4CPS-395 PHARMACY SERVICE'S ADAPTATION TO THE COVID-19 PANDEMIC: TELEPHARMACY AND HOME DRUG DELIVERY

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Background and importance The health crisis caused by the COVID-19 pandemic has impacted the hospital pharmacy services (HPS). Our HPS, which belongs to the region's referral hospital, had to adapt quickly to the new circumstances to ensure adequate pharmaceutical care (PC) and drug distribution. **Aim and objectives** To avoid interruption or lack of persistence of chronic outpatient treatment during the pandemic and to improve adherence and avoid treatment discontinuation, as well as to reduce the spread of the virus and protect patients.

Material and methods A descriptive, observational, retrospective study was conducted from 25 March to 22 April 2020. We detected less patients in the hospital's outpatient area (OA), and the waiting room did not allow the recommended social distancing. In addition, other findings were the need to avoid discontinuation of treatment, crowding, new infections and spread of the virus. A circuit based on telephone PC was designed to guarantee therapeutic adherence and clinical follow-up, with free home delivery of medication for all patients who gave their consent, ensuring confidentiality. This initiative had the collaboration of the computer service, which made the necessary modifications to the computer system to facilitate patient detection.

Results As a result of the health crisis, the number of patients attending the hospital's OA daily decreased by 56%, as the usual average number of patients before the pandemic was 215 ± 25 while the average during the pandemic was 95 ± 29 . Over 8 weeks, the daily average of 70.2 (25–109) medication shipments were made in the city and 11.4 (4–26) in the towns of the province. In total, 3116 shipments were made, 88% to the city and 12% to towns. There were no incidents in the dispensing or delivery of the medication.

Conclusion and relevance HPS demonstrated its ability to react and adapt to a health crisis pandemic by urgent adaptation of their procedures. The new implemented circuit has guaranteed an adequate telephone PC to the outpatient, ensuring continuation of treatment. In addition, correct and safe distribution of medicines has been achieved.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-396 EFFECT OF THE PATIENT'S OWN MEDICATION USE ON PATIENT SELF-REPORTED MEDICATION KNOWLEDGE DURING HOSPITALISATION: A PRE-POST INTERVENTION STUDY

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Background and importance Improving patient's medication knowledge and consequently medication use is essential for optimal treatment outcomes. As patient knowledge about medication is currently suboptimal, interventions to optimise medication knowledge are necessary. We hypothesise that patient's own medication (POM) use will improve patient's medication knowledge.

Aim and objectives To assess the impact of POM use on self-reported medication knowledge of hospitalised patients compared with standard care. Patient's sense of medication safety, attitude to the provision of information and to inpatient medication use were studied in both standard care and during POM use.

Material and methods In this nationwide intervention study, perceived medication knowledge was assessed with a questionnaire pre and post implementing POM use. The questionnaire assessed perceived medication knowledge (on how to and why to use medication) at admission and discharge, medication safety during hospitalisation, the provision of information during hospitalisation and at discharge, and inpatient medication use. Patients' answers were categorised into positive and negative/neutral. The proportion of patients with adequate medication knowledge, in the standard care and POM use groups at hospital admission and discharge, were calculated and compared with correction of potential confounders.

Results Among the 731 patients (80.2%) who completed the questionnaire, POM use seemed to be positively associated with self-reported knowledge on how to use medication at discharge (adjusted OR 3.22 (95% CI 2.01 to 5.16)). However, for the knowledge related statement on why medication was used, POM use was not associated. Medication knowledge at admission was the most important predictor of perceived medication knowledge at discharge. The majority perceived POM use safer (52.9% of standard care patients vs 74.0% of POM users; $p < 0.01$), POM users knew better which medicines they still used during hospitalisation (85.8% vs 92.3% respectively; $p = 0.01$) and most patients preferred POM use regardless of having experienced it (68.2% vs 82.2% respectively; $p < 0.01$).

Conclusion and relevance POM use has the ability to positively influence patient's medication knowledge about how to use medication. Furthermore, it enhances the perception of medication safety, more patients have a positive attitude towards the provision of information and most patients prefer it. Therefore, POM use seems a valuable intervention and more research towards POM use (in combination with self-administration) is recommended.

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4CPS-397 ASSESSMENT OF PHARMACEUTICAL INTERVENTIONS IN AN INTENSIVE CARE UNIT AFTER COMPUTERISED PHYSICIAN ORDER ENTRY SYSTEM IMPLEMENTATION

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Background and importance Critical care pharmacists have demonstrated their contribution to the management of drug therapy and impact on patient and medication safety. 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). Currently, a computerised physician order entry (CPOE) system has been implemented. This system reduces the incidence of medication errors and allows pharmaceutical validation.

Aim and objectives To analyse the evolution in the number of PIs before and after implementation of the CPOE; to describe the type of PIs carried out by clinical pharmacists after CPOE implementation; and to assess the degree of acceptance by ICU physicians.

