An average reduction of 50.5% was observed in the affected area, a reduction of 24.1% in the baseline pain score, using a Visual Analogue Scale (VAS), and a reduction of 12% in the peak pain score.

Functional capacity had limited improvement.

The most common side effects were application site reactions including intense burning, pain, swelling and erythema. Blood pressure alterations were not noticed.

Conclusions Taking into account the 'IMMPACT' recommendations [2], the observed reduction in the VAS score was lower than 30% both in peak and baseline score. This did not translate into a clinically significant improvement.

Given the size of the study sample, the conclusions although interesting, must be confirmed with additional data.

In times of severe budget restraints, heath care providers must take into account both the benefits that new treatments bring to patients and the limited resources available in public services.

No conflict of interest.

CPC-055 EVALUATION OF TREATMENT COMPLIANCE IN MULTIPLE SCLEROSIS PATIENTS AND ITS IMPACT ON THE CLINICAL STABILISATION OF THE DISEASE

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Background Multiple sclerosis is a degenerative disease in which compliance with therapeutic regimens is extremely important in the clinical stabilisation of disease.

Purpose To evaluate the compliance of patients with treatment and the impact it has on the clinical stabilisation of the disease.

Materials and Methods Data were collected using a patient survey and consulting the hospital computer system. Statistical analysis was done with SPSS. The following data were collected: number of patients, average age, number of outbreaks and management failures in the last six months, reason for failure and flaws in the administration of medicines reported in the survey.

Results The sample (97 patients, mean age 41.73 ± 9.37 years old) was not only representative of the total MS patients followed in Centro Hospitalar Leiria-Pombal (CHLP) but also of the epidemiological data on the disease.

Over the past six months, 18.6% of patients had at least one outbreak. Regarding administration failures, 24.7% of patients admitted to failing to administer their medicines at least once, 45.8% of these failed more than three times.

The main reason for failing to administer the treatment was patient oversight and that represented 48% of total failures.

The largest number of administration failures was observed in patients treated with Interferon B 1b 8 MIU (66.7%).

86.6% of patients had administered their medicine correctly.

In this group of patients, there is no statistically meaningful correlation between the failures of management and inventory, with the number of outbreaks that occurred.

Conclusions Generally, multiple sclerosis patients followed in CHLP are a group with a great commitment to following their treatment.

There was a significant percentage of people who failed to administer all doses correctly, although there is no statistically meaningful correlation with the number of outbreaks that occurred, and there was a significant incidence of outbreaks in the last 6 months, suggesting that the disease has a multifactorial nature.

As I see it, the pharmaceutical staff plays an essential role in promoting compliance, which is crucial for stabilising the patients' clinical condition.

No conflict of interest.

CPC-056 EVOLUTION IN DRUG RELATED PROBLEMS IDENTIFIED IN PHARMACIST NOTES AT THE EMERGENCY DEPARTMENT, HILLER¯D HOSPITAL DENMARK

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Background 'Pharmacists in the Emergency Department' is a two-year implementation project carried out in collaboration between the pharmacy of Capital Region and the Emergency Department (ED) at Hillerød hospital. The task of the pharmacist is to draw up a current and valid medicines history and to make a medicines review before the physician sees the patient at the ED. During the first year of the project the interventions developed gradually while the professional skills and clinical experience of the pharmacists built up.

Purpose To describe the evolution of the interventions recommended when Drug Related Problems (DRPs) are identified, as described in the pharmacist's notes.

Materials and Methods 5 samples of pharmacist's notes were recorded. The samples represent the interventions made in the 2 first weeks of each quarter of 2011 and the first quarter of 2012. This showed the development in interventions made by pharmacists. The interventions were coded based on 8 categories of DRP introduced by Hepler and Strand. In total 383 pharmacist's notes were analysed.

Results In all 549 DRPs were identified. 70–80% of the pharmacist's notes contained one or more DRP. On average 1.4 DRPs were identified per note. During the first 15 months of the project the DRPs recorded evolved as follows: The number of comments tended to increase in the categories "inappropriate choice of drug", "overdose", "adverse drug events" and "medicine without reasonable indication". The number of comments identified in the category "interactions" decreased. The categories "untreated indication", "subtherapeutic dosing" and "inappropriate use by the patient" were stable throughout the study period.

Conclusions When introducing a new pharmaceutical service one must expect a gradual evolution of the interventions as the pharmacist gradually develops hands-on-competencies and clinical experience on the particular ward. After 12 months, the findings in the pharmacist notes were stable. This must be taken into account when introducing new pharmaceutical services in the clinic.

No conflict of interest.

CPC-057 EVOLUTION OF CLINICAL TRIAL PRESCRIBING INCIDENTS

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Background It is essential to record incidents in clinical trials (CT) to monitor them appropriately. It is a basic tool to analyse and detect problems.

Purpose To analyse the development in prescription incidents recorded from 2009 to 2011, to identify and resolve quality problems, with the aim of establishing corrective actions to reduce CT problems in a process of continual improvement.

Materials and Methods The most frequent incidents were found in the prescription phase. Data were recorded using the following items: date, person reporting, CT identification, department, professional involved, description of the problem and corrective measures. The evolution of incidents was analysed by chi square.

