self-administered their own medication. In the control group, medication was dispensed by nurses in the ward.

The proportion of ward level dispensing errors was collected through disguised observation of patients in the patient room and nurses in the medicine room.

A dispensing error was defined as a deviation between the prescription and the dispensed medication (eg, incorrect dose). Opportunity for errors (OEs) was defined as any medication dispensed and any medication prescribed but not dispensed. Dispensing error proportion = (dispensing errors/OEs) × 100%.

Results A total of 250 patients were recruited; 11 were withdrawn as they were discharged prior to observation. The proportion of men was 66% and mean age was 64.2 years (SD 12.2). Total cost per patient in the intervention group was 49.9€ (95% CI 46.7; 53.1€) compared with 52.6€ (95% CI 47.1; 58.1€) in the control group ($p=0.09$). Sensitivity analysis consistently showed total costs favouring the intervention. The dispensing error proportion was 9.7% (95% CI 7.9 to 11.6%) (100 errors/1033 OEs) in the intervention group compared with 12.8% (95% CI 10.9 to 15.6) (132 errors/1028 OEs) in the control group ($p=0.02$).

Conclusion and relevance SAM seem to cost less but the results were not statistically significant. As SAM patients made fewer dispensing errors compared with nurse-led medication dispensing, the results are suggested to be cost effective.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

11SG-015 EVALUATION OF BISPECTRAL INDEX MONITORING IN GENERAL ANAESTHESIA THROUGH A HEALTH TECHNOLOGY ASSESSMENT METHOD: A POSSIBLE INTRODUCTION IN CLINICAL PRACTICE IN AN ITALIAN HOSPITAL?

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Background and importance International guidelines suggest evaluation of clinical signs to guide the dosages of anaesthetic agents in order to achieve the basic goals of anaesthetic management. The use of the bispectral index (BIS) as standard practice might be useful for anaesthesia management by reducing the risk of intraoperative awareness (0.1–0.2% of the surgical population), consumption of anaesthetic agents, recovery time and total cost of anaesthesia.

Aim and objectives The objective of the study was to assess the efficacy of BIS guided anaesthesia monitoring for its potential introduction as standard practice.

Material and methods The study was conducted from January 2008 to July 2019, using the following databases: PubMed, Cochrane Library, ECRI and NICE. The articles included meta-analyses, randomised control trials, health technology assessment (HTA) reports and guidelines for BIS guided monitoring versus clinical signs as standard practice during general anaesthesia in adult patients. The evaluation was conducted according to the scheme reported in the sub annex G of Lombardy region Resolution XI/1046 which describes methods for the systematic research and critical analysis of the literature sources and the drawing up of an HTA report.

Results We reviewed 18 articles to analyse the benefits in terms of more reliable statistical evidence and cost

effectiveness. BIS reduced the risk of intraoperative awareness in high risk patients by 80% (OR=0.24, 95% CI 0.12, 0.48). Furthermore, BIS reduced discharge time from postanaesthesia care units by about 23 mins (95% CI -31.01, -13.69; $I^2=20\%$), postoperative nausea and vomiting by 12%, risk of postoperative cognitive disorders at 3 months after extubation by 3% (95% CI -0.05, -0.00; $I^2=52\%$) and risk of postoperative delirium by 6% (95% CI -0.10, -0.03; $I^2=11\%$).

Conclusion and relevance BIS guided monitoring reduced the risk of intraoperative awareness in high risk patients under intravenous general anaesthesia. Furthermore, BIS was effective in reducing consumption of anaesthetic agents, time to discharge from postanaesthesia care units and postoperative adverse events. It remains to be clarified whether BIS technology is cost effective, considering the low prevalence of intraoperative awareness, and whether it represents a real benefit in perioperative and postoperative preventable adverse events. The costs of preventable adverse events should be evaluated at a single healthcare facility, considering the long term benefits.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. <https://www.ncbi.nlm.nih.gov/pubmed/24937564>
2. https://www.eahp.eu/sites/default/files/abstract_book_-_bar19_-_updated.pdf
3. <https://www.ncbi.nlm.nih.gov/pubmed/23962378>

No conflict of interest.

11SG-016 ENVISIONING SUSTAINABILITY IN PERSONALISED MEDICINE: FONDO AIFA 5% AND THE ITALIAN EXAMPLE

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Background and importance Sustainability in the era of personalised medicine represents one the major problems because of the possible limited access to innovative therapies. Since 2003, the Agenzia Italiana del Farmaco (AIFA), along with pharma industries, has established an innovative and unique programme, 'Fondo 5%',¹ to deliver innovative and highly expensive therapies to patients with rare diseases after their approval by the EMA but before AIFA authorisation and reimbursement for the specific indication. A joint evaluation by physicians and clinical pharmacists, based on the scientific literature, clinical reports, treatment plan and cost estimate analysis, produces a patient specific request for a peculiar drug not otherwise available through conventional channels. AIFA is responsible for the scientific evaluation, and final authorisation or rejection. Once the treatment plan has received AIFA official approval, the clinician is authorised to administer the therapy whose cost will be subsequently refunded by the AIFA.²

Aim and objectives To describe the Italian method in order to improve the availability of the best innovative therapies, considering sustainability of the national health system.