Material and methods A 2 month descriptive and prospective study was conducted between 1 January and 28 February 2020 in an 18 bed ICU of a tertiary teaching hospital, 3 months after CPOE implementation. Every type of PI and degree of acceptance were recorded. Total PIs recorded were compared with those recorded in the same period of time before implementation of the CPOE (between 1 July and 31 August 2020).

Results During the current study period, 227 patients were admitted to the ICU, and 366 PIs were recorded. PIs increased by 173% compared with the previous study period before the implementation of CPOE (232 patients, 134 PIs). Regarding the number of PIs during the current study period, 25.4% were related to PN prescriptions, 8.4% were related to antimicrobial stewardship programme, 5.7% were related to optimising drug therapy, 3.3% were related to route of administration, 4.6% were related to incorrect drug based on the indication, 2.7% were related to therapeutic drug monitoring and 46.4% were related to fluid therapy. 91% of PIs were accepted by the ICU staff.

Conclusion and relevance CPOE in the ICU promoted the pharmacist's participation in improving the safety of medical prescriptions by increasing the number of accepted PIs. The high number of interventions related to fluid therapy was highlighted. We consider it necessary to start corrective measures regarding this aspect, such as the preparation of prescription protocols, training talks, etc.

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4CPS-398

USE OF INTRAVENOUS IRON IN HEART FAILURE OCTOGENARIANS AND NONAGENARIANS WITH IRON DEFICIENCY

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Background and importance Anaemia is an important comorbidity in heart failure (HF), and iron deficiency (ID) is the commonest contributing factor. Intravenous iron therapy improves quality of life although data in elderly patients are scarce.

Abstract 4CPS-398 Table 1

	No intravenous iron (n=16 (42.1%))	Intravenous iron (n=22 (57.9%))	p value
Age (years)	87.8 (86.8–89.4)	86.2 (84.0–89.3)	0.261*
Sex (women) (n (%))	8 (50.0)	17 (77.3)	0.080†
LOS (days)	11 (8–15)	19 (14–24)	0.017*
Barthel Index	77.5 (50–90)	62.5 (50–85)	0.313*
Anaemia (n (%))	9 (56.3)	16 (72.7)	0.290†
At admission			
Oral iron (n (%))	0 (0.0)	6 (27.3)	0.030‡
Cockcroft–Gault (mL/min)	29.4 (19.3–38.0)	27.4 (19.7–34.0)	0.301*
Haemoglobin (g/L)	124 (112.5–139.5)	110.5 (107–122)	0.089*
Iron (µg/dL)	35 (24.5–51.5)	38 (28–43)	0.953*
Ferritin (ng/mL)	119.7 (75.6–190.2)	105.7 (40.4–122.7)	0.178*
Transferrin (mg/dL)	215 (187–235.5)	238 (215–270)	0.044*
TSAT (%)	12.2 (9.5–18.3)	12.15 (8.4–13.6)	0.249*
At discharge			
Oral iron (n (%))	0/12 (0.0)	6/18 (33.3)	0.057‡
Cockcroft–Gault	35.14 (28.1–48.9)	28.93 (22.9–34.9)	0.188*
Haemoglobin	114 (112–137)	114.5 (113.5–127.5)	0.812*
Iron	33.5 (22–47)	70.0 (66.5–94.5)	0.033*
Ferritin	293.8 (194.4–312.6)	444.5 (313.7–747.0)	0.053*
Transferrin	200 (151–239)	206.5 (199.5–247.0)	0.420*
TSAT	16.8 (9.6–17)	21 (18.3–36.3)	0.062*
Mortality (n (%))	4 (25.0)	4 (18.2)	0.698‡
At 6 months			
Readmission (n (%))	4/12 (33.3)	7/18 (38.9)	1.000‡
Global mortality (n (%))	6/16 (37.5)	10/22 (45.5)	0.624†

*Median (P25–P75), Mann–Whitney U test–Wilcoxon test; † χ^2 test; ‡Fisher's exact test.

Aim and objectives To describe the use of iron in patients with HF and ID and to analyse differences between receiving or not intravenous iron.

Material and methods A retrospective observational study was conducted in a university hospital. From January to March 2019, the acute geriatric unit admitted octogenarian and nonagenarian patients for unbalanced HF and ID. Registered variables were: sociodemographics, length of stay (LOS), Barthel Index, oral iron supplements, use of intravenous iron during admission, analytical parameters at admission and post-discharge, mortality and readmission at 6 months. Definitions: anaemia (haemoglobin: men <13.0 g/dL; women <12.0); ID (ferritin <100 µg/L or 100–299 with transferrin saturation (TSAT) <20%).

Results Among 89 unbalanced HF patients admitted, 38 were diagnosed with ID (table 1).

Conclusion and relevance In our octogenarian and nonagenarian cohorts, 58% of patients received intravenous iron, higher than in similar studies. According to the guidelines, no oral iron was prescribed, neither during admission nor at discharge. Intravenous iron increased LOS, without affecting mortality. However, ID parameters improved.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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