4CPS-383 DRUG PRESCRIPTION IN THE ELDERLY. ARE WE DOING WELL?

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Background and importance Inappropriate use of drugs in elderly patients has health consequences for the patient and for the health system.

Aim and objectives The main objective was to review medication in older adults, especially potentially inappropriate medications (PIMs) using the screening tool of older persons' prescriptions (STOPP). The secondary objective was to assess the possibility of detecting prescription errors by the pharmacist in community pharmacies and in primary care, through the use of the electronic prescription.

Material and methods A descriptive cross sectional study was conducted at a tertiary hospital. We included patients aged over 75 years who have been admitted as inpatients to an internal medicine department for 60 days. Study variables were: age, sex, prescription drugs to hospital discharge, electronic prescriptions and PIMs according to the STOPP criteria (2014).

Results 55 patients were selected, with an average age of 84.47 ± 4 96 years and a male/female ratio of 0.89. 437 prescriptions were analysed. Regarding the number of prescribed drugs per patient: 27.27% (n=15) patients were prescribed 0–4 drugs; 41.82% (n=23) 5–9 drugs; and 30.91% (n=17) ≥ 10 drugs. Analysing PIMs according to the STOPP criteria (2014): 187 PIMs (42.79%) were detected. 163 PIMs (87.17%) could be detected by electronic prescriptions. In the group of patients with 0–4 prescribed drugs, 19.25% (n=36) of PIMs were detected; 42.78% (n=80) in the group of 5–9 drugs; and 37.97% (n=71) in patients with ≥ 10 drugs. The most common PIMs were: concomitant administration of two drugs of the same class 14, 97% (n=28); and any medication prescribed longer than that indicated 12.29% (n=23).

Conclusion and relevance The results of the study showed a significant number of PPIs and a profile of polymedicated patients (≥ 5 prescribed drugs), associating polypharmacy with an increase in the number of PIMs. Therefore, there is a need to analyse and correct inappropriate medications and discrepancies in medical prescriptions to hospital discharge in our elderly patients. For this, the hospital pharmacist is a key element. In addition, the intervention of pharmacists from pharmacies and health centres who can verify the electronic prescription is possible and can make an important contribution.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-384 POTENTIAL DRUG RELATED PROBLEMS IN THE TIME OF COVID-19

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Background and importance Drug related problems (DRP) are common among hospitalised patients. During the COVID-19 pandemic, the number of inpatients increased and the pattern of drug use was varied which could lead to a higher number of potential DRP.

Aim and objectives To describe DRP in patients admitted to COVID-19 wards during the COVID-19 pandemic peak.

Material and methods A retrospective observational study was performed in a tertiary university hospital from 21 March to 30 April 2020. Patients included were those admitted to a COVID-19 ward and presenting a DRP (excluding emergency department and critical care units). Computerised physician order entry (CPOE) operates for all hospital beds. Medical prescriptions were revised daily by clinical pharmacists. When a potential DRP was detected, an annotation with a recommendation was made in the patient's medical record. DRP were classified according to the Pharmaceutical Care Network Europe classification.

Abstract 4CPS-384 Table 1

PRM		
Wrong dosage	Overdose	90 (22.9)
	Underdose	38 (9.7)
Out of protocol		78 (19.8)
Interactions	Adverse event potentiation	34 (8.7)
	Induction/inhibition	15 (3.8)
	Bioavailability alteration	12 (3.1)
Prescription error by incorrect use of CPOE		41 (16.1)
Renal impairment		25 (6.4)
Indication	Inexistent drug	16 (4.1)
	Unnecessary drug	9 (2.3)
Other		35 (8.9)
Recommendation		
Acceptance rate	Accepted	284 (72.2)
	Non-accepted	60 (15.2)
	Non-evaluable	49 (12.5)
Drug involved		
P	Hydroxychloroquine	90 (22.9)
J	Ceftriaxone	65 (16.5)
	Azithromycin	27 (6.9)
	Lopinavir/ritonavir	6 (1.5)
	Dolutegravir	1 (0.02)
	Other	14 (3.6)
A	Calcifediol	34 (8.6)
	Vitamin B	2 (0.5)
	Saccharomyces boulardii	9 (2.3)
	Calcium carbonate	4 (1.0)
	Potassium	4 (1.0)
H	Dexamethasone	25 (6.4)
	Methylprednisolone	4 (1.0)
B	Enoxaparin	15 (3.8)
	AAS	2 (0.05)
	Apixaban	2 (0.05)
	Acenocumarol	1 (0.02)
R	Respiratory system	13 (3.3)
C	Lipid modifying agents	10 (2.5)
	Diuretics	7 (1.8)
N	Psychoanaleptics	7 (1.8)
V	Various	8 (2.0)
Other		43 (10.9)

Data collected were demographic, the drug class involved (anatomical chemical therapeutic (ATC)), DRP detected and degree of recommendation acceptance.

