prescriptions. MR consists in obtaining the complete and accurate list of medications taken by the patient at home, the best possible medication history (BPMH), then using BPMH to ensure the medication order. Two approaches are possible: retroactive when BPMH is produced and considered after the prescription is written; and proactive when BPMH is produced before and is considered in the initial prescription. Proactive MR is promoted as a safer approach, but the lack of human resources is often presented as a major limiting factor to set it in practice.

Purpose Thus, the aim of our study was to determine which approach was the most time-effective.

Material and methods We conducted a single-centre prospective study between June and October 2018. Patients over 65 years' old, hospitalised in a neurology unit in a university hospital were included, and randomly assigned to either the proactive or retroactive group (ratio1:1).

We measured:

- The delay between patient's entry and the completion of MR.
- Time spent to perform each step of the process (working time).
- The delay between patient's entry and first prescription.

In all cases, we compared BPMH to the first hospital prescription, and recorded unintentional medication discrepancies (UMD).

Results Sixty patients were enrolled in the study. The two groups were comparable in terms of demographics and number of medications in BPMH. In the proactive group, we measured:

- A significant decrease in the delay between patient's entry and the completion of MR (3.0±1.8 h vs 13.7±14h, P<0.0001).
- No difference in working time (26.6±9.3 min vs 30.1±10.3 min, P=0.17).
- No difference in the delay between patient's entry and first prescription (2.4±1.1 h vs 2.4±2.0h, P=0.96).
- A significant decrease in the number of patients with at least one UMD (13.3% vs 73.5%, P<0.0001) and the average number of UMD per patient (0.3±0.7 vs 1.8±1.7, P<0.001).

Conclusion We demonstrated that proactive MR improved the delay of MR, without increasing the working time nor delaying the time of first prescription. We confirmed that proactive is safer than retroactive in a neurology unit.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.

No conflict of interest.

4CPS-245 EVALUATION OF THE DEGREE OF ADHERENCE TO THE INTRAVENOUS TREATMENT OF AMBULATORY PATIENTS

S Martínez-Pérez, M Llinares Esquerdo, AM Sanchez Garcia, AC Murcia Lopez, L Soriano Irigaray, A Navarro Ruiz*. *Hospital General Universitario de Elche, Pharmacy, Elche, Spain*

10.1136/ejhpharm-2019-eahpconf.394

Background The lack of adherence to the pharmacological treatment of patients with chronic diseases is a prevalent and relevant problem in routine clinical practice.

Purpose To assess the degree of adherence to the non-chemotherapy intravenous treatment of chronic patients who came to the day hospital, as well as to identify the possible specific factors related to therapeutic compliance.

Material and methods A retrospective longitudinal descriptive study of 1 year duration (2017) was carried out. This included patients who went to the day hospital to receive treatment. The adherence data were extracted from the pharmacy service database and day-hospital records. The demographic and clinical data of the patients were obtained from the review of electronic health records: age, gender, pathology and treatment. Besides, the degree of adherence was expressed as a percentage and the results were calculated from the records previously submitted and taking into account the posological interval. Adherence was considered adequate when values equal to or greater than 90% were obtained. On the other hand, the association between the variables studied and the degree of adherence was estimated by means of statistical tests of hypothesis contrast.

Results A total sample size of 199 patients were included with a mean age of 51 years and 64% of them were females. The most frequent pathology was rheumatoid arthritis (30%), followed by Crohn's disease (26%) and lupus (10%). In agreement with this fact, the most frequently infused drug was infliximab (38.7%), followed by tocilizumab (24%) and belimumab (10%). Adherence to the treatment was considered inadequate in 22% of patients. Females had a higher degree of non-adherence (61%) than males. The variables that showed a statistically significant association with adherence to the treatment were the drug delivered, the dosage interval and the duration of the infusion (Chi square-test with $p<0.05$). Patients under treatment with frequently administered drugs were more likely not to attend further appointments. In addition, therapies whose administration required a short time in the day hospital favoured a greater degree of adherence in patients.

Conclusion The degree of adherence to the intravenous ambulatory treatment was inadequate in 22% of the population. The infused drug, the dosage interval and the duration of the administration were the variables that showed association with the adherence of the patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

To my workmate, thank you for your help.

No conflict of interest.

4CPS-246 PALATABILITY ASSESSMENT OF ORAL MEDICATION

Ye Nisse*, S Robert, J Wicky, S Henn-Ménétré, B Demoré. *Chru Nancy, Pharmacy, Vandoeuvre-Lès-Nancy, France*

10.1136/ejhpharm-2019-eahpconf.395

Background Some drug forms are not adapted to young children or the elderly. Lists of crushable tablets are already published but do not t consider palatability, which is an additional challenge for drug compliance.

Purpose To determine the palatability of diluted oral solid medications and oral liquid forms.

Material and methods The powder extracted from crushed tablets or opened capsules was diluted in water and flavoured suspending excipient. The minimum solvent needed for dissolution was determined by increments of 1 mL. The solution was then smelled and tasted by three pharmacists to determine the taste and the palatability score (PS) using the 5-point numeric rating scale (1=really bad; 5=really good) of the

European Medicines Agency. PS were reported on a visual analogue scale for each drug. The quantity tested by each pharmacist was two drops. The time between two medications was at least 5 min. The possibility of administration of a fraction of the dose was also determined. Modified release formulations and cytotoxic drugs were excluded. Liquid forms were tested with the same method.

