

#### PREVALENCE OF POLYPHARMACY IN ELDERLY HOSPITALIZED PATIENTS

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# **Background**

■ The use of multiple medications and/or the administration of more medications that are clinically indicated, representing unnecessary drug use (polypharmacy) increases the risk of non-adherence, adverse drug reaction and drug interaction. These problems are specially common and relevant in elderly hospitalized patients.

# **Objetive**

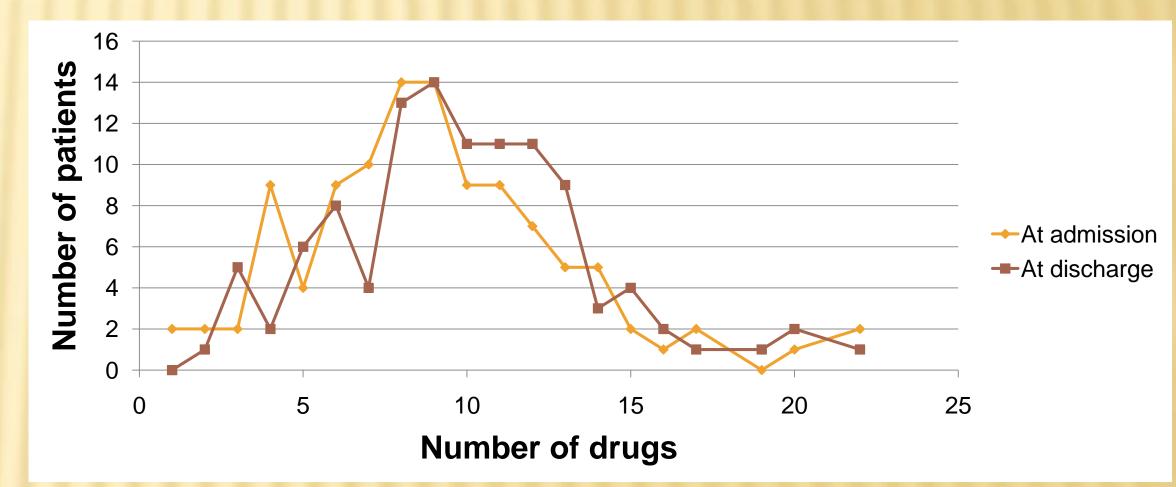
■ Analyze the prevalence of polypharmacy at hospital admission and at hospital discharge in a group of elderly patients, and how the hospital stay modifies this prevalence.

#### Methods

- Patients enrolled in our retrospective study were hospitalized at the Internal Medicine Department during October 2010.
- Only Patients ≥ 75 years old were enrolled.
- Polypharmacy was defined as the concomitant use of five or more medications and high-level polypharmacy was defined as concomitant use of ten or more medications.
- The following data were recorded for each patient: sociodemographic details, functional status, Charlson comorbidity index (predicts the ten-year mortality for a patient who may have a range of co-morbid conditions), diagnoses at discharge, and treatments at hospital admission and discharge.

## Results

- Of the 109 patients enrolled, 61 were women.
- The average age was 82,69 5,15 years.
- At admission, 29,4% of patients were independents.
- The average of Charlson index was 4,62 2,3.
- On average, the patients studied were taking 9,01 4,01 drugs at the time of hospital admission and 9,84 3,83 drugs at discharge. Hospitalization led to a significant increase in the number medications (p=0,001)
- Statistically significant difference was observed between high-level polypharmacy at admission and discharge (p=0,036).



Graphic 1: Prevalence of drugs use at admission and discharge.

% patients	Polypharmacy	High-level Polypharmacy
At admission	87,2%	42,2%
At discharge	91.8%	53.2%

Table 1: Polypharmacy at admision and discharge

### Conclusions

- Our study confirmed a relatively high prevalence of polypharmacy in elderly hospitalized patients at the Internal Medicine Department.
- Hospitalization led to a significant increase in the number of medications and in the prevalence of the high-level polypharmacy.
- The high prevalence of polypharmacy in elderly patients shows the need to reevaluate the pharmacotherapy during hospital stay.