

Using the PCNEclassification in Belgium

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Introduction

The identification, the management and if possible the prevention of drug related problems (DRP), are the main responsibilities of pharmacists.

Aim

The aims of the study were 1/ to investigate the frequency and nature of drug related problems detected by community pharmacists, 2/ to inventories the frequency and nature of the interventions by community pharmacists on prescribed medicines, and 3/ to evaluate whether there is a difference between DRP detection at the moment of dispensing versus in a quiet setting (*a posteriori* detection).

Method

All tutors of the participating universities of Belgian were asked to contribute to a observational study. Participating pharmacists quantified DRP's and their interventions on prescribed medicines for 5 days. Registrations were made by using a web tool based on an adapted version of the classification list of PCNE. The registration took place in two phases, at the time of delivery as well as in an a posteriori verification of the prescriptions with the pharmaceutical record file of the patients.

Results

The study was conducted from November 2012 to April 2013 in 534 community-pharmacies with internship. During this period 9.869 prescriptions (15%) with at least one DRP were detected on a total of 64.962 prescriptions treated by tutor pharmacists.

Since there could be more than one problem on a prescription, 15.952 DRP's were registered. 2.597 of the DRP's were detected by a posteriori verification. From the 19.269 causes were 57% technical, 37% clinical and 6% was due to another cause. Under the technical causes an incomplete prescription was the most common. The most frequently registered clinical causes were a drug interaction, an inopportune time of intake, a too high or too low dose and an unsuitable drug. Participating pharmacists solved almost 3 of the 4 detected DRP's. In more than half of the DRP's, the patient was verbally and / or written informed. In 44% of the a posteriori discovered problems, the pharmacist intervened.

Conclusion

Pharmacist detected one or more DRP's with 15% of prescribed medicines. The analysis of the prescription prior to supply the medicines thus appears necessary. The active intervention of the pharmacist in 82.6% of the problems indicates that the pharmacist contributes to the optimization of drug therapy with potentially an increase in the quality of life of the patient and a reduction in the cost of healthcare. The a posteriori discovered DRP's demonstrate the need for medication reviews

with the pharmacist's analyses the medication profile, if necessary together with the patient and / or physician.