Results One-hundred and fifty drugs were tested including 43 liquid forms and 107 solid forms. The average PS was smaller for diluted solid forms than for liquid forms (2.3 vs 2.9, $p<0.001$). This can be explained by the more frequent bitterness of diluted solid forms (87% vs 14%, $p<0.001$). PS was less than 3/5 for each tester in 72% of solid forms vs 60% of liquid forms ($p<0.001$). A dose fraction can be used for 76 diluted solid forms. Flavoured suspending excipient can mask the taste of 80/107 solid medication but only when the bitterness was low. Some medications cause other sensations: tricyclic antidepressants are anaesthetics for mucosa, naftidrofuryl and febuxostat are irritants for esophagus and glycerin in the formulation causes a warm sensation in the mouth.

Conclusion This database provides part of the answer regarding the acceptability of a treatment. PS is an important factor in compliance, particularly in the paediatric population. This method requires to be validated because taste varies with age, ethnic … This study must be completed by other elements such as pH of the solution, stability of the active substance or solubility parameters.

REFERENCES AND/OR ACKNOWLEDGEMENTS

https://www.ema.europa.eu/documents/presentation/presentation-acceptability-palatability-methods-available-assessment_en.pdf

No conflict of interest.

4CPS-247 LOCAL ASSESSMENT OF THE IMPACT OF PHARMACIST-LED MEDICATION RECONCILIATION ON HOSPITALISED ELDERLY PATIENTS

[1]S Nobili*, [1]SE Campbell Davies, [1]E Galfrascoli, [2]C Tinelli, [3]M Picca, [4]P Marino, [1]G Muserra, [1]M Medaglia. *[1]Fatebenefratelli e Oftalmico Hospital – Asst Fatebenefratelli Sacco, Hospital Pharmacy, Milan, Italy; [2]S. Matteo Hospital, Epidemiology Department, Pavia, Italy; [3]Macedonio Melloni Hospital- Asst Fatebenefratelli Sacco, Medicine Ward, Milan, Italy; [4]Fatebenefratelli e Oftalmico Hospital- Asst Fatebenefratelli Sacco, Medicine Ward, Milan, Italy*

10.1136/ejhpharm-2019-eahpconf.396

Background Medication reconciliation (MR) through pharmacists' interventions (PIs) is a standardised practice in many countries to reduce drug-related problems (DRPs), such as drug-drug interactions, no therapeutic indication and inappropriate duplications. DRPs, which are relatively common in poly-treated elderly hospitalised patients, can increase morbidity and healthcare costs. In Italy, MR has still not been systematically introduced, therefore, local assessments are crucial to evaluate feasibility.

Purpose To evaluate the impact of pharmacist-led MR.

Material and methods A pre-post intervention study was performed including hospitalised poly-medicated patients>65 years: in the pre-intervention group (PRE-group) MR was not conducted (May to September 2017); and in the post-intervention (POST-group) pharmacist-led MR was performed (November 2017 to March 2018). Data, collected with a specifically designed MR form from medical records and the hospital database, were registered in an Excel database including: patient demographics, number of prescriptions and DRPs at admission and at discharge, number of PIs and clinician acceptance rate in the POST-group and rehospitalisation rate 3 months after discharge in both groups. Statistical analysis was performed using STATA 15. Students *t*-test for independent data was used to compare quantitative variables between the two groups, while the Chi-square test was used for qualitative variables.

Results A total of 84 patients were included: 34 in the PRE-group (35.3% male, mean age 84.5±6.7, mean number of prescriptions per patient on admission 7.4±2.7, at discharge 8.0±2.6) and 50 in the POST-group (45.1% male, mean age 83.2±17.5, mean number of prescriptions per patient on admission 8.4±3.2, at discharge 7.7±3.0). DRPs at discharge were substantially reduced after the implementation of MR conducted by a pharmacist ($p<0.001$): in the PRE-group, mean 2.90±2.83 DRPs per patient were identified on admission and 3.79±2.99 at discharge, while in the POST-group 4.80±2.97 DRPs per patient on admission and 2.64±1.75 at discharge leading to a significant difference in terms of reduction of DRPs at discharge between the two groups ($p<0.05$). In total, 288 PIs were performed with a 74% clinician acceptance rate. The rehospitalisation rate reduced significantly in the POST-group (35% vs 10%, $p<0.05$).

Conclusion Results showed pharmacist-led MR to be an effective procedure in the local setting, reducing DRPs and rehospitalisations in elderly patients. Therefore, MR programmes should be introduced into Italian standard practice to reduce healthcare costs.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.

No conflict of interest.

4CPS-248 ANTIMICROBIAL POINT PREVALENCE SURVEY

[1]M Nunez-Nunez*, [2]F Anguita-Santos, [1]R Alvarez-Sanchez, [1]I Vallejo. *[1]Hospital San Cecilio, Pharmacy, Granada, Spain; [2]Hospital San Cecilio, Infectious Diseases, Granada, Spain*

10.1136/ejhpharm-2019-eahpconf.397

Background Antimicrobial resistance has become a global challenge in healthcare and is usually associated with poor antibiotic-prescribing patterns.

Purpose We sought to determine the rate and characteristics of antibiotic prescription in order to design future targeted antimicrobial stewardship interventions.

Material and methods A point prevalence survey was carried out in the framework of the multi-centre study of international prevalence Global PPS 2017 (www.globalpps.com) in November 2017. The study was conducted from the analysis of all prescriptions of active antibiotics at 8 am at the hospital in a single day. A descriptive study (frequency and percentage) of the variables explored was carried out.

Results Of 174 patients eligible for the study, quality indicators for antimicrobial prescriptions were: compliance with institutional guidelines: 100%, 62.3% and 57.8% ($p<0.01$); reason given for prescribing in patient case notes: 50%, 83% and 85.3% ($p<0.01$); antibiotic duration documented in medical chart: 14.3%, 7.5% and 13.8% ($p=0.498$); and targeted treatment: 28.6%, 34% and 32.1% ($p=0.922$) for ICU, medical and surgical departments respectively.