

PRESCRIPTION ERRORS ASSOCIATED WITH ON-DEMAND MEDICATION RECONCILIATION AT ADMISSION: SUBLINGUAL NITROGLYCERIN AS AN EXAMPLE.

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BACKGROUND

In primary care computerized physician order entry system (CPOES), treatments on demand must have a fixed schedule associated. This is use in order to calculate monthly collection of the medication.

At hospital admission, usually on demand home medication is prescribed with a fixed schedule, causing potential medication errors. Sublingual (sl) nitroglycerin is one of the most implicated drugs in this type of error.

OBJECTIVES

- To estimate and analyse the incidence of medication errors due to the incorrect prescription of on demand home treatment.
- To analyse the prescription of sl nitroglycerin.

METHODS

- Retrospective observational study of a 15 days period.
- Reviewed and registered the day after admission
- Included only patients with home medicines: chronic or on demand.
- On demand meds prescribed with fixed schedule was considered incorrect.

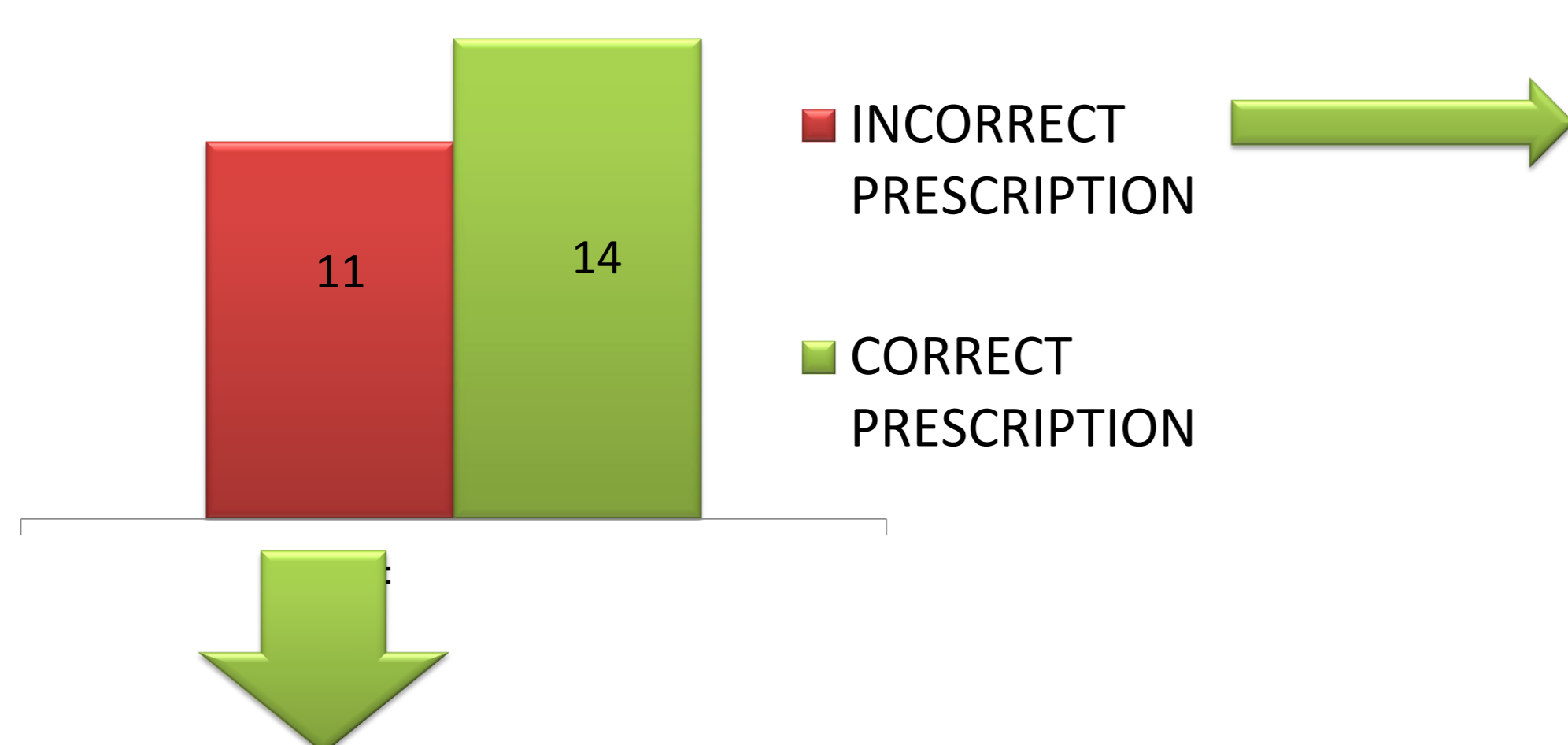
*Analgesics and proton pump inhibitors were excluded because of their high use at hospital.

SL NITROGLYCERIN

- Retrospective analysis of prescription during 60 days
- Patients receiving one dose or initiated in hospital were excluded.
- Prescriptions with a fixed schedule and without indications were considered wrong.
- Prescription correction by pharmacists was also taken into account.

