

**Material and methods** A 3 month prospective study (February 2018 to April 2018) to analyse the effectiveness of pharmacist-physician communication channels.

Effectivity was determined by the% acceptance of the interventions.

Channels chosen were: Through direct communication with the physician.

Electronic communication using the Farmatools program.

Interventions were performed following inadequate prescription, dosage, omissions and duplicates of STOPP/START and Beers criteria.

The target population on which the study was conducted were polymedicated patients in an internal medicine service.

**Results** The medications found in the prescriptions were mainly: nonsteroidal anti-inflammatory drugs (22.1%) antibiotics (22.1%), insulins (19.5%), proton pump inhibitors (10.1%), low-molecular weight heparin (9.4%), digoxin (8.7%) and others (8.1%).

Through direct communication with the doctor, the prescriptions of 125 patients over 65 years of age were studied, and pharmacist-physician verbal intervention was performed in 35 of them (28%). 74.3% (n=26) of them were accepted by the physician.

Through electronic communication, interventions were performed in 221 patients. Analysing the record of the electronic interventions carried out, only 28.8% (n=62) were accepted.

**Conclusion** Pharmacist-physician interventions carried out by clinical pharmacists are fundamental for a reduction of PIPs.

Direct pharmacist-physician communication provides a greater degree of interventions acceptance rather than electronic intervention.

Adding clinical pharmacists to clinical services could help to reduce PIPs.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-262

#### PLACE OF CLINICAL PHARMACIST IN THE MANAGEMENT OF PATIENTS UNDERGOING BARIATRIC SURGERY

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**Background** Obesity is a major national public health concern, with a prevalence of 15%. Among these patients, bariatric surgery procedures can be proposed, by sleeve gastrectomy or gastric bypass. Considering potential comorbidities of obesity (diabetes, arterial hypertension) many specialists are involved.

**Purpose** Our pharmacy department decided: to develop a pharmaceutical healthcare pathway in bariatric surgery for inpatients and outpatients; and to evaluate the relevance of medication reconciliation in this specific surgery.

**Material and methods** During the 3 month study period, the pharmacy department organised medication reconciliation in collaboration with the digestive surgery ward, and highlighted endpoints (including short-term stay at hospital) in the healthcare pathway of bariatric surgery where the pharmacist could be helpful.

All patients undergoing bariatric surgery could be included for medication reconciliation. The number and

type of discrepancies between admission medication and reconciled updated medication were reported, considering the particulars of medication management in surgery wards (such as switching oral by the IV route, usual peri- and post-operative management of anticoagulant, antihypertensive drugs).

**Results** The clinical pharmacist was integrated in initial information meetings for patients (including the organiser nurse, dietitians and a psychologist), which allowed him/her to answer questions from patients, collect their prescriptions and contact specialists, general practitioners and community pharmacists. The pharmacist received the surgical programme and planned admission reconciliation on day -1 before surgery. Forty-eight or 72 hours following surgery, the pharmacist explained the post-operative treatment and instructions with the patient (vitamin supplementation for life, crushing tablets during 45 days, contraindication for non-steroidal anti-inflammatory drugs and effervescent tablets). The community pharmacist received an informative leaflet and a mail was sent to the general practitioner and specialists detailing discharge medication reconciliation and proposing medication alternatives for non-crushing tablets.

Concerning the relevance of medication reconciliation: 51 patients had reconciled medication, 33% showing at least one discrepancy (17/51). 32/47 total discrepancies were unintended with 21/32 of omitted medication and 10/32 dosage error.

**Conclusion** Integrating clinical pharmacy in the healthcare pathway of bariatric surgery is relevant, with a gain in care management both for inpatients and outpatients. This activity fits with national/regional indicators referring to the healthcare pathway for obesity.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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#### ANALYSIS OF CLINICAL PHARMACIST INTERVENTIONS CARRIED OUT IN AN INTENSIVE CARE UNIT

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**Background** The clinical instability of patients in intensive care units (ICU), makes them subject to drug-related problems (DRP) that may have an impact on the efficacy and safety of treatments.

**Purpose** To analyse clinical pharmacist interventions (PIs) carried out over DRP registered in an ICU.

**Material and methods** This prospective and descriptive study was carried out in 1 month (15 t May to 15 June) in an ICU of 18 beds in a tertiary hospital. PIs were detected by a resident pharmacist in his ICU period during the validation of physician orders. The variables of this study were: demographic data (sex, age); type of medical intervention; degree of response (accepted if they changed the physician order or rejected if the change was not accepted); and the drugs used.

PIs were carried out in relation to DRP in the Third Consensus of Granada and the prescribing physician was orally informed of all of them.

