(n=23) of drugs. The extent was highest in oral liquid formulations (n=13/17, 76%), containing commonly parabens (n = 8), propylene glycol (n = 7), ethanol (n = 6). Of parenteral formulations 11% (n=7) contained EOI, frequently ethanol (n=5) that was found in alprostadil, digoxin and dopamine solutions. Solid oral commercial formulations (n=19) were free of EOI. When dosing and excipients were both considered, most industrial parenteral medicines 86% (n=55/64) and only 6% (n=2) of enteral formulations were age-appropriate for neonates. Altogether 45% (n=58/130) of drugs were produced industrially, EOI free and suitable for dosing. Most of these (n=55) were for parenteral use. Medications, that were frequently used in departments (furosemide, dopamine, epinephrine), were all parenteral and all of them, except one dopamine preparation, were EOI free.

Conclusions: Although the use of enteral route of administration is common in European neonatal units, majority of oral formulations are inappropriate for neonates. Further research in dosage forms suitability and substitution possibilities between European countries is required.

Disclosure of Interest: None Declared

HP-PC005

Multicentre medical record review on Adverse Drugs Events requiring a higher level of care

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Is this work original?: Yes

Background and Objective: Adverse drug events (ADEs) are a world-wide concern for healthcare professionals and policy-makers. The incidence of hospital ADEs ranges from 6.5 to 29 per 100 admissions (1–4). A patient with an ADE may require a higher level of care, defined in this study as an unplanned (re)admission to an Intensive Care Unit (ICU) or an intervention by a Mobile Emergency Team. These transfers prolongs hospital stay and increases its cost (5); they can have an important impact on the patient. Therefore, preventable ADEs (pADEs) that lead to a higher level of care are of particular concern. Earlier research (6) found that 17% of the adverse events which lead to an ICU admission are drug related. The objectives of this study are to determine the incidence and preventability of ADEs requiring a higher level of care, to assess the type of drug concerned, the levels of harm induced and the risk factors that can be identified.

Setting and Method: The study was performed in six hospitals in Belgium. It used a three-stage retrospective review process of screening, medical record review and consensus judgement. For the patients included records were assessed by a trained clinical team consisting of a research nurse, a physician and a clinical pharmacist. Once the team detected an ADE, the assessment on preventability, the type and level of harm was delivered by consensus judgment. A panel of experts was available for advice.

Main outcome measures: The incidence and preventability of ADEs requiring a higher level of care, the type of drug concerned, the levels of harm induced and the risk factors are the main outcome measures.

Results: 830 patients were included in the medical record review process. The mean age was 70.1 years (SD±14.5); 44.9% of patients had a severe life-threatening systematic disease (ASA 4). In 19.3% of these patients ADEs were found. 83.8% of the ADE were preventable. The overall incidence of patients transferred to a higher level of care because of an pADE was 33.9 per 100 000 patient days at risk. Antibiotics and antithrombotic agents accounted both for one-fifth of all pADE. Age, ASA score and the number of medications taken before admission are risk factors for pADE. The level of harm varied: 53.8% of patients with an ADE endure temporary harm, 18.1% suffer permanent impairment and 28.1% of patients died during hospitalization after the occurrence of an ADE. Because of many confounders and the design of the study, it was impossible to assess the causality between ADEs and mortality.

Conclusions: One in five patients with a unplanned transfer to a higher level of care had an ADE. Of these 83.8% was preventable and most often related to the (mis)use of antibiotics or antithrombotic agents. Age, ASA score and the number of medications taken before admission were risk factor for pADE. Detection and root cause analysis of these pADE is needed as a basis for the implementation of system improvements.

Disclosure of Interest: None Declared

HP-PC006

Sofosbuvir prescriptions review in a French university hospital

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Is this work original?: Yes

Background and Objective: Sofosbuvir is a new direct-acting antiviral medication, the first NS5B polymerase inhibitor marketed for the treatment of chronic C hepatitis in adults. Sofosbuvir's efficacy was established in subjects with genotype 1, 2, 3 or 4 HCV infections including those with hepatocellular carcinoma awaiting liver transplantation (LT), post-LT with liver reinfection and those with HCV/HIV-1 co-infection. Furthermore, and compared to the ribavirin/interferon bi-therapy, sofosbuvir is well-tolerated by patients. Sofosbuvir must be used as part of a combined antiviral treatment regimen. The objective of this study was to review the sofosbuvir prescriptions in our university hospital.

Setting and Method: Six-month retrospective observational study. Prescriptions were extracted with software Pharma® (Computer Engineering, Paris). Clinical and biological data were collected with the computerised patient file Millennium® (Cerner Corporation, Kansas City) and prescriptions' analysis was performed with the guidelines of the French Association for Liver Study (AFEF).

Main outcome measures: Age, sex-ratio of the sample population; HCV genotype, treatment indications, antiviral combination, treatment duration and treatment cost

Results: 73 patients were included between December 2013 and June 2014: 51 men (69.9%) and 22 women (30.1%); medium age was 57.2 ± 2.1 years. Most common HCV genotypes were 1, 3 and 4 (56.2%, 19.2% and 12.3% respectively), genotypes 2, 5 and 6 were 5.5%, 2.7% and 0% respectively. 39 patients were in therapeutic escape (53.4%); 12 in pre-LT (16.4%), 9 in post-LT (12.3%) and 13 patients were naïve with contraindications to other treatments (17.8%); sofosbuvir was combined with daclatasvir (46.6%), ribavirin/interferon bi-therapy (32.9%), ribavirin alone (16.4%) and simeprevir (4.1%); treatment duration was mainly 12 weeks (47.9%) or 24 weeks (46.6%). Between December 2013 and June 2014, expenditures associated with sofosbuvir were close to 5 million euros.

Conclusions: As a result of its efficacy and tolerance, sofosbuvir is more and more prescribed but treatment cost is very important. In our university hospital, the initial budget proposed to the financial management was 3.5 million euros, until its availability in community pharmacies (October 2014). In order to save costs, it seems essential to remain vigilant on the prescriptions' compliance with latest guidelines.

Disclosure of Interest: None Declared

HP-PC007

CIRCUS, a tool for paediatrics drug-use process quality. Validation with a Delphi technique

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Is this work original?: Yes

Background and Objective: Patient safety is a key priority in healthcare. To