RESULTS

122 patients:
-62 women
-Average age: 69
-Average drugs: 4
-488 medications → **25 prescriptions on demand**



11 meds were prescribed in a fixed schedule incorrectly in 8 patients :

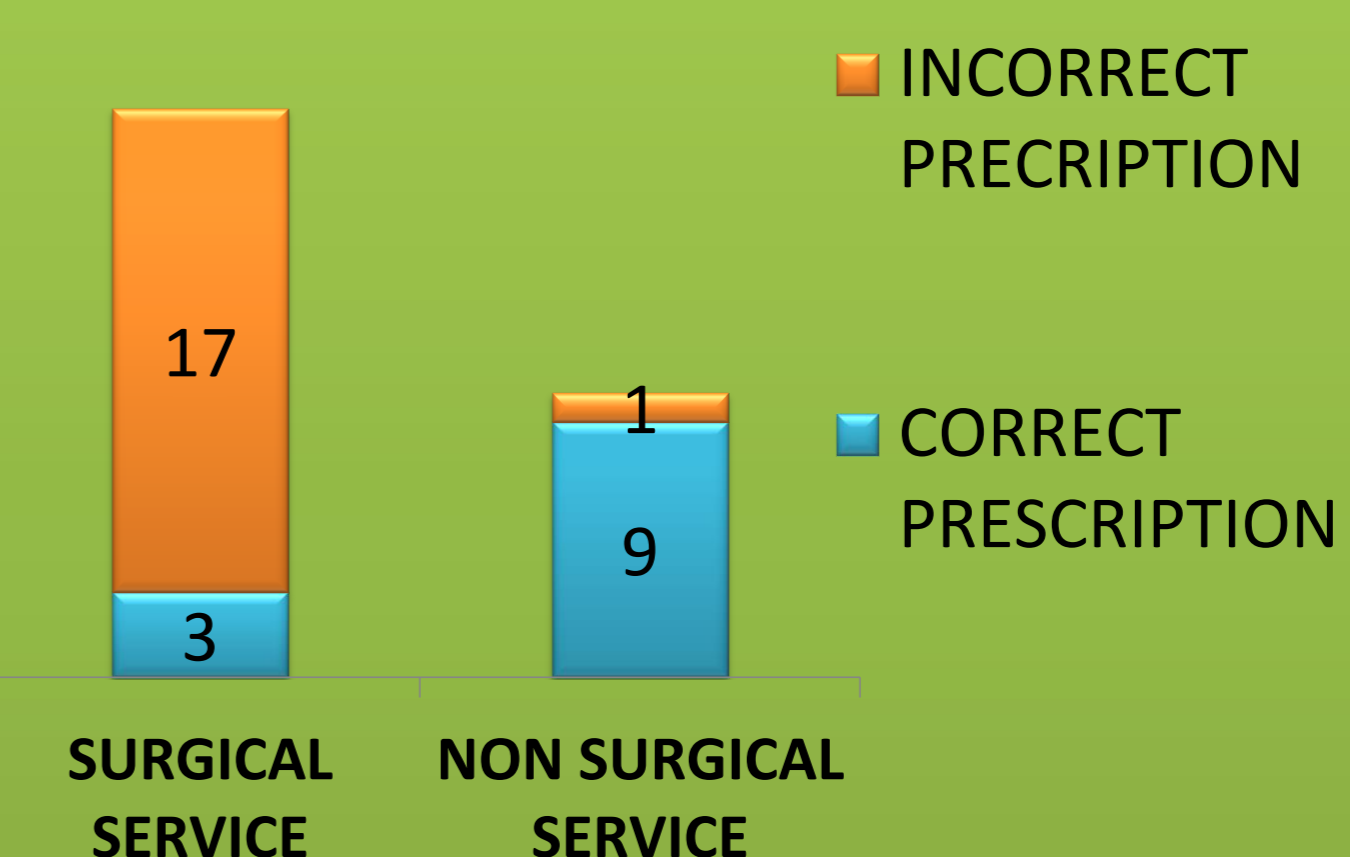
- 10 in a surgical services (7/48 inpatients)
- 1 in non-surgical services (1/74)

In 6 patients at least, one dose was administered

IMPLICATED MEDS:
Ebastine
Furosemide
Loperamide
Mepryramine
Mometasone
Olopatadine
Sl nitroglycerin
Salbutamol
Terbutaline (2)
Tramadol

SL NITROGLYCERIN

30 Inpatients prescriptions :
-18 men
-average age 76
-18 PRESCRIPTIONS were INCORRECT (60%)



incorrect prescriptions were corrected by pharmacists at admission → so no medication error occurred

CONCLUSIONS

- CPOES can be a source of new errors, not observed until its introduction, so pharmaceutical validation is essential in its detection and correction.
- To prevent these mistakes primary care CPOES modification and continuous practice are necessities, especially in surgical services.