1-March to 31-July-2024)
Tertiary-care hospital

Potential medication errors detected in outpatients were **discontinued** through an **electronic tool linked to the patients' home prescriptions**

The prescribing physician was notified on the day the medication was discontinued

The resolution by the prescriber was also evaluated after one week (deadline for modification of these pharmaceutical interventions in the tool)

Classification of errors

1	Therapeutic duplication
2	Incorrect dosage
3	Completed course of treatment not discontinued in electronic prescription and dispensing
4	Therapeutic inadequacy (contraindication, overdose,...)

Variables

- electronic medical records
 - e-prescribing and dispensing system
- ✓ Sex and age
 - ✓ Polypharmacy (≥5 medications)
 - ✓ Therapeutic drug group
 - ✓ Prescribing service

Results

50 medication errors

46 patients

62%



61 years
[IQR: 24–78]

84% polymedicated

Number of drugs prescribed:
9 [IQR: 4–14]

1	Therapeutic duplication	62%
2	Incorrect dosage	14%
3	Completed course of treatment not discontinued	8%
4	Therapeutic inadequacy	16%

Antidiabetic agents: **28%**
Drugs for treating hypercholesterolaemia and hypertriglyceridaemia: **20%**
Anticoagulants: **12%**
Bisphosphonates: **12%**
Methotrexate: **8%**

Prescribers

Primary care physicians: **36%**
Internists: **24%**
Cardiologists: **12%**
Neurologists: **6%**
Pulmonologists: **6%**
Others: **16%**

Suspension was accepted for **96%** of potential medication errors

Conclusion and Relevance

Although technology has contributed to improvements in medication error prevention, prescribing errors continue to occur

The **electronic tool to discontinue prescribing errors contributes to patient safety** by preventing potential dispensing errors, specially in polymedicated patients

The majority of the pharmacist interventions were accepted by the prescribing physician



mariar.cantudo.sspa@juntadeandalucia.es

5PSQ-019