Demographic, clinical and pharmacological data were retrospectively collected from residents with confirmed SARS-CoV-2 infection: comorbidities, signs and symptoms, outcome (recovery or death), therapy received for COVID-19 and concomitant antibiotic.

Results Of the 231 residents who lived in the LTCF when the first resident with confirmed COVID-19 was tested, 29.4% tested positive for SARS-CoV-2 during the study period, of whom 23.5% died. All cause mortality increased by 228.7% compared with the previous 3 years. Median Charlson comorbidity index, age adjusted was 6 (IQR 4.5–7). A few confirmed cases were hospitalised (26.5%) and most of these residents died in the local hospital (68.7%). Median duration of hospitalisation was 12.5 days (IQR 3.5–19). Most of the cases (72.1%) had symptoms, often typical symptoms (fever, cough or breathlessness). More than half received any experimental treatment for COVID-19 (58.8%). Antibiotics were prescribed in 52.9%, with an increase of 47.2% in consumption compared with the same period in 2019.

Conclusion and relevance We detected considerable mortality associated with COVID-19, highlighting the challenges of the implementation of a coordinated programme to control SARS-CoV2 outbreaks in LCTFs reducing hospital referral rates.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-358 POINT PREVALENCE REVIEW OF MEDICINES RECONCILIATION FOLLOW-UP BY MEDICAL TEAMS

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Background and importance Medicines reconciliation (MR) is identified as a patient safety priority by the World Health Organization (WHO). The pharmacist led medicines reconciliation service at our institution undertakes MR in the WHO priority patient cohort; patients 65 years and over admitted through the emergency department (ED). Completed MR is documented in the general drug chart. On completion of MR, the pharmacist documents in the medical notes that MR has been undertaken. Discrepancies identified through MR are reviewed and actioned, as required, by the medical team.

Aim and objectives To determine if MR completed by pharmacists was being reviewed and actioned by medical teams and to determine any trends in discrepancies not being followed-up.

Material and methods A 1 day hospital wide point prevalence review of MR follow-up by medical teams was undertaken. The review was completed by clinical pharmacists in February 2020. All patients who had an MR completed by a pharmacist in the current general drug chart were reviewed. Data were collected on the number of discrepancies, if the discrepancies were followed-up and the drugs involved.

Results A completed MR in the in-use general drug chart was identified for 88 (21%) inpatients. A total of 226 discrepancies were recorded. 76 patients (86%) had at least one discrepancy requiring medical review. Review and actioning of MR discrepancies was as follows (n=76):

- Followed–up in full for 67% of patients
- Partly followed–up for 18% of patients
- Not followed–up for 15% of patients.

These discrepancies related to 27 individual drugs. Frequently occurring drugs included hydroxocobalamin, folic acid, cholecalciferol, denosumab, inhalers and eye drops. High risk drugs accounted for n=2 of the discrepancies not actioned. In all cases this involved a sedative drug.

Conclusion and relevance In most instances, MR undertaken by pharmacists was being reviewed and actioned by the medical teams. However, there is room for improvement. There is no international published data to benchmark this figure against. The low incidence of incomplete follow-up of high risk drugs is reassuring. A large body of literature demonstrates the benefit of MR to the patient; however, this benefit can only be realised if MR is followed-up. Identification of inhouse initiatives to ascertain barriers to follow-up is recommended.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-359 DEVELOPMENT AND VALIDATION OF A 30 DAY REVISIT RISK PREDICTION MODEL IN PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT DUE TO DRUG RELATED PROBLEMS

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Background and importance Drug related problems (DRPs) are an important cause of admission to the emergency department (ED), and one of the most frequently implicated drugs are those used for cardiovascular diseases. However, information regarding the risk factors associated with ED revisits is this group of patients is scarce.

Aim and objectives The aim of this study was to develop a predictive model of 30 day revisits to the ED in patients with a first visit for an episode of DRP.

Material and methods A retrospective cohort study was carried out including patients who attended an ED in 2019 due to DRPs caused by drugs classified in the ATC classification system as A, B and C. A 30 day prediction model was created in a derivation cohort using backward logistic regression. Those variables significant at $p<0.100$ in a multivariate analysis were assigned an integer score proportional to the regression coefficient. The model was then internally validated by k-fold cross validation and in the validation cohort.

Results 580 patients were included (mean age 80.0 (12.6) years) and 133 (22.9%) patients revisited the ED at day 30. Five independent risk factors (moderate to severe chronic kidney disease (5 points), previous ED visit within 3 months (6), high anticholinergic burden (8), DRPs related to heparin use (12) and safety DRPs (8)) were identified in the derivation cohort and were combined into an overall score. The model achieved an area under the curve–receiver operating curve of 0.71 (95% CI 0.66 to 0.75) in the derivation cohort and 0.70 (95% CI 0.65 to 0.74) in the validation

cohort (p=0.273). Patients were classified into three risk categories (high, medium and low) and had the following rates of risk: 11.1% (0–6 points), 20.0% (8–13 points) and 39.5% (>13 points). Findings were similar in the validation cohort. The optimal cut-off point in the model was 9, having a sensitive of 67.09%, a specificity of 69.06%, a positive predictive value of 36.78%, and a negative predictive value of 87.61%.

