number of days from SLT assessment to pharmacy review was 0 for patients referred by SLT to pharmacy, compared with a median of 10 days for those not referred. Median percentage of medications optimally administered was 89% per patient in those referred to pharmacy versus 50% in patients not referred. This project has targeted a number of different areas to highlight and improve administration of medication to patients with dysphagia throughout a large acute hospital. The audit cycle continues with the aim of further improving patient care in this area.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-115 NEAR MISS DISPENSING ERRORS DURING WORKING HOURS IN INPATIENT DISPENSARIES AT A LARGE UK TEACHING HOSPITAL

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10.1136/ejhp-2020-eahpconf.432

Background and importance Errors in medication dispensing have potential to harm patients.¹ Up to 2.7% of dispensed medications include errors, although fewer 'near miss' data exist.² Near misses are 'a dispensing error detected by the checker before the patient receives the prescription'.^{1, 2} Audits defined a local near miss rate in 2013. This UK teaching hospital has two automated (acute, specialist) and one non-robotic (paediatric) dispensaries.

Aim and objectives To determine the frequency, time, staff group and harm potential of near misses.

Material and methods A group representing all stakeholders created a data collection tool based on the UK Centre for Pharmacy Postgraduate Education.³ It recorded type, time and staff group for near misses in three dispensaries (paediatrics, adult acute and adult specialist). Data collection were piloted and then collected in September 2019 over 7 days. Two pharmacists independently rated the likelihood of harm.

Results Near misses totalled 190/8483 (2.24%) items: 1.10% (specialist), 1.41% (paediatrics) and 3.10% (acute) dispensaries (χ^2 , $p < 0.001$). Most near misses (51, 26.8%) occurred between 5pm and 6pm. Assistant technical officers accounted for the highest proportion of near misses (16.8%, 32) followed by pharmacists (12.1%, 23), technicians (10%, 19), checking technicians (9.5%, 18), preregistration pharmacists (6.8%, 13) and trainee technicians (5.3%, 10): 71.1% (135) of near misses were graded likely to cause patient harm.

Conclusion and relevance Previous audits observed lower near miss rates than those found in 2019. Hurrying to complete work may account for the higher error rate between 5pm and

6 pm. Loss of three senior experienced pharmacists in 2015–2018 in the adult acute dispensary may have affected supervision of newly qualified pharmacists. The specialist dispensary implemented automation of drug selection in 2009, which may account for the 3.9% reduction in near misses. Reporting dispensing near misses may be too time consuming but regular audit may inform areas for improvement.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. James KL, *et al.* Incidence, type and causes of dispensing errors: A review of the literature. *Int J Pharm Pract* 2009;**17**:9–30.
2. James KL, *et al.* Unprevented or prevented dispensing incidents: which outcome to use in dispensing error research? *Int J Pharm Pract* 2011;**19**:36–50.
3. Centre for Pharmacy Postgraduate Education. Accuracy checking pharmacist technician programme. Available: <https://www.cppe.ac.uk/career/acpt>. Date accessed: 02.09.19.

No conflict of interest.

5PSQ-116 SAFER HANDLING OF ORAL HAZARDOUS DRUGS IN HOSPITAL UNITS

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10.1136/ejhp-2020-eahpconf.433

Background and importance After the National Institute for Occupational Safety and Health (NIOSH) classified hazardous drugs (HD), it was deemed necessary to make healthcare workers aware of the risks associated with handling HD in their daily work to mitigate these risks.

Aim and objectives To analyse oral HD handling activities to make handling recommendations based on the lowest dust inhalation risk and to ensure the safety of healthcare workers in hospital units.

Material and methods Oral HD were classified into two categories: groups 1 and 2 and group 3 according to NIOSH grouping system. Secondly, oral HD handling activities in hospital units based on their dust inhalation risk to the workers were ranked and decisions were taken accordingly: opening capsules and sachets must be avoided; marketed liquid formulations is strongly preferred; and in their absence, crushing tablets using closed systems is preferred over compounding medications due to shorter administering periods in hospital units. Finally, the above mentioned ranking was followed for every oral HD. If no marketed liquid alternatives were found, research on techniques for crushing and dissolving tablets was conducted. In the absence of crushing techniques, academic research on compounding oral HD was carried out. For the remaining oral HD, information was requested from the manufacturers.

Results A total of 59 active pharmaceutical ingredients (API) from groups 1 and 2 were analysed. Marketed liquid formulations were found for 13 API (abacavir, ciclosporin, crizotinib, phenytoin, megestrol, mycophenolate mofetil, mycophenolic acid, nevirapine, oxcarbazepine, trametinib, tofacitinib, valganciclovir, and zidovudine). Techniques on crushing and dissolving tablets were available for 21 API (abiraterone, axitinib, busulfan, dasatinib, entecavir, enzalutamide, everolimus, exemestane, flutamide, imatinib, letrozole, medroxyprogesterone, melphalan, mercaptopurine, methimazole, methotrexate, mitotane, ponatinib, rasagiline, sorafenib and tamoxifen).

