single initial empirical antibiotic whereas 92% received combination antibiotics. A total of 122 patients received appropriate initial empirical therapy on the first day of hospitalisation: 9.4% of patients received broad spectrum antibiotics that were not warranted. Eighty-one (58.7%) of the patients had a change in antimicrobial regimen during hospital admission. Overall appropriateness of CAP management based on the composite of initial empirical treatment, duration of treatment and switching antibiotics according to culture and sensitivity during the admission period was 58.0%. Severe respiratory illness was the most significant independent risk factor.

Conclusion and relevance The study showed that adherence to CAP guidelines for an initial empirical therapy on the first day of hospitalisation was optimal whereas overall adherence to CAP management throughout the hospital stay was low.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-160 MANAGEMENT OF DRUGS IN PATIENTS WITH SWALLOWING DIFFICULTIES IN A PUBLIC RESIDENTIAL CARE HOME: ROLE OF THE HOSPITAL PHARMACIST

N Ferreras López, MA González, N Álvarez Núñez*, D López Suarez, E Martínez Álvarez, Z Rodríguez Fernández, B Matilla Fernández, JJ Ortiz De Urbina, C Guindel Jiménez. *Complejo Asistencial Univeristario De León, Hospital Pharmacy, León, Spain*

10.1136/ejhpharm-2020-eahpconf.261

Background and importance Institutionalised people in a nursing home have a profile characterised by advanced age, multiple pathologies and many also suffer from swallowing problems. This not only affects nutrition but can also affect taking medications. Many drugs must be crushed or dissolved to facilitate administration and in many cases the stability of the drugs under these conditions is not known.

Aim and objectives The aim of the study was to evaluate medication administered to patients with swallowing problems in a public residential care home and to establish possible commercialised alternatives or develop compounding pharmaceutical preparations.

Material and methods A prospective longitudinal study was performed (1 month) in a public nursing home. Data collected were: patients with swallowing difficulties and oral treatments which had to be subdivided or crushed for administration, nasogastric tube use, age, sex, number of drugs and pharmaceutical forms. We also did a literature search for drugs and use in this manner (small therapeutic windows, slow release, enteric coats, etc) to look for alternatives that might facilitate administration and guarantee stability and safety.

Results Eighty-five institutionalised elderly patients lived in the nursing home and 20% had dysphagia or difficulty taking their oral treatment. Mean age of the patients with swallowing difficulties was 90.35 (SD=4.27) years. None had a nasogastric tube. Fifty-three different medications were identified and only 11 had an adapted pharmaceutical formulation: 50% (26/53) had an alternative of the same composition but of a different pharmaceutical form commercialised as syrup, oral solution, drops or powder. In 47 cases the drugs could be crushed and diluted and administered immediately. In five cases the drugs were being crushed and should not have been. The pharmacist proposed other alternatives, such as drinking parenteral ampoules (5/53), sublingual administration (1/53) or elaborate compounding preparations (8/53). The possibility of preparing eight compounding pharmaceutical preparations was facilitated.

Conclusion and relevance Most of the treatments that were analysed did not facilitate swallowing and were manipulated, which can provoke errors in medicine administration. Hospital pharmacists should assess the suitability of compounding medication formulations and propose solutions to guarantee stability and safety of medicines.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-161 PHARMACIST INTERVENTIONS IN A HOSPITAL AT HOME UNIT

A Brito*, A Simoes, A Alcobia. *Hospital Garcia De Orta, Pharmacy, Almada, Portugal*

10.1136/ejhpharm-2020-eahpconf.262

Background and importance Hospital at home (HaH) units provide hospital level care at home to patients who would otherwise remain hospitalised. A HaH unit is hospital based with a multidisciplinary team in which the pharmacist role is essential to provide pharmaceutical care in potential medication related problems.[1] Our HaH unit was started in 2015 and 1340 patients were admitted up to August 2019.