Conclusion and relevance This score could be used by clinicians from the ED to identify those patients at high risk of 30 day revisits, and could be useful to design specific interventions at discharge in this group of patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-360 RISK OF MALNUTRITION IN PATIENTS WITH COVID-19 DISEASE WHO RECEIVE ORAL NUTRITIONAL SUPPLEMENTS

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Background and importance The European Society for Clinical Nutrition and Metabolism (ESPEN) guidelines recommend the optimisation of the nutritional status of patients with SARS-CoV-2 infection through dietary advice and/or oral nutritional supplements (SNO). These should provide about 400 kcal and a minimum of 30 g of protein per serving.

Aim and objectives To identify the risk of malnutrition in patients with COVID-19 who received SNO, the cause of it and the adequacy of the SNO according to ESPEN guidelines.

Material and methods A cross sectional observational study was conducted between March and April 2020. Adult patients with COVID-19 who received SNO were included. Variables collected were: age, sex, body mass index (BMI), risk of malnutrition according to GLIM criteria, phenotypic criteria (weight loss (>5% in the previous 6 months) and low BMI (≤20 kg/m^2 for those aged <70 years old and ≤22 kg/m^2 in the elderly)) and aetiologic criteria (low intake (≥ 7 days of hyporexia) and inflammation, type of SNO, energy and protein intake, adaptation of the oral diet, evaluation by the nutrition service and reason for the consultation). The SPSS programme (V.25.0) was used for data analysis.

Results 162 patients were analysed. 51.8% (85) were men with a mean age of 72.75±12.58 years. Mean BMI mean was 27.05±4.2 kg/m^2. 15.2% (25) of patients presented weight loss greater and 6.7% (11) presented low BMI. 92.1% (151) had low intake and all patients fulfilled the criteria for inflammation associated with the disease. 22.6% (37) of the patients presented with a risk of malnutrition. The SNO provided a mean of 408.4±164.06 kcal/day and all were hyperprotein, with a mean of 25.96±10.08 g of protein/day. 18.3% (30) had an adapted oral diet and 16.5% (27) of the patients underwent consultation with the nutrition service, the reasons for this being: 70% (19) marked hyporexia, 18.5% (5) dysphagia and 14.8% (3) diarrhoea.

Conclusion and relevance A quarter of the patients analysed presented with a risk of malnutrition. Hyporexia was the main symptom. In our hospital, it would be advisable to increase the caloric and protein intake of the SNO to comply with ESPEN recommendations.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-361 INTERVENTIONS OF A CLINICAL PHARMACIST IN AN INTENSIVE CARE UNIT

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Background and importance Patients in an intensive care unit (ICU) are in a critical condition and often receive complex pharmacotherapy that needs to be adjusted frequently. It has been shown that a multidisciplinary approach, including pharmacists in the ICU team, improves the pharmacologic treatment of patients and helps to provide more individualised therapy.[1]

Aim and objectives The aim of this study was to identify the most common pharmaceutical care issues (PCI) in the ICU, to assess the acceptance rate of interventions by physicians and nurses made by the clinical pharmacist (CP), and to evaluate the time spent on chart reviews.

Material and methods This was a prospective observational study conducted in a 10 bed ICU in an acute care hospital during 2019. The clinical pharmacist visited the ICU 1–2 times a week and performed chart reviews. Recommendations were verbally communicated to the nurses and physicians, and interventions documented using the Pharmaceutical Care Network Europe classification of PCI.

Results During the study period, the CP visited the ICU 65 times and identified 232 PCI. On average, during each visit, 5 (n=315) patients' charts were reviewed and 1.6 (n=147) interventions per patient were made. 80% (n=52) of the CPs' visits lasted less than 60 min and of them, 27% (n=14) less than 15 min. The most common PCI were 'wrong dosage form' (12%, n=27), 'subtherapeutic dose' (11%, n=26), 'need for additional drug' (11%, n=25) and 'inappropriate drug' (10%, n=24). 136 (59%, n=232) PCI were accepted by physicians without adjustments, 8 (3%) were accepted with adjustments, 8 (3%) were not accepted and information was missing/not possible to assess for 75 (32%) PCI.

Conclusion and relevance This study shows that there is a need for a CP in the ICU. More regular visits and better collaboration with other healthcare professionals could improve patient outcomes.

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Conflict of interest No conflict of interest