The compounded product has suitable pharmaceutical characteristics, such as rheology, in vitro release profile and a pH value suitable for oral administration.

Its clinical application in a patient with grade 3 mucositis resulted in excellent acceptability and significant reduction in the degree of mucositis (for grade I) and re-introduction of EVR into the therapeutic regimen at the end of a week of treatment with the gel.

Conclusion This mucoadhesive gel can be an effective option for the prophylaxis/treatment of oral mucositis, for its prolonged residence time in the oral cavity and easier administration. The pleasant taste promotes a good therapeutic compliance, as well as the smooth and suitable texture for the treatment of an aggressive mucosa. The inclusion of more patients in this study will validate these assumptions.

REFERENCES AND/OR ACKNOWLEDGEMENTS


No conflict of interest.

3PC-049 MOBILE APPLICATIONS RELATED TO PARENTERAL NUTRITION: QUALITATIVE AND QUANTITATIVE ANALYSIS

JT de Pourcq*, 1A Montero Delgado, 1M Gomis Pastor, 2C Fraile Clemente, 2FJ Merino Alonso. 1Hospital de la Santa Creu i Sant Pau, Pharmacy Service, Barcelona, Spain; 2Hospital Universitario Nuestra Señora de Candelaria, Pharmacy Service, Santa Cruz de Tenerife, Spain

Background In recent years, health apps have increased exponentially, with more than 3 25 000 available.

Because of the lack of regulation, some of these apps may offer inaccurate content or may not reach the minimum quality standards in order to be used by healthcare professionals.

Purpose Analyse the availability of parenteral nutrition (PN)-related apps for mobile devices and their quality according to the Mobile App Rating Scale (MARS).

Material and methods Cross-sectional study performed in October 2018.

A search was conducted of two major mobile platforms: Apple’s App store and Google Play Store. The keywords used to identify the initial sample was ‘parenteral nutrition’.

The exclusion criteria were:

• Not related to PN.
• Non–medical category.
• No English or Spanish language.
• Not updated <36 months.
• Non–free apps.

The selected apps were downloaded on a smartphone and on a tablet of both systems in order to be analysed. The app’s quality and reliability were measured by means of MARS (score 0–5 points). MARS includes a 4-item subjective assessment which was also used to analyse the apps. Other variables analysed were: social score (for Android apps), availability in operative systems and devices, and price.

Data collection and statistical analysis were performed in a Google Drive spreadsheet.

Results Of the 34 apps identified, only six met the inclusion and exclusion criteria. All were addressed to healthcare workers, standing out those addressed to ICU or neonatal units.

The mean MARS was 2.82 (2.41–3.75). The mean social score was 4.65. The three apps with best MARS (0–5) were ASPEN ebooks (3.75), UCIN-Calc Beta (3.06) and Nutrition Parenteral UCI (2.68). These also obtained the best score in the subjective assessment (2.5, 3.25 and 2.25 respectively).

The other analysed apps obtained a MARS <3 points and a subjective score <2 points.

Conclusion There are few updated apps related to PN, and they are all addressed to healthcare professionals. Only a few PN apps have enough quality to be used by healthcare professionals with guarantees of their activity.

REFERENCES AND/OR ACKNOWLEDGEMENTS


No conflict of interest.

3PC-050 APPLICATION OF HAZARD VULNERABILITY ANALYSIS TO EVALUATE POTENTIAL RISKS OF PHARMACY COMPOUNDING

R Giammona*, P Poldori. IRCCS ISMETT, Clinical Pharmacy, Palermo, Italy

Background Hazard vulnerability analysis (HVA) is a method that provides a systematic approach to identifying the hazards and the direct and indirect effects that they have on the hospital pharmacy.

Purpose The objective of this study was to identify the phases at the greatest risks, to find solutions to reduce the risk level and to enhance patient safety.

