

D-1463 Evaluation of drug related problems in Belgium : focus on corticosteroids

Background: Pharmacists have an important role to play to detect and resolve drug related problems (DRPs). Most studies have shown that DRPs have a negative impact on clinical results and quality of life but also on health care costs. Corticosteroids are often implicated in DRPs in particular because of their side effects, incorrect use of the inhalation device or lack of adherence.

Purpose: The aim of this work is to identify causes and interventions performed by pharmacists on corticosteroids related problems and to distinguish inhaled and general corticosteroids.

Methods: During 5 days of their internship, 530 students in last year of pharmaceutical sciences in six Belgians' universities had collected DRPs encountered in community pharmacies, as well as interventions performed by pharmacists. DRPs electronic registration was done through an adapted tool based on the classification of Pharmaceutical Care Network Europe (PCNE - v 6.2). This tool was validated by pharmacists and allow to measure frequency and nature of DRPs.

Findings: Pharmacists detected 16 733 DRPs. 555 DRPs (3,3%) was about corticosteroids of which 115 was inhaled corticosteroids. The most common causes of corticosteroids related problems (inhaled and general) are administrative, logistical and fraudulent with an average of 55%. More than a half of these technical causes was incomplete prescriptions. For inhaled corticosteroids, drug/device use problems was the most common clinical causes (28%) which of 88% were related to incorrect use of the inhalation device. For general corticosteroids, the most common clinical causes was drug choice (37%). Drug choice most often included medication interaction (57,5%) and inappropriate medication (13,8%). Pharmacists' intervention was similar with inhaled and general corticosteroids. Pharmacists intervened to patient orally in more than 34% compared to the total of interventions and written in more than 13%. In 14% (inhaled corticosteroids) and 16% (general corticosteroids) of corticosteroids related problems pharmacists did not react. These non interventions included for example interaction and incomplete prescriptions.

Conclusion: Several corticosteroids related problems were detected and solved. However pharmacists barely intervene to non observance and to drug interactions. The introduction of a structured interview between the patient and the pharmacist would enable to educate and inform the patient about his disease and treatment. Therefore, pharmacists' training is essential to perform these interviews. More randomized studies should be done in community pharmacies to evaluate the impact of these interviews on patients and on therapeutic adherence in real time.

Location of Primary Work: Belgium

