

# 4CPS- 111 IMPORTANCE OF IMPLEMENTING A CLINICAL PHARMACOKINETIC UNIT IN HOSPITAL PHARMACY SERVICE

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## BACKGROUND AND IMPORTANCE

Pharmacokinetic monitoring is a tool used in therapeutic optimization to achieve the best clinical results and minimize the incidence of adverse effects

Computing software are used to integrate patient data into population models through which pharmacists can establish the optimal dosage regimen.



### AIM AND OBJECTIVES

To analyze the influence of pharmacokinetic reports on clinical decision

## MATERIALS AND METHODS

A retrospective observational study was conducted from January to August 2022 in a general hospital.

Patients had at least one plasma concentration of monitored drugs

A pharmacokinetic software was used.

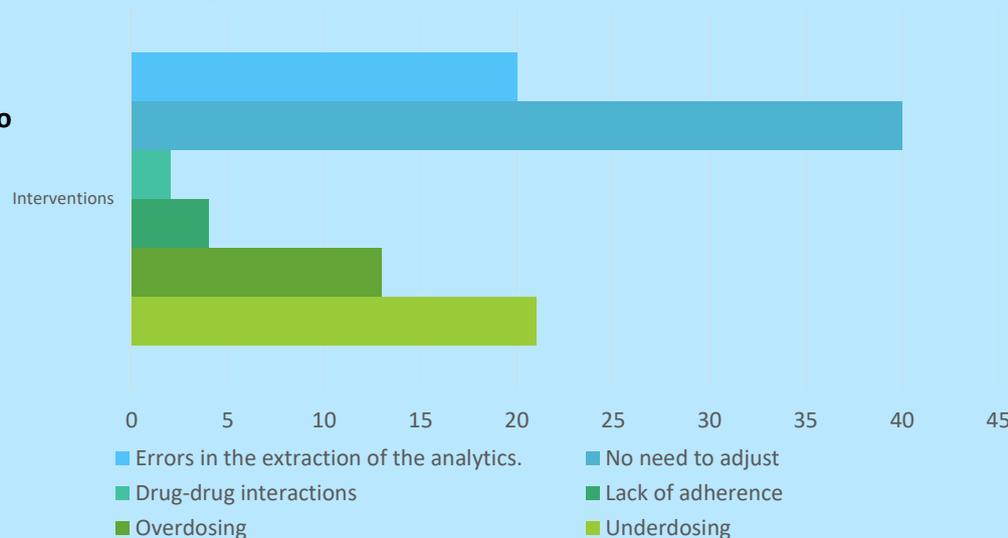
By Bayesian estimation, optimal dosage regimen was calculated.

Based on these data, the pharmacist prepared the pharmacokinetic report and dosage recommendations for the physician.

## RESULTS

- 182 patients and 395 interventions were evaluated.
- 71% of the recommendations addressed to physicians were accepted.

Clinical services with more pharmacokinetic reports	
Internal medicine	48%
Psychiatry	19%
The most common monitored drugs	
Digoxin	24%
Valproic acid	22%
Vancomycin	18%



## CONCLUSION

- The most common dosage adjustment was due to underdosing so that the efficacy of the treatment was compromised.
- It should also be noted that there is a high percentage of errors in the analytic extraction procedure.
- Health professionals who perform the sample collection must be properly trained.
- Clinical pharmacokinetics is a tool that allows us to optimize the patient's dosage regimen

