equating to 164–192 points. In the third method, values of 50.2–52.6% (200–220 points) were obtained.

Conclusion and Relevance The findings demonstrate ChatGPT's variable ability to provide correct responses to FIR questions depending on the methodology employed. Regardless of the approach, ChatGPT consistently achieved the minimum score required for participation in the allocation of FIR positions.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

6ER-021

### OPIOID-SPARING STRATEGIES FOR DISCHARGE ANALGESIA PRESCRIBING IN NON-COMPLEX SURGERIES — A MISSED OPPORTUNITY

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Background and Importance Opioids are an integral element of post-operative management for moderate to strong pain. Despite their effectiveness they are associated with a range of adverse effects and excessive opioid prescribing has contributed to a widespread international crisis of addiction and overdose, including across Europe and in Australia. Even minor surgeries can serve as an initial event for opioid-naive patients to become persistent opioid users. In Australia, opioid-related harm and associated deaths have risen along with opioid prescribing.

Guidelines recommend paracetamol and nonsteroidal antiinflammatory drugs (NSAIDs) to reduce the opioid analgesics use. NSAIDs in particular work synergistically with opioids, providing opioid-sparing effects. Usage in the final 24 hours of hospital admission guides decision-making around prescribing of discharge analgesia.

Aim and Objectives We retrospectively assessed analgesia use patterns in opioid-naive patients undergoing non-complex surgery (length-of-stay 1–4 days post-operatively). We had a particular focus on intermediary analgesia use (NSAIDs and tramadol) and possible NSAIDs contra-indications to short-term use.

Material and Methods Patients undergoing surgery under general surgical teams with a post-operative length-of-stay of 1–4 days were retrospectively identified using case mix codes. Use of opiods, non-steroidal anti-inflammatories, tramadol and paracetamol in the final 24 hours of admission were quantified along with possible contra-indications for use and discharge prescribing.

Results Of 1015 patients assessed there were 555 (55.7%) who were eligible for NSAIDs and/or tramadol and not prescribed this as an inpatient option, although 310 (55.9%) of these patients still received opioids.

In the final 24h of admission 759 patients with no contraindication to NSAIDs or tramadol did not receive these medications but 314 (41.4%) still received discharge opioids.

79 (7.8%) patients required no opioid analgesia in the final 24 hours but were still prescribed opioid at discharge.

A further 122 (12.0%) were not prescribed inpatient paracetamol 31 (25%) but received discharge opioids.

Conclusion and Relevance There is an abundance of missed opportunity for opioid-sparing strategies to be employed in this cohort. These poor prescribing patterns were largely driven by engrained culture and/or junior prescriber unawareness of options. Further work is underway to define post-discharge analgesia use patterns in order to inform development of clinical decision support to address this issue.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

6ER-022

# KNOWLEDGE, ATTITUDE AND PRACTICE ABOUT PHARMACEUTICALS IN THE ENVIRONMENT AMONG HOSPITAL PHARMACISTS IN SPAIN

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Background and Importance Healthcare professionals need to be more aware of the negative environmental impact of pharmaceuticals. Hospital pharmacists, in particular, play an essential role in the life cycle of drugs. Their contribution to tackle the problem is going to be pivotal. So far, scant information is available about the level of knowledge, attitude and practice about the issue among hospital pharmacists.

Aim and Objectives To evaluate the knowledge, attitude and practice about the issue of pharmaceuticals in the environment (PiE) among hospital pharmacists in Spain.

Material and Methods A self-administered on-line questionnaire (Microsoft Forms) consisting of 18 questions about knowledge, 10 about attitude, 2 about practice and 3 others was sent via e-mail to all members of the Spanish Society of Hospital Pharmacists (n=4451). The scale used for knowledge questions was variable. The attitude scale, previously validated, is an agreement scale (being 0 'totally disagree' and 10 'totally agree'). Descriptive statistics were performed.

Results 149 hospital pharmacists (3.4%) answered the survey. (75.2% women, mean age 43.7 years). 92 professionals (61.7%) did not know the concept 'emerging pollutants', and 85 participants (57.0%), had not heard of 'One Health'. Only 19 (12.7%) knew about the Environmental Risk Assessment reports of the European Medicines Agency, and the majority (n = 98; 66.2%) responded 'do not to know/no answer' to the question about the most famous ecotoxicological disaster in Asian vultures caused by veterinary diclofenac. 111 (74.5%) knew nothing about the destiny of their hospital wastewaters and 58 (38.9%) admitted to having doubts about pharmaceutical waste management in their setting. On the contrary, 130 (87.2%) correctly identified metered dose inhalers (MDIs) having a higher carbon footprint. Acquiring knowledge about drug pollution was considered very positive (mean score 8.61). Only 17 responders (11.4%) admitted to considering environmental aspects to develop hospital formularies.