Results 186 events were recorded in a total of 331 CTs. The most frequent events occurred mainly in the prescription phase (49.0%)

followed by dispensing (22.1%), recording (9.6%) and reception (8.6%). The causes of prescribing incidents during 2009, 2010 and 2011 were respectively: no specification that the patient was included in CT (74.2%, 27.1% and 5.3%); incomplete prescription (2.6%, 24.2% and 31.6%), non-adherence to the study protocol (2.6%, 12.2% and 15.8%), incorrect dose (18%, 18.2% and 36.8%) and other causes (2.6%, 18.2% and 10.5%). The percentage of prescription incidents was: 2.01% (n = 1932) in 2009, 1.64% (n = 2012) in 2010 and 0.92% (n = 2050) in 2011. Prescribing incidents decreased significantly in 2011 compared to previous years. In these cases, there was an immediate intervention with a communication to the investigator.

Conclusions To manage the process as the Ethics Committee requires it is essential to have excellent communication and coordination between the pharmacy department and the other professionals involved. Measures taken were: increased electronic prescribing, using a specific application for CT prescribing and communication to researchers. The measures were effective in achieving a reduction in incidents in CT prescribing.

No conflict of interest.

CPC-058 FACTORS ASSOCIATED WITH ANTIRETROVIRAL MEDICINES ADHERENCE AMONG HIV-INFECTED CHILDREN

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Background The aims of highly active antiretroviral therapy (HAART) in HIV-infected children are to achieve and sustain full HIV-RNA viral load (VL) suppression and CD4-reconstitution, in order to prevent the progression of the HIV infection and allow normal growth and development.

Adherence to HAART is a strong predictor of therapeutic efficacy. Previous studies have shown that therapeutic success requires adherence > 95%. Among paediatric HIV patients, adherence to HAART is reportedly suboptimal.

There are a number of factors that can compromise treatment compliance. These can be classified as those related to the medicine, the patient, the family/caregiver and the healthcare system.

Purpose To estimate the correlation between adherence to HAART and treatment efficacy.

To assess factors related to non-adherence among HIV-infected children.

Materials and Methods Retrospective cohort study from January 2008 to July 2012 including all HIV-infected patients on HAART followed by the Paediatrics Department.

Age, sex, lipoatrophy, number of pills/day (P/d) and frequency of daily dosing: once a day (QD) or twice a day (BID), were analysed.

Adherence was assessed by using the pharmacy refill records and pill count, according to the following formula:

Adherence (%) = (N° dispensed doses- N° returned doses)/N° prescribed doses × 100

Undetectable VL was defined as VL < 20 copies/ml.

Data were analysed by multiple logistic regression methods using SPSS software (version 19.0).

Results 24 HIV-infected patients were included (mean age = 15.3 ± 5.5 years; 29.2% male, 70.8% female).

37.5% of patients presented lipoatrophy.

54.2% and 45.8% of the children were treated with a QD and BID regimen, respectively.

Only 50% of patients were considered adherent to treatment (adherence >95%).

The relationship between risk factors and adherence was: see Table

Patients with poor adherence had a higher risk of virological failure (OR = 11.67; CI95 = 1.14–119.54;p = 0.039)

Conclusions Adherence to HAART represents a significant challenge in the paediatric HIV population.

The P/d was significantly associated with adherence. Every pill/day increased up to 2.3-fold the risk of non-adherence to HAART.

Simplifying HAART by reducing the pill burden may contribute to improving compliance in the paediatric HIV population.

Abstract CPC-058 Table 1

Factors	OR	CI 95%	p
P/d	2.323	1.276–5.529	0.048
Sex	0.238	0.018–3.084	0.272
Age	0.858	0.622–1.182	0.348
BID	0.347	0.014–8.716	0.52
QD	0.494	0.030–8.204	0.623
Lipoatrophy	0.591	0.58–6.072	0.658

No conflict of interest.

CPC-059 FIRST GLOBAL ANTIMICROBIAL STEWARDSHIP SURVEY – INTERIM ANALYSIS OF NON-UK EUROPEAN DATA

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Background Antimicrobial stewardship (AMS) has been surveyed at national and continental level, but never at a global level. The European Society of Clinical Microbiology & Infectious Diseases, Guidelines & Policies Working Group (ESGAP) supported a worldwide survey of AMS. This aimed to quantify the delivery & impact of AMS across the world.

Purpose A literature review identified published surveys and standards for AMS. The survey aimed to quantify those aspects of AMS that were being delivered; the barriers to delivery; funding & staffing of AMS; and its impact on financial, safety and resistance outcomes.

Materials and Methods This was an open web-based survey of hospitals via SurveyMonkey software using good practise methodology. It was piloted in 11 countries in 6 continents, refined, then disseminated through microbiology, infectious diseases and pharmacy networks & websites.

Results By the initial deadline, 513 hospitals worldwide & 298 from Europe (including 122 from the United Kingdom (UK)) had entered data.

26 non-UK European countries entered data (range: 1 (many) to 24 (France); average 7; mean 3). 65% of hospitals had AMS standards & 19% were planning them. 74% had an AMS Committee, 58% had an AMS Programme in place & 25% had one planned. Lack of information technology was the main barrier. Antimicrobial or infectious diseases pharmacists were present on 86% of AMS committees. On average, there was 8 hours per week of pharmacist time for AMS from the 75 responses. 80% had an antimicrobial formulary, 69% guidelines, 58% restriction, 40% day 3 review, 50% IV-to-oral switch guidance & 57% had dose optimisation on request. 61% had AMS ward rounds mainly on intensive care & medicine. 34 centres had formally assessed their AMS programmes and had demonstrated reductions in expenditure, broad spectrum & inappropriate prescribing, but no decrease in length of stay or reduction in antimicrobial resistance.

Conclusions AMS appears to be well developed in many parts of Europe, and pharmacists are actively involved in its delivery.

No conflict of interest.