BACKGROUND

Previous studies have reported that clinical pharmacists improve medication safety. A clinical pharmacy team (1 senior pharmacist, 1 junior pharmacist, 7 student pharmacists) was deployed in cardiology units (79 beds) to develop medication reconciliation, identify medication errors (ME) and optimize patients’ pharmacotherapy.

OBJECTIVES

Describe and analyse pharmacists’ interventions (PI) in cardiology units during 9 months and evaluate their impact on the management of chronic cardiovascular diseases (CVD).

METHODS

Prospective, non-randomized and observational study performed between December 2015 and August 2016.

RESULTS

• A total of 532 interventions were performed for 339 patients.
• The mean (median) age was 70.4 (72).
• 258 (48.5%) of pharmacists’ interventions were identified by medication reconciliation.
• 98.2% of interventions were accepted.

Type of medication errors | Number (%)  
---|---
Untreated indication | 178 (33.5%)
Supratherapeutic dosage | 107 (20.1%)
Subtherapeutic dosage | 96 (18.0%)
Inappropriate form of administration | 52 (9.8%)
Drug without indication | 26 (4.9%)
Nonconformity to guidelines/contraindication | 22 (4.1%)
Pharmacological advice for medical questions | 16 (3%)
Drug interaction | 15 (2.9%)
Drug monitoring | 9 (1.7%)
Adverse drug reaction | 5 (0.9%)
Pharmacological advice for nurse questions | 4 (0.7%)
Failure to receive drug | 2 (0.4%)

ATC class of medication errors

Impact of pharmacists’ interventions on cardiovascular diseases

Discussions and conclusions

These results highlight a positive impact of pharmacy team on reduction of ME. Prescriptions analysis as well as medication reconciliation are two key points to avoid medication discrepancies.

Pharmacists became a key member in cardiology team. They are involved in therapeutic strategy, indeed most of interventions concern cardiovascular drugs. Moreover we can see that half of these interventions involved treatment of heart failure and acute coronary syndrome, so we can observe that pharmacists can improve the management of these chronic diseases.

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