Conclusion and Relevance This study shows that there is room for improvement in the knowledge about PiE among hospital pharmacists in Spain. There is a high level of knowledge about MDIs carbon footprint, and the attitude towards the issue is positive, but environmental criteria are not considered to develop hospital formularies.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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6ER-023

## A MULTI-SECTOR SIMULATED EXPERIENTIAL PRACTICE EVENT FOR YEAR 1 PHARMACY STUDENTS

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Background and Importance Simulation-based education complements traditional teaching, improving students' knowledge, understanding, as well as supporting the development of students' teamwork, decision-making, and consultation skills<sup>1,2</sup>, as well as supporting professional identity formation<sup>3</sup>. Year 1 students across the country participated in a pre-placement workshop and a simulated multi-sector experiential event.

Aim and Objectives To evaluate Year 1 pharmacy students' and participating staff' experiences of a simulated multi-sector Experiential Event designed to develop clinical and consultation skills.

Material and Methods The year 1 Experiential Event was delivered in both Universities in the country in March 2022. Staff (n=16) and students (n=222) were invited to complete a post-Event evaluation on Microsoft Forms to inform ongoing improvement of the Event.

Ethical approval was not required as this formed part of the review of the module

Results Seventy-five percent of staff responded (n=12) with 42% (n=5) respondents believing that students were competent conducting medication history, counselling and simple prescribing decisions. Seventy-seven percent of students (171/222) responded; 85% (n=145) and 81% (n=139) respectively believed that the medication history and consultation checklists developed in the pre-placement workshop prepared them for 'real' patient consultations. Students were confident in conducting BP and peak flow examinations (73%, n=125) and in prescribing medication (83%, n=142). Eighty-six percent (n=147) of respondents believed that the event had made them feel more like a pharmacist.

Conclusion and Relevance Year 1 respondents showed an appreciation for the experiential event, believing that it improved their clinical and consultation skills. The majority of student respondents believed that the event supported their professional identity formation. Staff respondents agreed that students developed core clinical skills but to a lesser extent than student participants, believing curriculum redesign will facilitate enhanced student engagement with the event.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

- Korayem GB, et al. Simulation-Based Education Implementation in Pharmacy Curriculum: A Review of the Current Status. Advances in Medical Education Practice. 2022;13:649–660.
- McMillan A, Barrickman A. Implementation of a skills practical to first-year pharmacy students. Currents in Pharmacy Teaching and Learning. 2017;9(6):1111–1116.

 Quinn G, Lucas B, Silcock J. Professional Identity Formation in Pharmacy Students During an Early Preregistration Training Placement. American Journal of Pharmaceutical Education. 2020;84(8):1132–1139.

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6ER-024

### LYELL'S SYNDROME IN CAR-T TREATED PATIENTS: A CASE STUDY

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Background and Importance Lyell's syndrome - a toxic epidermal necrolysis - is a rare and potentially life-threatening disease that affects the skin and mucous membranes. The drugs commonly implicated in toxic epidermal necrolysis (TEN) include non-steroidal anti-inflammatory drugs, chemotherapy, antibiotics and anticonvulsants.

Aim and Objectives This case report explores potential triggers of Lyell's syndrome in 39-year-old woman diagnosed with relapse and diffuse refractory large cell B lymphoma (DLBCL) who underwent Third Line Therapy with Axicabtageneciloleucel. After the infusion, CRS (cytokine release syndrome) was reported, which progressed from grade 1 to G2 within 3 days. This was complicated by the onset of ICANS (immuneeffector cell-associated neurotoxicity syndrome) progressed to G3 within 3 days. Subsequently, the HLH/MAS framework (Hemophagocytic Lymphohistiocytosis/Macrophage Activation Syndrome) was reported. To control her persistent high fever and to reduce the risk of convulsions, was somministrated levetiracetam. Despite anti-cytokine therapies and steroids were continued, after 6 days Toxic epidermolysis affected 90% of the body surface area, confirmed by histological examination of the skin rhomboid, consistent with TEN/Lyell syndrome. Levetiracetam was discontinued.

Material and Methods Medical records and National Pharmacovigilance Network were used to collect data.

Results The patient was admitted to the intensive care unit for 32 days, receiving treatments comparable to those given to patients with severe burns. Drugs administered: ruxolitinib, methylprednisolone, daptomycin, amine, piperacillin/tazobactam, tocilizumab, entanercept, anakinra, and high-dose fluids. The pharmacist provided critical support to CAR-T team, playing a key role in the management of drug selection and occasionally resort to off-label use of medicines. A sterile paraffin tulle gras dressing led to re-epithelialisation and disappearance of the blisters. DLBCL progression led to death 9 months later.

Conclusion and Relevance The co-administration of several drugs, the lack of available data on adverse drug reactions (ADRs) in response to CAR-T, and the temporal relationship between levetiracetam and onset of ADR lead to the conclusion that a metabolite of anticonvulsants, identified in the literature as a potential trigger, was responsible for the ADR. The decision to use anti-TNF-alpha was critical in the management of the syndrome. A comparable ADR was subsequently reported in Eudravigilance, raising uncertainty about the potential involvement of levetiracetam as a trigger of the ADR.