

Pharmacist in securing the drug circuit: from prescription to administration (analysis and actions)



C. Muziotti, (1), J.Fodimbi (1), C. Unia, F. Santin, L. Dol (1)
(1) Pharmacy, Centre Hospitalier Hyères



POSTER
5PSQ-002

Background and importance

In a multidisciplinary hospital with 426 beds, **roles of the hospital pharmacist are varied** and drug circuit presents many risks of **medication error**. According to the WHO, the roles of pharmacists are “the Seven –star Pharmacist”: care giver, decision maker, communicator, leader, manager, life long learner and teacher.

Aim and objectives

Objective : measure effectiveness of actions taken by pharmacists **to reduce medication errors**: from prescription to administration.



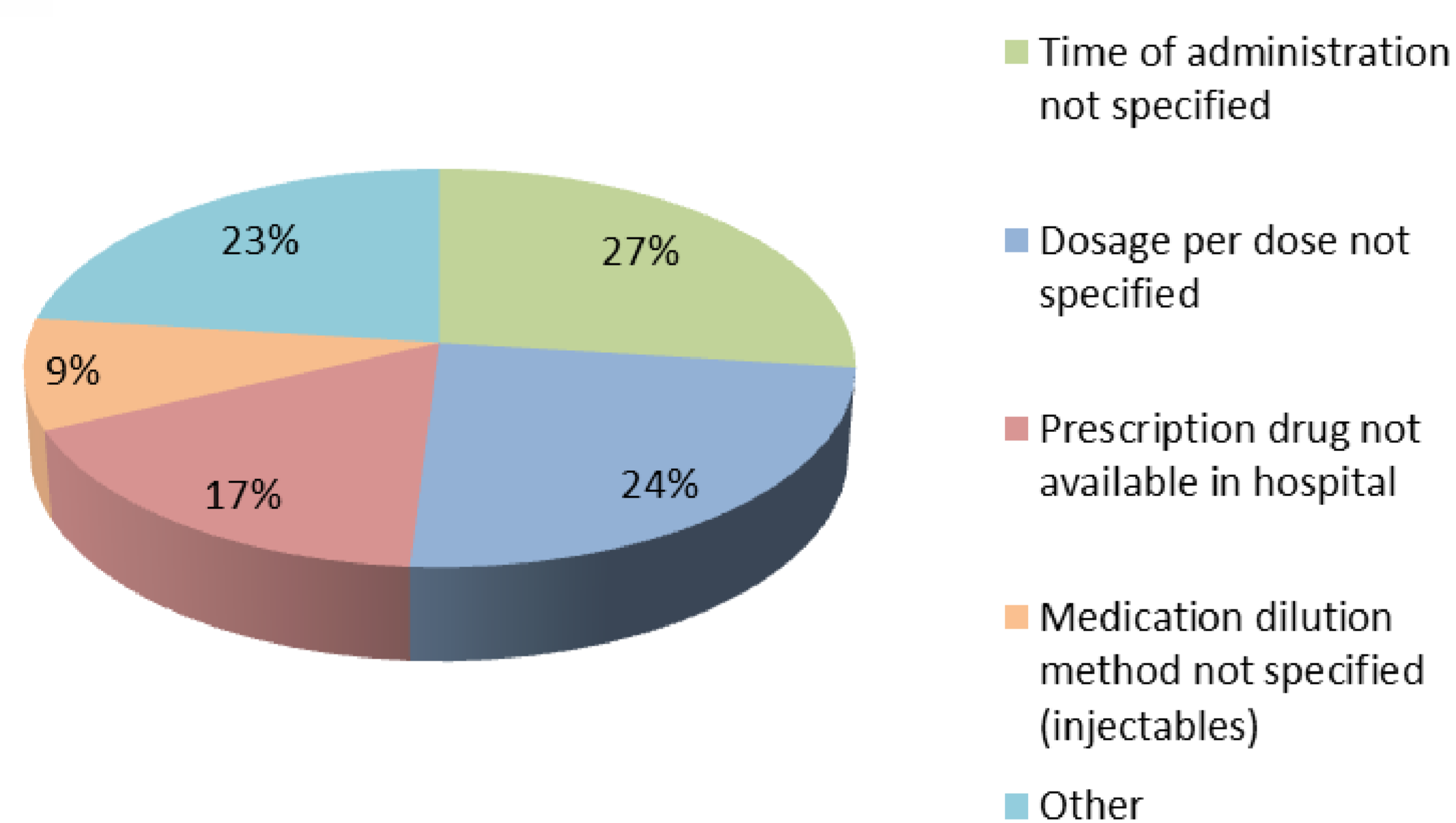
Material and Methods

Between 2019 and 2022, various stages of drug circuit were audited using previously validated audit grids. A statistical study comparing the error rate before and after the implementation of improvement actions was carried out.

- **Prescription** of all injectable drugs has been formalized; new doctors arriving at the hospital have a formation
- **Medication reconciliation**: in the event of a discrepancy observed, doctor is systematically informed, a pharmacy student has been assigned to the surgery unit.
- Errors not detected during **pharmaceutical validation** were presented to the team of pharmacists.
- **Dispensation** : Measures to reduce risk of task interruption were implemented during dispensing (dedicated emergency telephone line, redefining tasks).
- Concerning **administration** of medication: training workshop days for nurses have been created and new arrivals are trained by a pharmacist