Results Total patients with DRP: 291 (23.3%). Identified DRP: 393 (1.4 DRP/patient). 58.3% were men and median age was 63 (15.7) years.

Conclusion and relevance Almost 25% of all patients had a DRP, presenting an incidence of 1.4 DRP/patient, higher than reported in previous series. 83% of evaluable recommendations were accepted. One-third of the recommendations were derived from a wrong dosage, and 15% from drug interactions. Hydroxychloroquine was the most frequently involved drug, probably because of the limited experience and wide spectrum of interactions, followed by antimicrobials such as ceftriaxone and azithromycin, used widely in respiratory tract infections.

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4CPS-385 IMPACT OF FULLY AUTOMATISED CENTRAL INTRAVENOUS ADDITIVE SERVICE (CIVAS) ON DAILY NURSING PRACTICE

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Background and importance The introduction of the pharmacy based central intravenous additive service (CIVAS) enabled the batches production of ready-to-administer, non-hazardous intravenous drugs by using the robotic system APOTECAnit. The clinical benefits in terms of a higher quality aseptic process, reduced medication errors and increased quality control testing have been demonstrated.

Aim and objectives The aim of the study was to evaluate the impact of the fully automatised CIVAS on the working efficiency of the wards by measuring the time saved in daily nursing practice.

Material and methods The study was conducted over 3 months with data collected before and after introducing the CIVAS. Overall, three wards were analysed: inpatient haematology (IH), cardiac surgical (CS) and infectious diseases (ID). The nursing staff was observed daily for 4 weeks. Different tasks associated with the following intravenous drugs supplied by the CIVAS were recorded: ondansetron, palonosetron, cefazoline, piperacillin-tazobactam, ceftriaxone and dexamethasone. The average working time spent on managing intravenous drugs was calculated per full time equivalent (FTE), including direct activities (intravenous drug preparation) and indirect activities (procurement of drugs and medical devices, drugs inventory management, drug ordering). 1.0 FTE was equivalent to a nurse working 8.0 hours per day, 5 days per week.

Results The overall time spent on managing intravenous drugs decreased from 1.6 to 0.7 hours/day/FTE in the IH ward, from 0.75 to 0.15 hours/day/FTE in the CS ward and from 2.1 to 0.43 hours/day/FTE in the ID ward. Before implementing the CIVAS, on average 1.0 FTE spent 0.5 hours/day on preparing intravenous drugs, whereas the intravenous drug preparation time was reduced to zero afterwards in each of

the three wards. The time spent on procurement decreased by 80% in the IH ward, by 60% in the CS ward and by 75% in the ID ward. The nursing staff shortened the time required for drug inventory management by 33% in the CS ward and by 50% in the IH and ID wards. In all wards, ordering of drugs was reduced by at least 50%.

Conclusion and relevance The study showed that the centralised, automated preparation of intravenous drugs optimised the working efficiency of the wards, thereby allowing the nursing staff to dedicate more time to perform tasks directly involved with patient care.

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4CPS-386 ONE YEAR EXPERIENCE OF A NEW PROGRAMME OF TELEMATIC PHARMACEUTICAL CONSULTATION AND DELIVERY OF HOSPITAL DISPENSING MEDICATION

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Background and importance In a third level hospital, a new telematics pharmaceutical care consulting programme was implemented with later delivery of medication from the outpatient unit of our hospital to a specialty medical centre.

Aim and objectives To analyse the implementation of the new programme and to evaluate the satisfaction of the patients.

Material and methods A descriptive retrospective study was conducted from May 2019 to April 2020. An action protocol was developed which included: inclusion criteria, teleconsulting process and a method for preparing and sending the medication. An external courier service was hired, with direct delivery and integrated into a platform (patients, treatment and traceability). Incidents were recorded: medication collection, preparation of the medication and teleconsulting. We developed a survey to evaluate patient satisfaction (11 questions evaluated on a numerical scale from 1 to 5. It included the evaluation of the dispensing process (15 points), the teleconsultation (20) and the general project (20), with a maximum score of 55 points). We collected data on: the person to whom it was performed, demographic variables, time spent collecting the medication and treatment.

Results Up to April 2020, 80 patients were included. Incidents included: 4.44% of medication collection, 2.09% of preparation of medication and 0.26% of teleconsultations. The satisfaction survey was carried out on 70 patients (27.1% of persons authorised to collect the medication), average age 51.5±17.8 years, 57.1% men. 51.4% were working, 4.3% were studying, 40% were retired and 4.3% were unemployed. 82.5% lived in the same town as the specialty medical centre and 17.5% in nearby towns. 57.1% had been attending our service for more than 5 years. 68.6% were biological drugs, 7.1% drugs for multiple sclerosis, 5.7% antibacterials, 4.3% growth hormones, 2.8% antiretrovirals and 11.5% others. Satisfaction was rated with an average of 14.6 points for the dispensing process, 19.4 for the teleconsultation and 19.7 for the overall project, with a total of 53.7 points.