**Results** A total of 31 interventions were registered, 71% of which were males and 29% females, with an average age of 74 years (41–92). PIs were classified in this way: 15.2% drug dose adjustment; 9.2% start of medication; 8.2% pharmacokinetics monitoring; 6.2% routes of administration of drugs; 4.2% interruption of treatment; 4.2% mistakes in the transcription of physician orders; 4.2% drug interaction prevention; and 4.2% allergic reaction prevention. 93.3 per cent of PIs were accepted.

The group of drugs J (systemic anti-infectious) was the most involved, with 35.5% of PIs, followed by group C (cardiovascular system) with 19.4% and group B (blood and haematopoietic organs) with 12.1%, among others. Regarding DRP, 51.7% were related to safety, 25.7% to the efficacy of the treatment and 22.6% to the indication.

**Conclusion** The high level of acceptance of the proposed interventions and its clinical relevance demonstrates the significance of clinical pharmacists that prevent, detect and solve DRP in the prescription process before they affect the patient. According to the published literature, the presence of a clinical pharmacist in critical patient care multidisciplinary teams provides improvements in terms of safety, efficacy and cost of treatments.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Erstad BL, Haas CE, O'Keeffe T, et al. Interdisciplinary patient care in the intensive care unit: focus on the pharmacist. *Pharmacother* 2011;31:128–37.

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#### ANALYSIS OF THE DISCREPANCIES FOUND IN THE RECONCILIATION OF CONCOMITANT MEDICATION IN A COHORT OF ELDERLY PATIENTS INFECTED WITH HIV

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**Background** The increase of life expectancy in HIV patients leads to the appearance of comorbidities and therefore the increase in concomitant medication.

**Purpose** To determine the prevalence of discrepancies in the reconciliation of concomitant medication in elderly HIV patients. To describe the most frequent discrepancies as well as the medications involved.

**Material and methods** Prospective observational study conducted in HIV-infected patients treated at the pharmacy service (1 January 2014–31 December 2014) of a regional university hospital.

Collected variables: age, sex, concomitant medications, discrepancies found in the clinical history of specialised care (CH) and primary care (PC) and plasma viral load (VL). The discrepancies were classified as: omission, different dose/frequency/route, erroneous medication and therapeutic duplication.

In the conciliation the CH was reviewed, the pharmacotherapeutic history of PC and the patient was interviewed.

The inclusion criteria were: HIV infection, age  $\geq 50$  years and antiretroviral treatment for at least 6 months.

The statistical analyses were performed using the statistical package SPSS 15.0.

**Results** We analysed 327 patients of which 132 (40,37%) were elderly patients.

In the study population (n=132), the median age was 53 years (RI: 50–88), with 61.4% (n=81) being polymedicated patients. 73.5% (n=97) of the population was male.

A total of 790 active ingredients were analysed, 439 being concomitant active ingredients. The median of active ingredients/patient was 5 (RI: 1–21). One-hundred and thirty-one active substances with HC discrepancy and 154 active ingredients in PC were registered and 81 patients were affected (61.4%). 81.5% of them (n=66) were polymedicated patients.

In CH there were: 109 omissions, 22 erroneous medications and two medications with erroneous doses. In the PC: 132 drug omissions were collected, 21 wrong medications and one medication with the wrong dose. The active ingredients mostly involved belonged to: vitamins (16.17%), psycholeptics (11.0%) and antacids (10.1%).

VL was less than 50 copies/ml in 81 patients (61.4%) and less than 200 copies/ml in 119 patients (90.15%).

**Conclusion** Seropositive patients have a high number of discrepancies affecting patients' polymedicated majority. The most frequent discrepancy in both primary and specialised care is the omission of medications. The group of drugs mostly involved are vitamins. It would be interesting to analyse in the future if patients with more discrepancies in medication have more interactions or worse immuno-virological control.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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#### EFFECT OF DEDICATED PHARMACIST INTERVENTION IN NEUROCRITICAL CARE UNIT: BEFORE AND AFTER PARTICIPATING IN MULTIDISCIPLINARY ROUNDS

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**Background** Few studies have assessed the activities of a designated neurocritical care pharmacist (NCP) by reducing preventable adverse drug events and medication errors.

**Purpose** This study evaluated the effect on the pharmaceutical service by a dedicated NCP.

**Material and methods** A retrospective study was conducted to compare a pre-designated NCP period (from 1 May 2016 to 31 December 2016) and post-designated NCP (from 1 May 2017 to 31 December 2017). Intensive care unit (ICU) length of stay, ICU mortality, a total number of interventions, intervention rates per prescription and acceptance rate of NCP interventions were compared between the two groups. The types of interventions and relevant medications were investigated.

**Results** The total number of patients was 676 during the pre-NCP period and 769 during the post-NCP period. The presence of NCP pharmacists decreased ICU length of stay (B = -0.077 (-0.148–0.006), p = 0.033), increased the clinically significant interventions (OR, 2.2 (1.5–3.1), p < 0.001) and showed a tendency to reduce ICU mortality (OR, 0.7 (0.3–1.7), p = 0.436). The number of interventions per