

EFFECTS OF PHARMACIST'S INTERVENTIONS ON INAPPROPRIATE PRESCRIBING IN A GERIATRIC PSYCHIATRY UNIT

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Introduction

A prospective observational study was conducted in 2012 in order to evaluate prescription of potentially inappropriate medication (PIM) in a geriatric psychiatry admission unit (GPU) of Lausanne University Hospital [1]. The STOPP/START criteria, an explicit screening tool, were used to detect PIM [2]. This observational study showed a high number of PIM. Therefore, introducing a clinical pharmacist in this unit has been suggested as a strategy to improve quality of prescribing by reducing PIM.

Purpose

- **Primary outcome** : Assess the impact of a clinical pharmacist on PIM by measuring acceptance rate of the pharmacist's interventions.
- **Secondary outcome** : Compare STOPP/START criteria obtained during the observational study to those of the interventional study.

Methods

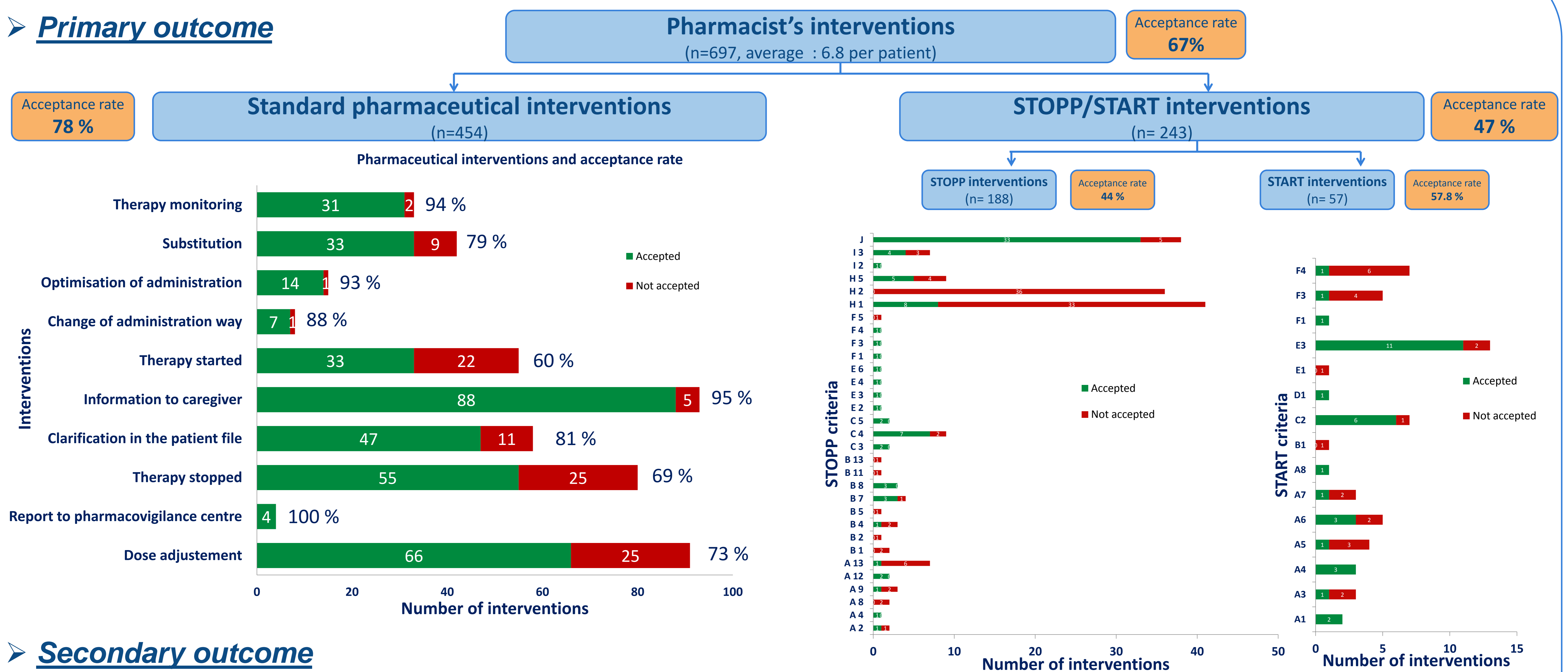
An intensive clinical pharmacy service was implemented in this GPU (16 beds) in order to optimize drug prescription. A clinical pharmacist was integrated in the multidisciplinary team and attended weekly different meetings (pharmacotherapy discussions, new cases ward round, nursing staff reports). A complete medication review have been performed daily (medical history, medication reconciliation, checking for interaction, consultation of the electronic medical notes, laboratory data, detecting PIM with STOPP/START criteria).

These activities could generate pharmacist's interventions to physicians when drug-related problems were observed. Interventions could result from STOPP/START criteria or from standard pharmacist examination. They were categorized using the Swiss Association of Public Health Administration & Hospital Pharmacists classification [3] and communicated to the physicians during meetings, after private discussion or by email. The impact of this activity was measured by the intervention acceptance rate (number of interventions accepted/total number of interventions).

Results

The study took place from July 2013 to February 2014. 102 patients were included.

Primary outcome



Secondary outcome

	STOPP Admission (number/patient)	STOPP Discharge (number/patient)	Reduction observed (%)	p
Observational study	1.65	1.58	3.7 %	0.54
Interventional study	1.45	1.10	24.3 %	0.009

	START Admission (number/patient)	START Discharge (number/patient)	Reduction observed (%)	p
Observational study	0.71	0.57	19.7 %	0.001
Interventional study	0.64	0.32	49.2 %	10 ⁻⁶

This interventional study shows a significant difference between admission and discharge for both STOPP and START criteria. As this has not been observed in the previous study, this difference may be attributed to pharmaceutical's interventions.

Discussion - Conclusion

This study showed a good integration of the clinical pharmacist into the healthcare staff with a satisfactory level of acceptance rate. However, a difference of acceptance between standard and STOPP/START interventions was observed. This difference may be related to the limitations of this explicit tool in geriatric psychiatry. Indeed, some criteria such as STOPP H1/H2 (benzodiazepines and neuroleptic drugs that adversely affect fallers) cannot easily be reduce in a geriatric psychiatry admission unit.

References

- [1] Weibel M.-L. et al. http://www.chuv.ch/pha/pha_home/pha-recherche/pha-recherche-contributions/pha-recherche-contributions-travauxdiplomes.htm
- [2] Gallager et al. Int J Clin Pharmacol Ther. 2008;46(2):72-83.
- [3] <http://www.gsasa.ch/pages/activites/activites-cliniques/?oid=1587&lang=FR>