

**Results** The main pain reported by the staff was lumbar pain (70%).

Several factors explain that result:

- Repeatedly carrying heavy weights (>7 Kg), especially when loading the Instrument Washer-Disinfectant trolleys and sterilisers.
- Making little use of helping fork-lift trucks (60% of the staff use them <2 hrs/day).
- Not asking colleagues for help when carrying heavy weights.
- 80% of people work in front of a computer screen for 1/3 or 1/2 the day without adopting an ergonomic position.
- Highly repetitive actions during packaging.

Preventive measures:

- Staff training on ergonomics suited to any post.
- Organization of packaging posts and data capture according to the “comfort zone” concept.
- Reduction of distances to be covered when carrying or moving heavy weights.

**Conclusions** This study demonstrates that MSDs often appeared in sterilisation. The implementation of suitable preventive measures – according to posts – should increase efficiency and reduce the physical demands made on members of staff.

No conflict of interest.

#### GRP-018 ANALYSIS OF ANTINEOPLASTIC MEDICATION ERRORS IN A 500-BED TEACHING HOSPITAL

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**Background** Medication errors with antineoplastic drugs may be catastrophic due to the drugs' high toxicity and narrow therapeutic index.

**Purpose** To assess antineoplastic medication errors in terms of frequency, type of error and severity for patients.

**Materials and Methods** A 1-year prospective study was conducted (2011) in order to identify the medication errors that occurred during cancer chemotherapy for patients in a 500-bed teaching hospital. Wards included both day care and inpatient units. All prescriptions and production forms were verified by pharmacists. The different types of error were defined in a data collection form. For each medication error intercepted, the potential severity was evaluated according to the Ruiz-Jarabo 2000 version2 classification system.

**Results** During the study period, the pharmacy unit prepared 17241 distinct anticancer drugs. In total, 136 medication errors were detected throughout the medicines use process. Prescriptions errors represented 82% of errors, followed by pharmaceutical validation (7%) transcription (7%), preparation (2%) and administration errors (2%).

The most common causal drug was carboplatin, which was involved in 25 cases, despite corresponding to only 2.8% of anticancer drugs prescribed at our institution. Overall, in 66 cases erroneous doses of the medicine were recorded (48.5%), 24 errors were linked to the choice of antineoplastic regimen (17.6%) while in 12 cases, erroneous duration of treatment was prescribed (8.8%).

Of the 136 medication errors, 124 were intercepted prior to administration while 12 reached the patients (9%). Overall 66% of non-intercepted medication errors had no impact on the patient and only 3 cases required enhanced monitoring.

**Conclusions** In our study pharmaceutical validation mainly allowed us to identify prescription errors (82%), almost all errors

were intercepted prior to administration to the patient. Wrong dose represented the most common type of error. Few pharmaceutical errors (transcription, validation, preparation) were detected.

No conflict of interest.

#### GRP-019 ANALYSIS OF ANTIRETROVIRAL TREATMENT ADHERENCE IN OUTPATIENTS OVER A TWO-YEAR PERIOD OF STUDY

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**Background** The efficacy and safety of anti-retroviral treatment is affected by many factors and compliance is key in therapy success. A lack of adherence may lead to therapeutic failure and higher rates of drug resistance.

**Purpose** To describe collected data about outpatient antiretroviral treatment adherence and analyse characteristics and factors associated with the non-adherent population.

**Materials and Methods** A retrospective observational study was conducted over 27 months on all outpatients on antiretroviral therapy who attended our hospital for human immunodeficiency virus (HIV) monitoring between June 2010 and September 2012. Each patient's adherence was checked and recorded every 6 months. This was measured as '(Total no. of units dispensed/Total no. of units needed) × 100'. Those patient with adherence >95% were considered as 'adherent' and those with <95% as 'non-adherent'. All results were recorded in a database. For the 'non-adherent' population the following features were reviewed: Sex, age, drug use, presence of Hepatitis B (HBV) or Hepatitis C (HCV) and total number of tablets/day, including drugs for other diseases besides HIV.

**Results** During the period of study, 1841 adherence cheques were made on a total of 630 patients (2.9 tests/patient). 24.6% of the HIV patients in treatment were non-adherent in at least one cheque. Their average age was 45.5 ± 8.6 years, 74% men, mean treatment duration of 8 ± 4.4 years, and a median consumption per day of 4 doses (range 1 to 16). 35.5% of these patients took drugs, 7.1% were co-infected with HBV and 45.2% were co-infected with HCV (5.2% was co-infected with both viruses). The Chi-square test showed a significant relationship (p < 0.05) between substance abuse, HCV infection and male gender in non-adherent patients.

**Conclusions** The study revealed a large percentage of non-adherent patients who compromised the effectiveness of their anti-retroviral treatment. The intervention of hospital pharmacists, checking on compliance and following up with patients, could play an important role in reducing this negative factor, especially in those with HCV and/or substance abuse.

No conflict of interest.

#### GRP-020 ANALYSIS OF ITALIAN HOSPITAL PHARMACIST ACTIVITIES TO PREVENT LASA DRUG ERRORS IN TREATMENT: FIRST RESULTS

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**Background** Errors caused by the use of Look-Alike/Sound-Alike (LASA) drugs occur with high frequency in hospital departments. In August 2010 the Italian Ministry of Health passed a Recommendation to help health operators to reduce LASA errors, through