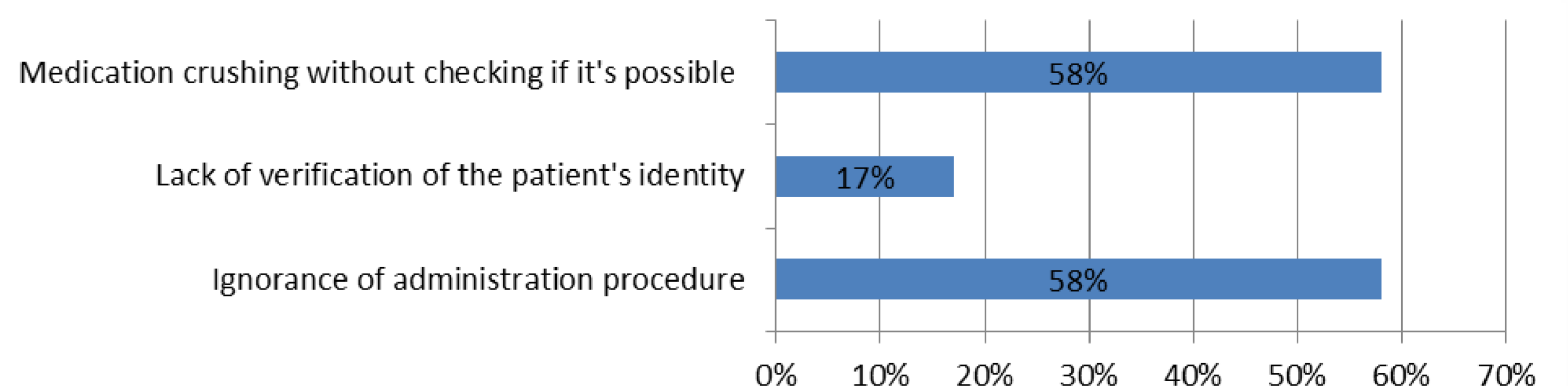
Results

→Main prescription detected errors

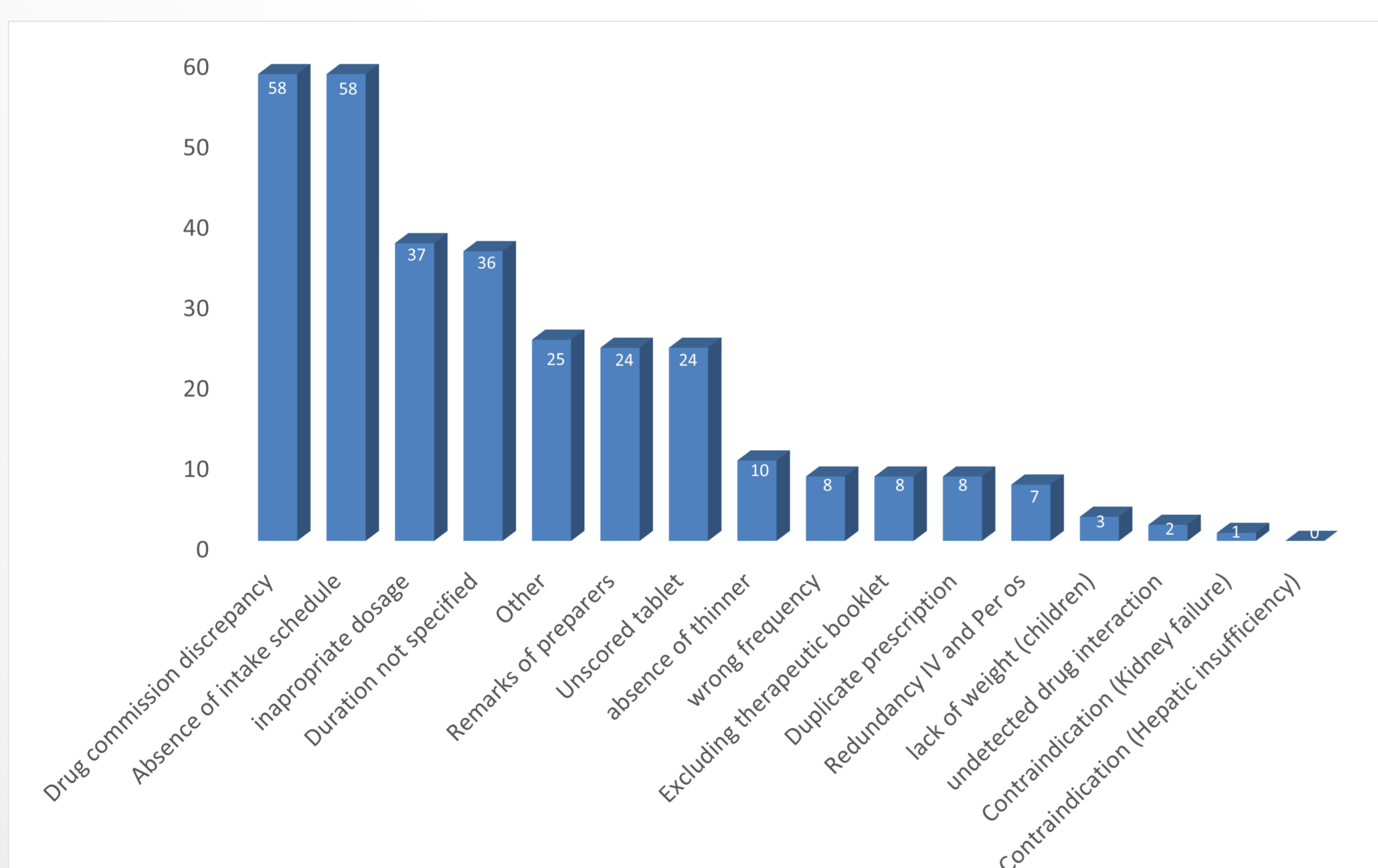


→Dispensation : 2,93% errors detected during nominative dispensation

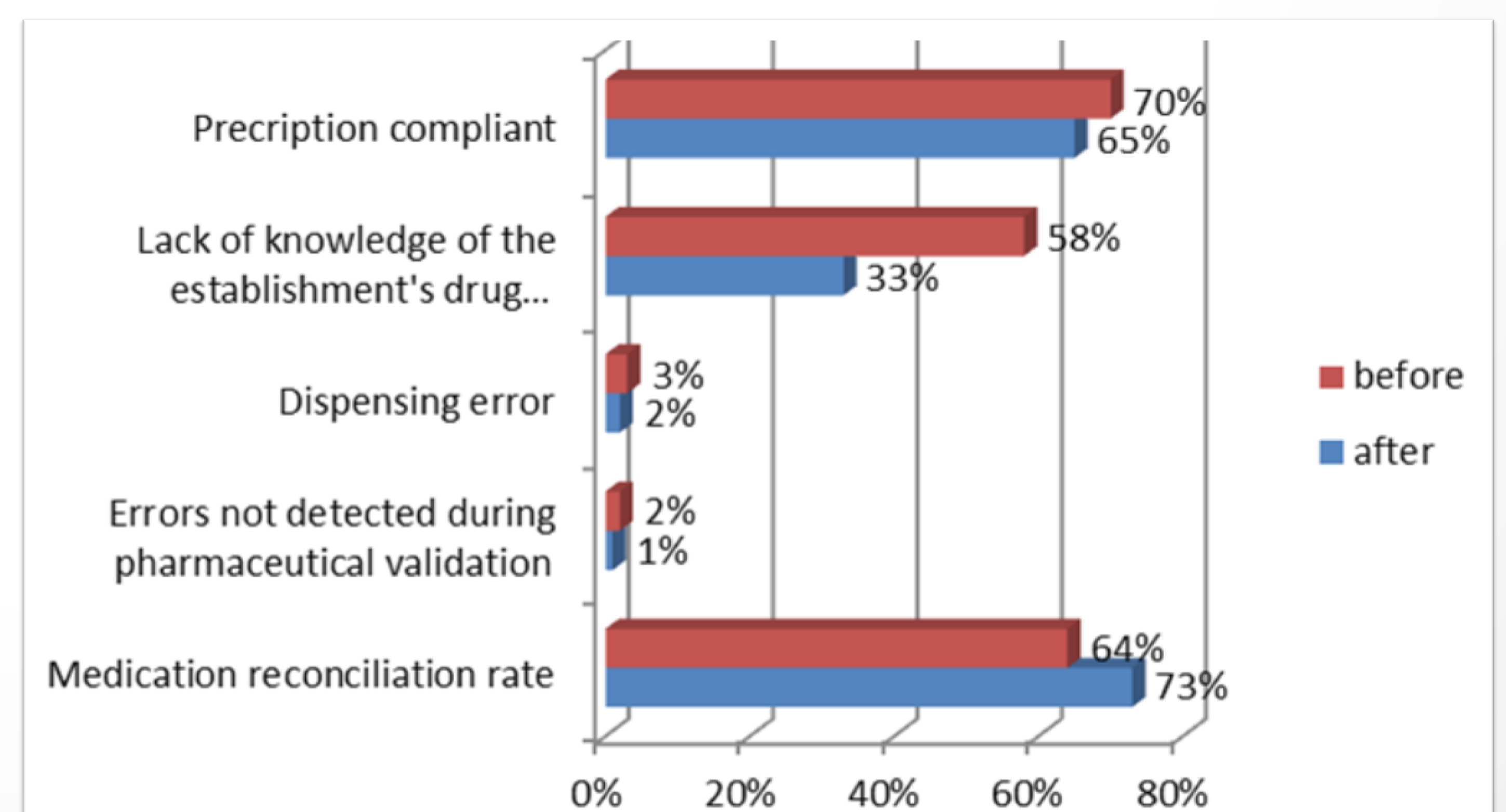
→Administration detected errors



→Validation : not detected errors



→Difference between before and after actions taken by pharmacists to reduce medication errors



→Results showed a **statistically significant improvement** in certain criteria (α 5%) : medication reconciliation rate increased ; errors not detected during pharmaceutical validation ; dispensing error ; lack of knowledge of the establishment's drug administration procedure.

→ **Certain criteria have deteriorated**: prescription compliant

Conclusion

This study has made it possible to objectify that actions of **pharmacists have been beneficial in management of patients**. However, we find that **actions taken to improve prescription of drugs have not been effective**. It would be interesting to **set up continuous training for doctors** on the use of the prescription software in our establishment.