Drug related problems and interventions of pharmacists on prescribed medicines in Belgium



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Aim of study

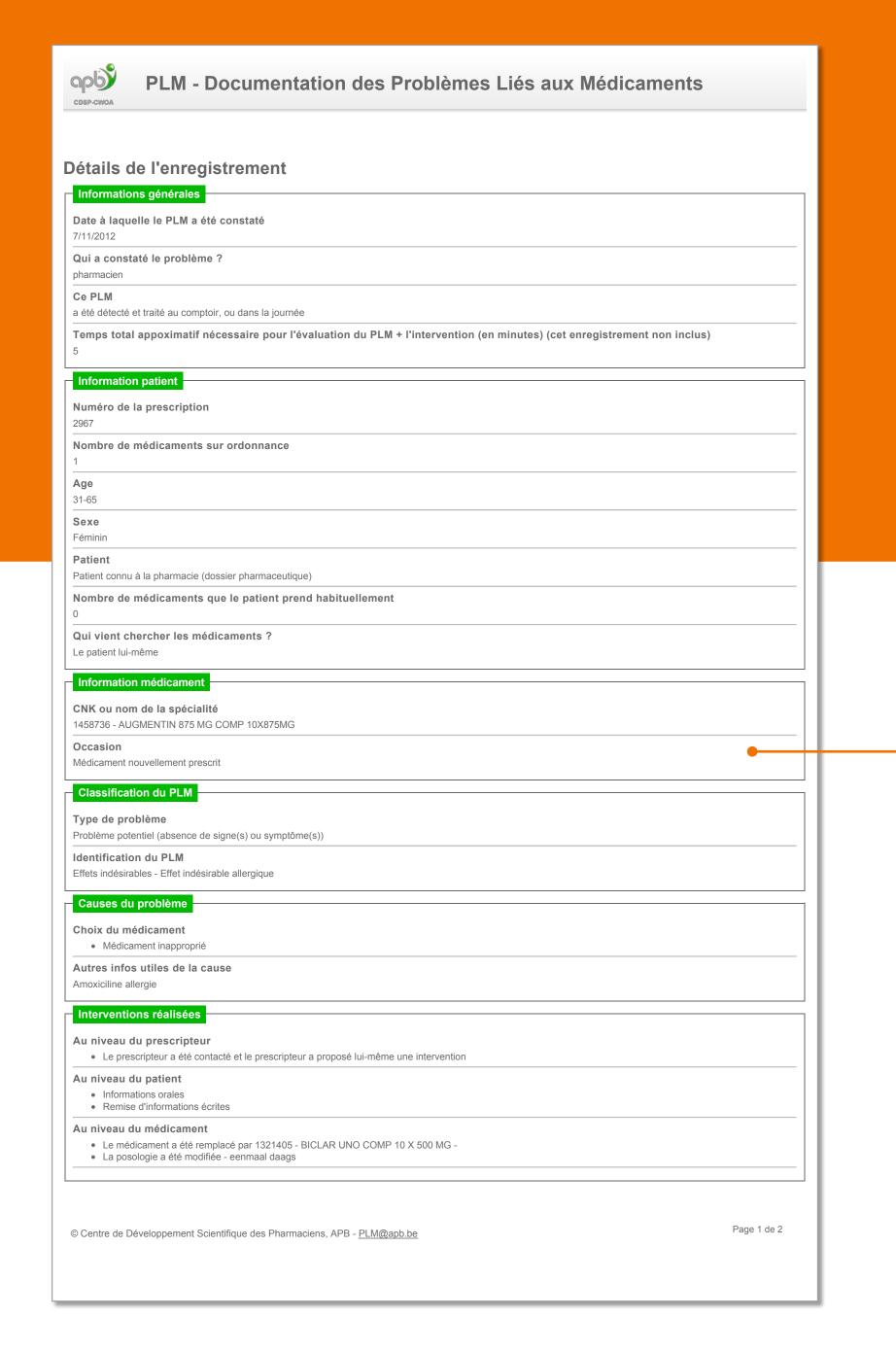
- 1/ To study the frequency and nature of drug related problems (DRP) detected for prescribed medicines.
- 2/ To investigate the nature and frequency of interventions by pharmacists.
- 3/ To study whether there is a difference between DRP detection at the moment of dispensing and in a quiet setting, with possibilities to discuss with other team members or consult other information's sources.

Methods

- Development of a DRP registration tool based on a modified PCNE classification system;
- Evaluation of the web application in a pilot study;
- Classification of DRP's and intervention by tutor pharmacists and their internship students;
- Duration of the study: 5 full or 10 half days.

Setting

Community pharmacy.



Methodology

Internship student follows his tutor pharmacist when he handles prescriptions and dispenses medicines

Tutor pharmacist detects a DRP and resolves it during the dispensing process

Internship student documents DRP detected by his tutor pharmacist and his intervention = registration at dispensing

Internship student analyses prescriptions treated by his tutor pharmacist and compairs the prescription with the medication history

In this second phase, internship student documents the DRP's only if different from those detected by his tutor pharmacist at dispensing = registration a posteriori

Results

Belgian pharmacists participate in the study: 280 tutor pharmacists - internship students conducted the study in November/December 2012 and 250 couples will do so in February/March 2013.

Total number of prescriptions	Number
Prescriptions treated by tutor pharmacists	29.623
Prescriptions with minimum 1 DRP	3.951 (13%)
Drug related problems	Number
Registered DRP's	6.091
DRP's detected when dispensing	5.502 (90%)
DPR's detected a posteriori	589 (10%)
Prescription type	Number
Newly prescribed medicine(s)	2.984 (49%)
Repeat prescriptions	2.998 (49%)
Compounded drugs	109 (2%)

Data available on January 11th, 2013

Drug related problems - Details of a registration of a DRP

Preliminary conclusions

DRP's occur with 13% of prescribed medicines. The majority (90%) is detected at the moment of dispensing. DRP's were evenly detected for newly prescribed medicines as for repeat prescriptions. This study is ongoing. In a further report, we will present more detailed analyses such as nature of DRP's and more common pharmacist's interventions.