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Introduction

Different studies have shown that clinical pharmacists can play a great role in **prevention of drug iatrogenicity** and in **therapy optimization**, specially in **elderly** or **polymedicated** patients. [1-4]

Clinical Pharmacy is developing in Belgium in recent years and is promoted by the Federal Public Service (FPS) of Health, Food Chain Safety and Environment.

The objective of this project, financed by the FPS, was to investigate if a clinical pharmacist could contribute to optimize the medical care of the patient in different wards of our hospital.

Methods and Materials

A pharmaceutical care program has been developed in **geriatric, neurologic** and **emergency** units, in the environment of a **university hospital**, where the objectives of education and training of health personnel (doctors, nurses, pharmacists ...) add to the concern of an optimum quality of care.

For 19 months, a clinical pharmacist, or pharmacy students in their final year under the supervision of clinical pharmacist, has participated to the round, carried out medication history and monitored treatment during and after hospitalization.

Patients were selected according to age (≥ 75 years) and number of drugs mentioned in the medical record (≥ 4).

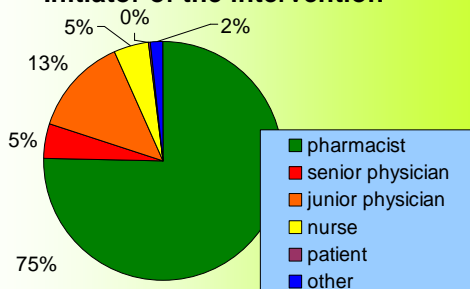
The clinical pharmacist interventions were recorded on standard sheets, and evaluated by a doctor of the medical team who judged the clinical importance of the intervention.

Résultats

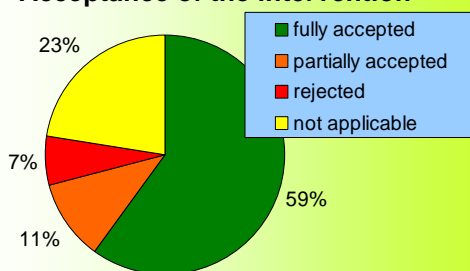
Identification of the problem

	T1	T2	T3	T4
Medication history	8 (7%)	6 (5%)	43 (74%)	10 (15%)
Prescription	17 (15%)	21 (19%)	8 (14%)	19 (29%)
Administration	10 (9%)	7 (6%)	7 (12%)	2 (3%)
Follow-up	75 (67%)	76 (67%)		31 (47%)
Discharge	2 (2%)	3 (3%)		4 (6%)
Total	112	113	58	66

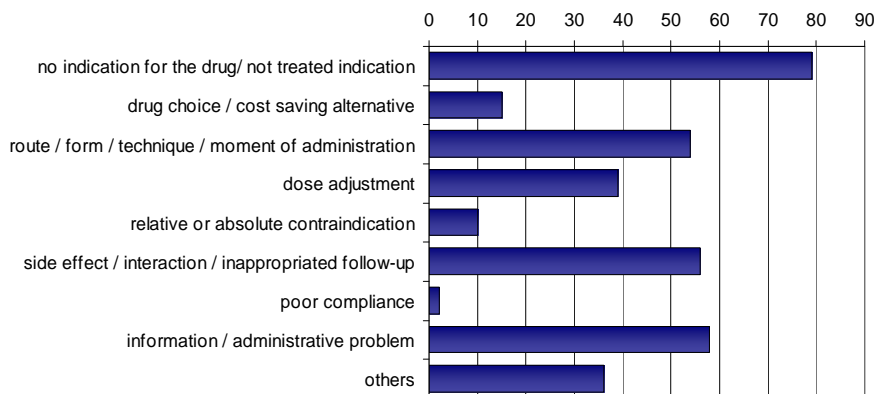
Initiator of the intervention



Acceptance of the intervention



Reason of intervention



T1 : geriatric (6 months 2007); T2 : geriatric (6 months 2008); T3 : emergency (5 months 2008); T4 : Neurology (2 months 2008)

Discussion

349 interventions of clinical pharmacists were recorded in 19 months. Interventions were mainly initiated by the pharmacist (75%), followed by junior physician's questions. Patients were rarely at the origin of an intervention, even if they were very collaborating and receptive to advice. This could be explained by the unusual and not widespread presence of a clinical pharmacist in the wards.

The most important reasons for intervention were: no indication for the drug or not treated indication (23%); changes in route, form, technique or moment of administration (15%); detection of adverse drug effect, interactions ... (16%) and information to the staff (17%).

The interventions were generally well accepted by the medical team (>90% of full or partial acceptance) and evaluated as of major (37%) or moderate (47%) clinical importance.

Conclusions

The added value of the presence of clinical pharmacist in the various services has been demonstrated. The pharmaceutical care program in place is highly valued and claimed by both the medical staff and nursing.

References

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