

Purpose To analyse the use of antibiotics at the Children's University Hospital.

Materials and Methods Two point prevalence surveys undertaken on a single day in May and November, 2011. Data collected included demographic details, antibiotic, route and indication. This study included all in-patients, who were present in hospital at 8 am on the days of surveys and to whom a systemic course of antibacterials (ATC J01) were prescribed for treatment. Day-cases were excluded. Microsoft Excel and SPSS 20.0 were used for data analysis.

Results The total number of patients to whom antibacterials was prescribed: 125/418 (30%) in May, and 159/424 (38%) in November. The number of patients to whom antibacterials were prescribed (for treatment): 105 (84%) in May, and 125 (79%) in November. The main age group was 1–5 years: 27 (22%) patients in May, and 33 (21%) in November. Males made up a greater proportion of in-patients. The most common groups of antibiotics prescribed for treatment were extended-spectrum penicillins with 31/117 (27%) treatment courses and the third generation cephalosporins 29 (25%) in May, and 38/158 (24%) and 41 (26%) in November. The top five antibiotics prescribed for treatment were ampicillin, penicillin G, ceftriaxone, cefotaxime and amoxicillin both in May and November. The most common indication for antibiotic treatment was lower respiratory tract infection. Antibiotics were mostly used intravenously: 92 (88%) patients in May, and 109 (87%) in November.

Conclusions These prevalence studies indicated the main problems in antibiotic prescription and areas of improvement: the high use of third generation cephalosporins and predominant intravenous administration.

No conflict of interest.

B.E.A.M. Summit

BEA-001 BUILDING UP A REGIONAL AND INTERDISCIPLINARY NETWORK FOR BETTER USE OF MEDICINES IN INTENSIVE CARE UNITS

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Background Clinical pharmacy in intensive care units (ICUs) showed beneficial effects on safety and economics. The establishment of a regional network including pharmacists, physicians and nurses of all ICUs seemed useful for the following reasons:

- Issues regarding medicines use in ICU are similar in all hospitals.
- Patients are often transferred from a tertiary care hospital to a secondary one or vice versa.
- Health care givers move from a hospital to another one during their career.

In 2007, an interdisciplinary group, Sipharm, was set up in order to create a network in the French and Italian speaking parts of Switzerland.

Purpose The goals of the project were to exchange data on drug administration in ICUs, share knowledge and skills, and establish standards for the administration of drugs.

Materials and Methods Sipharm now involves 13 hospitals. Each is represented by an ICU physician, an ICU nurse and a pharmacist. The group meets twice a year. Then, each member has to implement the decisions in his/her hospital.

Results Four main areas of action have been developed:

- Harmonisation of the dilution and preparation of intravenous drugs: 52 standard dilutions have been defined. This led to collaborations with manufacturers in order to obtain ready-to-use preparations at the defined dilutions.
- Harmonisation of the labelling of syringes: definition of the minimal list of elements that labels have to include.
- Exchange of critical data
- Drafting of joint guidelines

Conclusions Establishing a network is an effective way of increasing the exchange of expertise. It can lead to the simplification and harmonisation of practises and therefore help reducing risks and medicines errors and limit problems related to the movement of patients and caregivers. Pharmacists have to be the driving force of such interdisciplinary projects focusing on drug use.

No conflict of interest.

BEA-002 ONLINE INTERNET SURVEY ON LEADERSHIP AND MANAGEMENT FOR PHARMACISTS WORKING IN THE ITALIAN NATIONAL HEALTH SERVICE (SSN)

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Background Hospital pharmacists working in the Italian SSN need a compendium of leadership and management skills. Currently, the health system does not envisage in-depth assessment of these skills when it comes to choosing heads of department who coordinate and manage other professionals. So we have to envisage meeting these training needs, mostly for the heads of departments, services and pharmacies. We think that even if shared leadership is not restricted to such people, head pharmacists and experienced practitioners should be trained for the greater complexity and responsibility of their roles. The BEAM summit held by the European Association of Hospital Pharmacists (EAHP) offered material and tools with which to disseminate this knowledge in Italy.

Purpose The first step probably is for head pharmacists and experienced practitioners to become aware of the skills they have in this field; therefore an on-line internet survey for SSN pharmacists is being organised to cheque the situation regarding individual knowledge. Furthermore, the intention is to raise awareness of the areas of expertise required among the pharmacy colleagues and communicate their personal level of knowledge and their leadership and management abilities to SIFO. Courses can then be designed to cover areas of skills that are most lacking. Later on, all of those who have got a global mark below the expected value will be invited to attend more training to fill in the gaps regarding these competences.

Materials and Methods The aim is to use the leadership competence framework of the Royal Pharmaceutical Society (RPS) in which competency statements describe the activity all pharmacy professionals should be able to demonstrate. The statements will be subdivided by areas: 1) demonstrating personal qualities, 2) working with others, 3) managing services, 4) improving services, 5) setting directions. To develop the questionnaire, we will ask questions based on examples of situations pharmacists may be faced with in their daily work. The statements will be handed over to experienced practitioners and each question will have several possible answers, each of them providing a different rating (10 being the most correct answer, 0 being the wrong one). The most correct answer will be set based on answers we expect from experienced pharmacists with leadership skills. The software used will limit the time to answer each question. The final score will be shown as a percentage and those receiving a total score higher than 50% will be considered sufficiently competent. The data will be statistically analysed and means, medians, by age, by region, by function, by area, etc. will be calculated. Attending a specific training course will

be recommended to those individuals that achieve a score under 50%. The software that will be used is Question Writer professional 4, which is licenced to SIFO.