Material and methods Collection and processing of drug requests for Fondo 5% and analysis of the clinical and economic impact.

Results From August 2018 to September 2019, 24 treatments were authorised by AIFA: 20 (83%) in the adult and paediatric haematological area (venetoclax for acute myeloid leukaemia/mantle cell lymphoma, eltrombopag for pure red cell

aplasia, pembrolizumab for Hodgkin lymphoma/non-Hodgkin lymphoma, ruxolitinib for myeloproliferative neoplasm BCR/JAK2-rearranged, blinatumomab for acute lymphoblastic leukaemia, ruxolitinib for graft versus host disease); 3 requests (12%) came from the oncological/gynaecological area (trabectedina for tube ovarian carcinoma and serous ovarian adenocarcinoma) and 1 (5%) from the ophthalmology area (cenegermin for neurotrophic keratitis). Eight of 24 authorised patients (33%) are still receiving treatment and 16 (67%) have completed their treatment programme. Of note, 16/23 (70%) oncologic patients had a disease response; moreover, 4/9 (44%) high risk acute leukaemia patients have undergone bone marrow transplant. The total cost of the authorised treatments was about € 700 000, of which € 142 000 was already credited back to the hospital.

Conclusion and relevance These results demonstrate that Fondo 5% represents a scientific based method guaranteeing access to highly expensive therapeutic programmes, impacting on patient survival, without affecting the cost effectiveness balance and sustainability of the national health system.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. L.326/2003
2. www.aifa.gov.it/fondo-nazionale-aifa

No conflict of interest.

1ISG-017 IMPACT OF SUPPLY PROBLEMS IN A HOSPITAL PHARMACY SERVICE

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Background and importance Hospital management of drugs is a complicated task and it is necessary to take into account different factors, such as average consumption, seasonal variations, cost, physical space available for storage and therapeutic innovations. Currently, this task is hampered by the numerous supply issues (SI) that in many cases affect regularly used drugs. These problems can lead to shortages and produce lack of effectiveness of treatments, compromise patient safety and increase treatment costs.

Aim and objectives To analyse non-oncohaematologic SI and their impact on the management of drugs in the pharmacy service of a hospital.

Material and methods This was a prospective study to evaluate SI between June and November 2018. The variables collected were: start and end dates of SI, ATC code and if the drugs were considered essential according to the WHO, if they produced shortages, if SI had alternatives (same dose and same route of administration) and if the SI was registered on the official website of the Spanish Government (AEMPS) when detected. An economic analysis of SI was made with all the data registered in an Excel sheet. SI were evaluated if they caused any inconvenience to the pharmacy service (drug restriction, management and preparation difficulties).

Results There were 76 SI affecting 74 drugs. The average duration was 64 days (range 2–224) and 53% of the affected drugs were considered essential according to the WHO. Most affected ATC groups were: J (22%), C (16%), B (12%), N (12%), H (8%), V (7%), A (5%), G (5%), D (4%), S (4%) L

(3%), P (1%) and R (1%); in 29% there was a stock shortage, 60% of SI had an alternative and 47% of SI were not registered on AEMPS.

The total additional cost of supply problems was 52.054,04 € and 38% of SI were inconvenient for the pharmacy service.

Conclusion and relevance Considering that most of the supply problems involved essential drugs, these problems can compromise the quality of healthcare and patient safety. The J group was the most affected group which could result in an increase in antibiotic resistance if it increased the consumption of broad spectrum antibiotics. AEMPS must improve SI information. Shortages usually increase treatment costs.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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1ISG-018 APPLICATION OF A TIME SLOT MODEL IN ONCOLOGY: DELIVERY PLANNING AND PROCESS OPTIMISATION

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Background and importance Initially, the aim of centralisation of the management of antineoplastic drugs was for the quality of preparations, workers' protection, patient safety and reduction of the risks associated with environmental contamination. In recent years, optimisation of hospital processes has become more relevant. In 2017, a new time slot model for the delivery of cancer therapies was introduced in the galenic preparation laboratory. This type of model consists of time slots defined on the basis of fixed criteria.

Aim and objectives The aim was to optimise the management of anticancer drugs.

Material and methods A pharmacoeconomic analysis was carried out on anticancer therapies administered in two oncology departments, one of which was located 20 km from the preparation site. Various parameters were taken into consideration: costs and chemical-physical stability of the drugs, average number of daily dosing and duration of dosing. According to these parameters, five time slots were identified for the oncology on site (8.00, 9.30, 10.00, 12.00 and 14.00) and three time slots for the off-site (14.00 on the previous day, 10.00 and 11.00). High cost therapies can only be set up on the same day for reasons of economic sustainability and to avoid waste.

Results For the time slot 8.00 on site and 14.00 off-site the following were chosen: low cost drugs, with good chemical-physical stability, long term administration, with a maximum of six therapies on site and four off-site. These therapies are set up the day before administration.

Time slot 9.30 on site and 10.00 off site: preferably medium and high cost drugs, long term, with a maximum of three therapies on site and eight off site.

Time slot 10 on site: medium and high cost drugs, medium or long term, with a maximum of six therapies.

Time slot 12.00 on site and 11.00 off site: medium and high cost drugs, medium or short term, for patients who cannot undergo tests and medical examination the previous day.