Material and methods We have adapted this method to all the stages of drug compounding. We analysed 45 different events concerning the preparations of drugs. For each process, a score of 0 to 3, has been assigned for the following items: probability of the event happening (0=none/unknown; 1=low; 2=moderate; 3=high); magnitude of impact divided into human impact (probability of death or injury), property impact (physical losses and damages) and business impact (interruption of services) (0=none/unknown; 1=low, 2=moderate, 3=high); and mitigation factors divided into preplanning, internal response and external response (0=none/unknown, 1=high, 2=moderate, 3=low). The severity of the event determined using the difference between the magnitude of impact and the degree of mitigation. The risk was obtained by multiplying the probability by the severity.

Results Only 6/45 (13.3%) of all phases showed a risk of more than 50%. The risk related to the lack of prescription and, consequently, preparation made after a doctor’s call, was 52%. The risk related to the preparation of the drug that caused allergy to the patient noted in the electronic medical record was 56%. The risk due to the preparation of the drug that caused interactions with other drugs administered to the patient was 52%. The risk of the wrong quantity of drug prepared was 67%. The risk due to incorrect labelling was 56%.
Conclusion Based on these results, we have identified some solutions to reduce the risk: the double-check carried out by two different people could solve the risk due to incorrect labelling; and the software used by pharmacists can be improved to reduce the risk related to the patients' allergy or cross-reaction. Finally, errors can be reduced through clearer and specific sessions of training for the compounders.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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Abstracts

IMPACT OF OPHTHALMOLOGICAL PREPARATIONS IN THE PHARMACY SERVICE OF A REFERENCE HOSPITAL
I Salar Valverde, N Manresa Ramon, M Gil Candel*, M Onteniente Candela, C Pastor Mondejar, C Caballero Requejo, C Iniesta Navalon, M Garcia Coronel, E Ubrieta Sanz. Hospital General Universitario Reina Sofia, Hospital Pharmacy, Murcia, Spain
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Background There are many medicinal products that, although they have shown efficacy and safety in different ophthalmological indications, are not authorised or commercially available for ophthalmic administration.1

Purpose To evaluate the elaborations of ophthalmological medicines which must be prepared in the pharmacy service.

Material and methods This was a retrospective study of ophthalmological preparations in a reference hospital from January 2016 to December 2017. The parameters measured were treatment, administration (eye drops or intraocular injections) and economic impact.

Data source: SAVAC computer system.

Results Over the studied period, 37 618 ophthalmological preparations were elaborated in our laboratory: 20 430 (2017) and 17 188 (2016).

The preparation of eye drops were 16 838 (2017) and 13 990 (2016). During 2017, we observed that autologus serum 20% supposed 8810 preparations, cyclosporine 0.05% (6,800), autologus serum 50% (313), vancomycin 5% (200) and ceftazidime 5% (150). The main increase was concentrated in autologus serum 20% eye drops and cyclosporine 0.05% eye drops (17% and 20%, respectively).

The preparation of intraocular injections were 3592 (2017) and 3128 (2016). During 2017, the five preparations with the highest number of preparations were: cefuroxime 1 mg/0.1 ml (1,630); aflibercept 2 mg/0.05 ml (1,193); vancomycin 1 mg/0.1 ml (481); ceftazidime 2 mg/0.1 ml (130); and bevacizumab 5 mg/0.2 ml (74). It can be observed that these five preparations were 96% of the total intraocular injections. The main increase was concentrated in the saving of aflibercept 2 mg/0.05 ml intraocular injections.

It has also been shown that bevacizumab 2.5% eye drops (€ 12,008,4/year) and intravitreal syringes of aflibercept 2 mg/0.05 ml (€ 244,920/year) account for 98% of the total expense (€ 260,920) in ophthalmology preparations.

Conclusion The ophthalmological preparations in a pharmacy hospital have increased by 19%. Autologus serum 20% and cyclosporine 0.05% were impacted of 92% eye drops, including the longest storage duration tested. They must be prepared in the pharmacy service according to quality criteria to ensure its effectiveness, stability and sterility,1 and supposed a high economic impact (€ 260,816.76)

REFERENCES AND/OR ACKNOWLEDGEMENTS
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