Aim and objectives To analyse pharmacist interventions (PIs) in HaH admitted patients.

Material and methods This was a retrospective study conducted between December 2018 and August 2019. All patients admitted to the HaH unit were included, except those <65 years of age or with <5 drugs prescribed. PIs made by email and by electronic notification were recorded. Telephone PIs were excluded. PIs were classified by intervention type (medication review, pharmacokinetics monitoring, prescription validation, information and therapeutic reconciliation), reason for intervention and therapeutic recommendation.

Results During the study period there were a total of 80 PIs in 53 patients from a total of 425 patients admitted to the HaH unit. Most patients (63.5%) had more than 10 drug prescriptions, and mean age was 74.7 years.

The major PI were related to pharmacokinetic monitoring (45.0%), medication review (28.8%) and prescription validation (23.8%). The principal pharmaceutical recommendations were related to dose adjustment, low therapeutic index (34.6%), blood analysis for monitoring (23.5%) and alterations in prescribed drugs (16.0%). Thirteen cases of severe interactions were detected, of which 69.2% led to drug alteration and 30.8% to de-prescription. The acceptance rate of the pharmacist recommendations was 96.3%.

Conclusion and relevance PIs were mainly in polymedicated patients, reinforcing the need for pharmaceutical care in these high risk patients. Although the study population was small, compared with the total number of patients admitted to the HaH, the PIs showed a high impact, reducing potential harm to patients (antibiotics with low therapeutic index, detection of severe or moderate interactions). The high acceptance rate of the interventions by physicians revealed their importance and significance. Participation of a pharmacist in the HaH team contributes to improve patient safety and avoids drug related problems.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Satti AE, *et al*. Impact of clinical pharmacist interventions in the medical ward—a study at Alkhor Hospital. *Am J of PharmTech Res* 2014

No conflict of interest.

4CPS-162 PHARMACEUTICAL INTERVENTIONS IN DRUGS PROVIDED TO THE OUTPATIENT HOSPITAL PHARMACY

A Brito*, A Fernandes, L Lourenço, S Domingos, A Alcobia.

10.1136/ejhpharm-2020-eahpconf.263

Hospital Garcia De Orta, Pharmacy, Almada, Portugal

Background and importance Pharmacists are responsible for outpatient drug distribution. The aim is not just to provide the medication but also to prevent, acknowledge and resolve medication related problems (MRP). The value of pharmaceutical interventions (PIs) is reflected in adherence, healthcare education and promotion of quality of life in patient.

Aim and objectives To assess and characterise PIs performed in outpatients, their caregivers and other healthcare professionals.

Material and methods This was a retrospective longitudinal study conducted in all patients treated in the outpatient hospital pharmacy between November 2018 and August 2019. PIs were recorded and classified according to type, reason, time and outcome of the intervention.

Results During the study period, 663 PIs (n=38057 patients) were recorded. The specialties with the largest number of interventions were infectious disease (41.9%), oncology (26.5%) and gastroenterology (14.6%). The PI targets were patients (62.7%), caregivers (12.2%), physicians (22.9%) and other healthcare professionals (2.2%). We highlighted PIs related to therapeutic education (37.1%), verification/reinforcement of adherence (21.1%) and pharmaceutical consultation (7.4%). The most relevant reasons for PIs were new patient/new drug (44.5%), poor adherence (21.5%), incorrect intake/insufficient therapy knowledge (4.9%), wrong drug prescribed (4.1%) and suspected adverse drug reaction (1.1%). A total of 67.3% of PIs took 5–15 min and 19.1% >15 min. The acceptance rate of pharmaceutical recommendations was 92.9%.

Conclusion and relevance Pharmacists are essential when dispensing drugs, not only for providing information and therapeutic teaching, but also to actively detect MRP. Due to the high number of daily consultations performed (about 200 patients/day) and lack of human resources, it is likely that PIs are underreported. Communication between different health professionals is essential in the resolution of MRP, contributing to safety improvements and therapy optimisations. PIs had a high acceptance rate which demonstrates the importance and recognition of the pharmacist's role.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Boorman S, *et al*. Another way forward for pharmaceutical care: a team-based clinical pharmacy service. *Pharm J* 2000;264.

