followed by dispensing (22.1%), recording (9.6%) and reception (6.6%). 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.

**FAC-TORS ASSOCIATED WITH ANTIRETROVIRAL MEDICINES ADHERENCE AMONG HIV-INFECTED CHILDREN**

doi:10.1136/ejhpharm-2013-000276.515

C Casado, A Gil, ME Martínez, JM Ramón, L López, T Molina. Hospital Universitario de Getafe, Pharmacy, Madrid, Spain

**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:

\[ \text{Adherence} = \frac{\text{N refills}-\text{N returneds}}{\text{N dispensed doses}} \times 100 \]

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**

<table>
<thead>
<tr>
<th>Factors</th>
<th>OR</th>
<th>CI 95%</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/d</td>
<td>2.323</td>
<td>1.276-5.529</td>
<td>0.048</td>
</tr>
<tr>
<td>Sex</td>
<td>0.238</td>
<td>0.018-3.084</td>
<td>0.272</td>
</tr>
<tr>
<td>Age</td>
<td>0.858</td>
<td>0.622-1.182</td>
<td>0.348</td>
</tr>
<tr>
<td>BID</td>
<td>0.347</td>
<td>0.014-8.716</td>
<td>0.52</td>
</tr>
<tr>
<td>QD</td>
<td>0.494</td>
<td>0.030-8.204</td>
<td>0.623</td>
</tr>
<tr>
<td>Lipatrophy</td>
<td>0.598</td>
<td>0.096-0.872</td>
<td>0.659</td>
</tr>
</tbody>
</table>

No conflict of interest.