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 used 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.

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

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 necessary, especially in surgical services.