Results In order to be able to present the results at the EAHP congress in Paris, the questionnaire will be available online, to be answered during January–February 2012. The SIFO will dispatch the survey to some 2000 SSN pharmacists via email making use of the society's mailing list. The results will be presented in a poster and the final situation about the general skills of Italian SSN pharmacists regarding leadership will be presented by area as specified in the RPS framework. These results will provide an overview of the knowledge of Italian pharmacists and SIFO intends to arrange specific training courses in follow-up and to encourage the participants who do not get good scores to engage in autonomous training.

Conclusions Pharmacists' awareness of leadership and management, acquired by completing the questionnaire and being awarded an individual skills level, will be an incentive for the SIFO and other professionals to undertake the necessary corrective activities, such as education and specific training. We would like to start a self-awareness path regarding the importance of leadership competences in the personal CVs of pharmacists working in the Italian SSN. The ultimate aims of improving leadership skills are improved cost-effectiveness, better quality services, and risk reduction in patients who benefit from the SSN services. The questionnaire will be available in English, for it to be used within the EAHP and other European scientific societies.

No conflict of interest.

BEA-003 OPTIMIZATION OF TREATMENT SAFETY AT THE IN- AND OUT-PATIENT INTERFACE IN NEUROSURGICAL CARE

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Background At admission and discharge to/from hospital information concerning the correct medicines has to be transferred between health professionals. If this information is incomplete or lost, the correct medicines for patients are at risk. We therefore analysed adverse events at the in-/out-patient interface in order to optimise the medical treatment of patients at these critical steps.

Purpose To optimise the medical treatment of patients at admission and discharge to/from hospital.

Materials and Methods The prescription and resulting administration of medicines of all patients who underwent spinal stabilisation surgery in our clinic in the year of 2011 were recorded retrospectively. We analysed the resulting dataset in terms of frequency and severity of medicines errors.

Results 147 datasets were included, while only 144 of these contained complete information concerning post-discharge medicines.

The medicines taken before admission to the hospital were not documented correctly in 16% of the admission reports. Complete transfer of the previously taken medicines to drugs listed by the hospital pharmacy was missing in 72%. Both these factors frequently led to incomplete continuation of the medicines taken previously (before admission). Uncertainty concerning the listed drugs [the medicines prescribed for use in hospital] was identified as the main reason for this problem.

At discharge the prescribed medicines did not match the medicines taken before admission in 78%. An indication for this change was however only documented in 9%.

Missing documentation of the medicines taken before admission and an unconsidered transposition of the drugs listed in the hospital pharmacy to the discharge information were identified as the most common risk factors.

Furthermore in 37% (n = 41 who received anticoagulation treatment) and in 67% (n = 9 who received metformin) these treatments, which were paused preoperatively, were not resumed postoperatively.

So in order to optimise treatment at the in-/out-patient interface a number of processes were modified:

- At admission – the medicines history is now taken by a clinical pharmacist, who was employed for this purpose instead of a physician. The pharmacist is informed via the hospital administration software (SAP) or the admissions management system when a new patient is admitted.
- The hospital pharmacist transfers previously taken medicines to the listed drugs.
- A new admission sheet was designed standardising the recording of medicines history and transfer to listed drugs. This sheet provides all the necessary information concerning the drugs taken previously to physicians and nurses in a standardised form throughout hospitalisation and when composing the discharge information.

These measures allow continuous administration of the medicines taken before admission over the in-/out-patient interfaces and re-administration after the perioperative period of suspended drugs like anticoagulants and metformin. The clinical pharmacist furthermore checks the medicines in stock of each unit of the clinic and orders any new or special drugs from the hospital pharmacy. During hospitalisation the physicians consult the clinical pharmacist on specific medicines issues.

Conclusions In order to achieve a high level of medicines safety physicians, nurses and clinical pharmacists have to cooperate closely and frequently. Each step in the medicines process should be performed by the specialist most suited for this task. The medicines process has to be standardised and transparent, so that each group involved (nurses, physicians, clinical pharmacists) knows at any time where to find the required information. In order to achieve this, the neurosurgical department now employs our 'own' clinical pharmacist. A final review of the measures taken and the overall quality of medicines at the in-/out-clinic interface is scheduled for 2013.

No conflict of interest.

BEA-004 TAKING A LEAD IN WARD PATIENT SAFETY

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Background The pharmacist workforce is limited in terms of patient safety due to the 'one pharmacist to every one hundred beds' rule in Turkish state hospitals. Our hospital is being rebuilt, and having fewer patients in wards has resulted in all departments working under capacity for a certain period.

Purpose To take advantage of this unique situation that allowed pharmacists to raise the standards of patient safety by using the extra time and workforce granted; and also to prove that good leadership in pharmacy care can result in better patient health.

Materials and Methods Pharmacists were encouraged to appraise the clinical skills of their department, determine the level of the need of ward patients for better patient safety and judge the resources currently available for implementation, before considering the potential sources of collaboration with other health professionals. 'Rx Media Pharma' software was used for gaining detailed results on patient chart evaluations. All documentation was performed online with 'Google Docs', allowing participants to share and make changes online directly with selected health professionals.

Results For 23 working days, 200 patient charts were reviewed. The average number of drugs used was 7.6 and the drug-drug interactions identified were 2.02 per patient. The importance of the interactions was evaluated in 3 levels; major (42.82%), moderate