No conflict of interest.

4CPS-163 CLINICAL PHARMACIST RESIDENCE IN AN INTENSIVE CARE UNIT: SCOPE AND RELEVANCE

T Cabeças*, J Cardoso, R Oliveira, M Pereira. *Cuf Infante Santo, Pharmacy, Lisboa, Portugal*

10.1136/ejhpharm-2020-eahpconf.264

Background and importance The clinical pharmacist ensures the effective and rational use of drugs through the application of technical and scientific knowledge. Residence in the intensive care unit (ICU) allows greater proximity to the patient and the multidisciplinary team, resulting in rapid and efficient support in all issues related to drugs.

Aim and objectives To describe and characterise the interventions developed by the clinical pharmacist residing in the ICU, and thereby demonstrate its added value, namely in pharmacotherapeutic follow-up and on the spot rapid and assertive support in a multidisciplinary environment.

Material and methods The clinical pharmacist's workplace was transferred to the ICU of a private hospital in Lisbon, with 12 inpatient beds. Ove a 10 month period (November 2018 to August 2019), the unit had a monthly average of 165 inpatients, of which 115 (70%) were in postoperative recovery and 50 (30%) in a critical condition. All pharmaceutical interventions for critically ill patients were recorded (Excel file and/or BSimple software), categorised and analysed.

Results Nearly 79% of critically patients admitted during the study period were the subject of pharmaceutical interventions, performing a total of 394: 86 (17%) related to dose and dosage adjustments; 49 (10%) related to dilution/reconstitution; 46 (9%) were regarding training and preparation of technical and scientific support material; 44 (9%) related to route of administration; 40 (8%) related to logistics and supply issues; 30 (6%) were interactions, compatibility and stability; 27 (5%) were in the field of clinical nutrition; 19 (4%) were related to records of drug allergies; 18 (4%) were support in the establishment of guidelines based therapy; 13 (3%) were internal audits of narcotic drugs, blood products and emergency vehicles; 11 (2%) were clarification of questions on wound care material; 7 (1%) were requests for out of hospital medication; and 4 (1%) were therapeutic reconciliations.

Conclusion and relevance Residence of the clinical pharmacist in the ICU is fundamental for safe and effective use of drugs. The evidence presented in this study demonstrated the added value of providing a patient centred pharmaceutical service in a multidisciplinary and interdisciplinary team, adding value to the care provided by other health professionals. This proximity also allowed quick intervention in the resolution of various day to day pharmacotherapeutic and/or circuit related issues.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-164 A SAFE HANDLING HAZARDOUS DRUGS STRATEGY TO IMPROVE THE SAFETY OF HEALTH PROFESSIONALS: REDUCING EXPOSURE BY MEDICAL PRESCRIPTION REVIEW IN NURSING HOMES

[1]I Cañamares Orbis*, [1]F Apolo Carvajal, [1]M Gonzalez Martinez, [1]E Capilla Santamaria, [1]N Martinez Casanova, [1]I Mayorga Bajo, [1]B Caliz Hernandez, [1]MT Llanos Garcia, [1]A Escudero Brocal, [2]H Hernandez Ovejero, [1]A Aranguren Oyarzabal. *[1]Servicio Madrileño De Salud, Subdirección General De Farmacia Y Productos Sanitarios, Consejería De Sanidad., Madrid, Spain; [2]Consejería De Políticas Sociales-Familias-Igualdad Y Natalidad, Agencia Madrileña De Atencion Social, Madrid, Spain*

10.1136/ejhpharm-2020-eahpconf.265

Background and importance The occupational risk due to exposure to hazardous drugs (HDs) has been a mounting concern to healthcare professionals, including in nursing homes.