

4CPS-218 ASSESSMENT OF CLINICAL PHARMACIST INTERVENTIONS IN AN INTENSIVE CARE UNIT

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Background Traditionally, the functions of the clinical pharmacist in the intensive care unit (ICU) of our hospital were based on pharmaceutical interventions (PIs) concerning parenteral nutrition (PN), the preparation of these formulas and checking that the composition was adapted to the nutritional requirements and the clinical situation of the patient. Nevertheless, the same pharmacist can also collaborate with the ICU staff (physicians or nurses) in the optimisation of the pharmacological treatment of critically ill patients.

Purpose To describe the number and type of PIs upon medical prescriptions of critical care patients and to assess the impact of these PIs according to the degree of acceptance by the ICU staff.

Material and methods We carried out a prospective study between 1 April and 31 May 2018 in an ICU of 18 beds of a tertiary teaching hospital. Inclusion criteria: ICU patients who received PN during the stay. Variables included: type of PI (made after daily review of the nutrition and drugs prescriptions that were communicated verbally to the ICU staff), demographics and acceptance by the ICU staff.

Results During the study period, 232 patients were admitted to the ICU, 30 (12.9%) of whom received PN (mean age 62, range 13–93; 32% females; mean length of stay 3 days: range 1–36). A total of 134 PIs were recorded: 56.7% were related to PN prescriptions (27.6% of this kind of PI were modifications of insulin, 14.5% were modifications of electrolytes); 16.4% enteral nutrition PIs; 7.5% administration of drugs via the nasogastric tube; 7.5% giving information about drugs administration; 4.5% stability of intravenous mixtures; 3% conciliation of medication; 3% suggestions for changing one drug for another (due to inefficiency); and 1.5% concerning maximum dose alerts. Eighty-three per cent of PIs were accepted by the ICU staff.

Conclusion More than four PIs were performed per patient and the percentage of rejected PIs was very low. Although the main task of our clinical pharmacist was focused on clinical nutrition, this study demonstrates the role and importance of this professional incorporated into the ICU multidisciplinary team, since PIs contribute to prevent medication errors and to improve the effectiveness and safety of the total pharmacological treatment in critically ill patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-219 ANALYSIS OF PHARMACEUTICAL INTERVENTIONS IN AN EMERGENCY DEPARTMENT

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Background Medication errors in the emergency department can persist throughout the episode of care and up to hospital

discharge, leading to inadequate management that can compromise patient care. The pharmacist in an emergency department can be a key person in reducing medication errors and improve the quality, safety and efficiency of patient care.

Purpose To analyse the pharmaceutical interventions made during the conciliation and validation process, the drugs classified according to the Anatomical Therapeutic Chemical (ATC) Classification System and the degree of acceptance of the intervention by the prescriber in a medium-sized hospital.

Material and methods Prospective observational study, conducted between August and September 2018. The pharmacist spent 3 hours from Monday to Friday in the emergency department to carry out the conciliation of the previous treatment and the validation of the treatment for the acute pathology that was prescribed in the emergency department. The pharmaceutical interventions were registered in the pharmacy software and were communicated to the responsible physicians. Data collected: drugs involved, type of pharmaceutical interventions and acceptance of the recommendation by the prescriber.

Results A total of 244 pharmaceutical interventions were recorded in 86 patients, 50% males, median age: 73, median age (17–95).

The most frequent pharmaceutical interventions performed were 186 conciliations of the previous 58 treatments for acute pathology that were prescribed in the emergency department.

The drugs involved according to the ATC were: 39 (16.0%) alimentary tract and metabolism; 28 (11.5%) blood and blood-forming organs; 55 (22.5%) cardiovascular system; three (1.2%) dermatologicals; nine (3.7%) genito-urinary system and sex hormones; 11 (4.5%) systemic hormonal preparations excluding sex hormones; 26 (10.7%) anti-infectives for systemic use; three (1.2%) antineoplastic and immunomodulating agents; six (2.5%) musculo-skeletal system; 45 (18.4%) nervous system; 13 (5.3%) respiratory system; and six (2.5%) various.

The degree of acceptance of pharmaceutical interventions were: 178 (73.0%) accepted, 54 (22.1%) rejected and 12 (4.9%) not valued.

Conclusion The most frequent pharmaceutical interventions performed were related to conciliation of the previous treatment. The most common drugs according to the ATC whose interventions were performed by pharmacists were for the cardiovascular system. The degree of acceptance of the pharmaceutical interventions by the prescribers was high.

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4CPS-220 THERAPEUTIC DRUG MONITORING: ARE WE GETTING IT RIGHT AND OPTIMISING THERAPY?

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Background Therapeutic drug monitoring (TDM) is currently planned and ordered by doctors at an outer metropolitan hospital. Previous audits looking at clozapine and low-molecular weight heparin (LMWH) TDM found that sample timing was