

# Quality of the preoperative medication history for the patients scheduled for total hip replacement or total knee replacement at the CHU of Liège (QAMP-STUDY)

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## BACKGROUND

Up to 27% of all hospital prescribing errors are related to incomplete medication history obtained upon admission. Accurate medication reconciliation is an important part of medication safety and a subject of growing interest by health authorities. Few data are available about medication reconciliation at the preoperative visit for total hip replacement (THR) or total knee replacement (TKR). **The objective of this study** was to identify major gaps existing in the preoperative medication history and recommend new way to obtain a comprehensive medication history during the preoperative visit.

## METHODS

In a 6-months blinded prospective study conducted from December 2012 to June 2013, all elective THR or TKR patients were interviewed by a clinical pharmacist postoperatively. Patients were identified from the daily surgical list. The medication histories were collected by the clinical pharmacist using a standardized form and compared with the medication information obtained by the anaesthesiologist during the preoperative visit, reported in the medical record. Then, clinical relevance of the discrepancies were evaluated by anaesthesiologists after the data collection period.

## RESULTS

### Population

105 patients were enrolled and included in data analysis  
 Sex (women/men): 63/42 → 60%/40%  
 THR/TKR: 60/45 → 57.1%/42.9%  
 Age, years (mean ± SD) → 64.3±11.6

### Identified discrepancies

Discrepancies	Number	Mean (n=105)	Frequency (%)
<b>Discrepant drugs</b>	<b>486</b>	<b>4.6</b>	<b>53.5</b>
➤ Drugs omission	296	2.8	61.9
➤ Treatment schedule omission	67	0.6	13.8
➤ Dose omission	50	0.5	10.3
➤ Treatment schedule and dose omission	73	0.7	15.0

101 patients (96.2%) had at least one discrepant drug

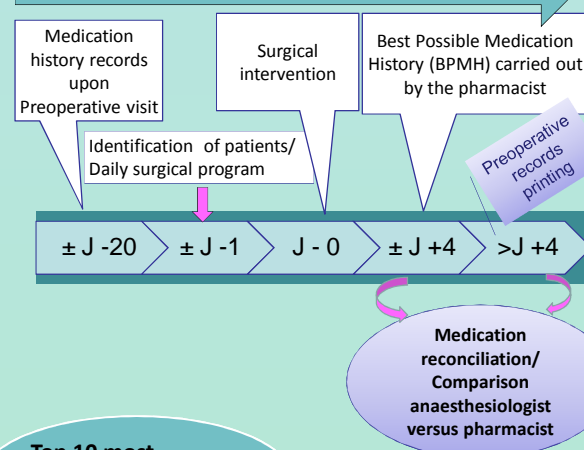
### Clinical evaluation of discrepancies

Clinical severity	Number (n=486)	Frequency %
Level 0 (identified drug for which information on dose or treatment schedule is not important)	188	38.7
Level 1 (discrepancy that doesn't have any influence on perioperative management)	196	40.3
Level 2 (discrepancy that can cause minor harm to patient)	88	18.1
Level 3 (discrepancy that can cause moderate harm to patient)	13	2.7
Level 4 (discrepancy that can cause severe or life threatening harm to patient)	1	0.2

## CONCLUSION

There are numerous errors in the medication history collected preoperatively. This confirms the importance of reviewing procedures for the collection of medication history. Education of anaesthesiologists, use of a dedicated form, active participation of a clinical pharmacist in the preoperative consultation or patient empowerment are possible paths to improvement.

### Methodology chart



### Top 10 most frequent discrepant drugs