For 13 API (azathioprine, capecitabine, carbamazepine, cyclophosphamide, chlorambucil, etoposide, hydroxyurea,

Abstract 5PSQ-115 Table 1

Year	Adult specialist (%)	Adult acute (%)	Paediatrics (%)	Hospital average (%)
2006	5	0.5	N/A*	0.9
2011	1.3	0.8	N/A*	1.1
2013	1.0	0.5	0.7	0.7
2019	1.1	3.1	1.4	2.2

*Not audited.

procabazine, spironolactone, sunitinib, tacrolimus, thalidomide and topotecan) compounding oral information was found. No information was obtained for 12 API (20.3%) (bexarotene, bosutinib, cabozantinib, fingolimod, fludarabine, ixazomib, lenalidomide, nilotinib, pazopanib, pomalidomide, regorafenib and vinorelbine) for which avoiding their handling and seeking other therapeutic alternative was advised. For the remaining 79.7% of API, priority was given to the recommendation of the lowest dust inhalation risk handling alternative.

Conclusion and relevance Safe handling alternatives were found for most of the analysed oral HD in the sample, with potential to minimise workers' handling risk and ensure safety measures in hospital units.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-117 ANALYSIS OF MEDICATION ERRORS IN AN ONCOLOGY SETTING USING AN INTERNAL REPORTING SYSTEM

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10.1136/ejhp-2020-eahpconf.434

Background and importance The last 20 years have seen a growing awareness of the effect of human error in healthcare in oncology practice. Despite global advances in healthcare practices, an estimated 1 in 10 patients is still harmed while receiving care. In 2017, the World Health Organization published 'Medication without harm, global patient safety challenge', calling for action to reduce patient harm due to unsafe medication practices and medication errors. The Italian Ministry of Health issued the 'Raccomandazione 14' to provide the Italian health system with shared unequivocal procedures for anticancer drug supply, compounding, storage, prescription and administration. Although some progress has been made, error measurement methods and prevention strategies remain important areas of research.

Aim and objectives Our main aim was to evaluate the effectiveness of the pharmacy occurrence-reporting system and to study which procedures can be put in place to minimise drug preparation errors in oncology.

Material and methods In two oncology settings, the effectiveness of the pharmacy occurrence-reporting system was determined over a period of a year and a half to increase occurrence reporting within the pharmacy and allow administrators to identify specific areas for improvement within the chemotherapy drug preparation process. These events were identified according to the number and type of near misses documented by pharmacy staff. A web based error reporting form was developed for all steps of the pharmacy preparation process. The pharmacy staff was asked to complete the form when a new error occurred.

Results During the evaluation period, eight errors were reported to the hospital's error reporting system. In contrast, 401 total pharmacy events were documented using the pharmacy's internal occurrence-reporting system: 46.6% were classified as errors, 25.2% as non-conformity errors, 23.2% as near miss errors and 5.0% of the reported events involved high alert medications according to the institution's high alert medications policy classified as sentinel events.

Conclusion and relevance A pharmacy internal occurrence-reporting system increased staff reporting and identified areas for improvement within the medication distribution process that may not have been recorded by a hospital based reporting system. Oncology preparation therapy must be regarded as a high risk activity and improvement in risk management procedures to minimise risk to patients has to be seen as a priority of the pharmacist's work.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-118 DESCRIPTIVE COMPARATIVE SAFETY ANALYSIS OF PALBOCICLIB AND RIBOCICLIB IN METASTATIC BREAST CANCER HER2 NEGATIVE WITH POSITIVE HORMONAL RECEPTORS

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10.1136/ejhp-2020-eahpconf.435

Background and importance Palbociclib and ribociclib are equivalents in terms of effectiveness in the treatment of metastatic breast cancer (mBC) HER2 negative with positive hormone receptors (RH). The randomised studies PALOMA-2/3 and MONALEESA-2/3 concluded that the most frequent AE is neutropenia of any degree with an incidence of 75.8% and 71.5% for palbociclib and ribociclib, respectively.

Aim and objectives To determine the long term safety profile of palbociclib and ribociclib in real clinical practice.

Material and methods This was an observational, descriptive, retrospective study. All patients diagnosed with mBC HER2 negative and RH positive who started treatment with palbociclib or ribociclib between November 2017 and October 2019 were selected. The main outcomes were percentage of patients that required dose reduction due to AE, causes of AE and time of onset. Other outcomes were percentages of dose delays and their causes. The clinical and analytical data were obtained from the history clinical electronic programme (Diraya) and the treatment data from the prescription programme (OncoFarm).

Results During the study period, 22 patients were treated with palbociclib (4 as firstline therapy) and 44 with ribociclib (22 as firstline therapy). Median duration of treatment was 17.1 months in the palbociclib group and 5.0 months in the ribociclib group. In the palbociclib group, 36% (n=8) of patients the dose was reduced to 100 mg due to neutropenia (6/8), thrombocytopenia (1/8) and unknown cause (1/8); one of these patients required a second dose reduction to 75 mg due to neutropenia 71 days after the first reduction. In the ribociclib group, 6% (n=3) of patients had their dose reduced due to AE, 4% due to neutropenia and 2% to nausea. In 52% of patients treated with palbociclib there were 18 delays: neutropenia (n=11), leucopenia (n=2), thrombocytopenia (n=2), unknown (n=2) and rash (n=1). In the ribociclib group, 6% (n=3) of patients had a dose delay due to AE: 2 due to neutropenia and 1 to nausea and vomiting. At the time of analysis, 7 and 12 patients, respectively, had discontinued treatment for any cause.

Conclusion and relevance In our sample of patients, tolerance, in terms of AE, of ribociclib was better than that of palbociclib. These data are not consistent with previous studies and