Evaluation of a drug-related problem classification tool in community pharmacy daily practice

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Background: An adapted Pharmaceutical Care Network Europe (PCNE) drug related problem (DRP) classification tool has been validated by Belgian pharmacists. The tool was reliable and had adequate validity to measure the frequency and nature of DRPs detected in Belgian community pharmacies.

Purpose: In 2012, a study was initiated for pharmacy students to collect the different DRPs during 5 days of their internship. The aim of this study was to evaluate the daily use of the PCNE classification tool by community pharmacists and their perception of this classification tool.

Methods: A self-completion questionnaire, in a web-based format, was send to 210 pharmacy students from the French-speaking universities of Belgium. It was organized into three different parts. The first part revealed the prescription analysis method at the moment of dispensing or a posteriori, for a new or a repeat prescription. The second aimed to identify whether some complementary information sources are necessary for an optimal DRP detection. The third identified barriers to the tool's use and its advantages in DRP detection.

Findings: In total, 79 students completed the questionnaire. For optimal DRP detection, they needed complementary information about the patients (54% and 75% for patients not known and patients known to the pharmacist, respectively) as well as information from scientific sources, which were mainly Belgian publications (96%). International scientific sources were rarely used in the detection of DRPs (15%). The drug dosage in the patient pharmaceutical file (PF) was checked in 48% and 56% of cases at the moment of dispensing and a posteriori, respectively. Similarly, medication adherence was checked in 44% and 55% of cases at the moment of dispensing and a posteriori, respectively. This suggested that the patient PF was underused, even though its consultation allowed DRPs to be identified (78%). Finally, DRP detection could promote the profession (84%), strengthen the pharmacist-patient relationship (91%) and improve patient monitoring by the pharmacy team (92%). Lack of time seems to be the major barrier to the use of this tool in daily practice (79%), as it is for consulting complementary information sources (70%).

Conclusion: The PCNE classification tool is very helpful for identifying the nature and frequency of DRPs and interventions performed by pharmacists. Pharmacists used substantially the same analysis method at the moment of dispensing and a posteriori, which would allow a protocol to be established that would facilitate the registration of DRPs. However, the time required to complete the tool is too long for daily use.