Background and Aims The availability of appropriate medicines for pediatric patients remains a challenge in any Health System. To evaluate the extent of this limitation in Portugal, the INFARMED, I.P., conducted the present study aiming at 1) knowing which extemporaneous formulations were prepared/used in hospital settings and 2) identifying which of these have a liquid formulation medicine available in Portugal, EU or USA.
Methods A cross sectional study was performed in nine Hospitals in Portugal regarding the collection of 2010 data on the use and production of extemporaneous formulations. The information was gathered trough a questionnaire. Data analysis was restricted to medicines with more than 1000 formulations prepared or prescribed to more than 100 patients.
Results Thirty three medicines met the defined criteria. They were included in groups A and C of the ATC classification (Alimentary Tract and Metabolism and Cardiovascular System) with 8/33 (24.24%) each, followed by Anti-infectives for Systemic Use and Nervous System with 5/33(15.15%) each. It was realized that 20 (75.76%) have a licensed oral liquid formulation either in Portugal, EU or USA. In Portugal 7 (21.21%) have or had a market authorization no longer available due to industrial ending. In addition, different hospitals prepare the same medicine in distinct formulations.
Conclusions The results confirmed the needs of Portugal in this area, identified potential lack of interest of the industry and recommend that strong action should be taken by the Regulatory Authority in the implementation of industrial manufacture authorization of small GMP batches of these medicines.

1536 PHARMACOEPIDEMIOLOGY OF OCULAR PRESCRIPTIONS IN PAEDIATRIC OUTPATIENTS IN PORDENONE PROVINCE

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G Montanari, P Schiaulini. *Clinical Research Department, FIMP Friuli Venezia Giulia, Sacile, Italy*

Background and Aims The use of ocular drugs in paediatrics is often "off-label", concerning both safety in relation to the age and efficacy. For this reason we have deemed it necessary to examine prescribing habits of family paediatricians (pdf).
Methods Each pdf of Pordenone province (315.323 inhabitans) was sent a questionnaire where it was requested to list the ocular drugs usually prescribed, why they were prescribed and any side effect observed. They were also requested to confirm any use of dietary supplements or other medical devices.
Results All 35 pdf (34.440 chidren, aged 0–14 years) filled in the questionnaire. The most commonly prescribed drugs were antibiotics, anti-histamine agents and mast cell stabilizers for bacterial and allergic conjunctivitis. Only topical drugs were used. Children affected by serious ocular diseases were referred to ophtalmologists and of these only four assumed drugs for vernal keratoconjunctivitis and glaucoma (cyclosporine, timolol, dorzolamide and bimatoprost). Only minor adverse reactions (conjunctival hyperaemia, lid swelling) were found, even if potentially dangerous drug associations are still used (i.e. associations with steroids and/or sympathomimetic decongestants). No dietary supplements or medical devices were prescribed.
Conclusions Many ocular drugs lack reliable proof of efficacy and safety in paediatrics but fortunately their use outside the hospital seems limited. Nevertheless their use can probably be improved. Our research confirms the need to widen clinical studies of ocular drugs in paediatrics, not only concerning limited controlled trials but also their rational use.

1537 EFFECTIVENESS OF MELATONIN IN TREATING SLEEP PROBLEMS IN CHILDREN - PARENT SATISFACTION SURVEY

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[1]A Gupta, [2]C Varthamanan. *[1]Addenbrookes Hospital, Cambridge; [2]Bedford Community Paediatrics, Bedford, UK*

Background and Aim Melatonin is not licensed for children in UK. Limited evidence is available about its efficacy and safety. We assessed parents' satisfaction with melatonin for treatment of sleep problems in children.
Methods 27 children who were prescribed melatonin by community paediatricians at Bedford, UK were randomly selected. Structured questionnaire was given to their parents.
Results

1. Parents' overall assessment of response to melatonin treatment - Good (63%), Average (33%), Poor (4%).
2. Analysis of age group of children with good response. 1–5 years (3 out of 3 children i.e. 100%), 6–10 years (7/12 i.e. 58%), 11–16 years (7/10 i.e. 70%), Over 16 years (0/2 i.e. 0%).
3. Effect on sleep when melatonin was stopped (in 18 children) - worsening (72%), same (28%), improvement (0%).
4. All the children had associated problems - 81% behavioural (autism, ADHD), 19% structural/chromosomal. 41% were in mainstream school, 55% special need school and 4% left school.
5. Improvement in behaviour secondary to improvement in sleep - yes (26%), No (74%).
6. Improvement in quality of life of parents secondary to fewer interruptions to their sleep - Yes (77%), No (23%).
7. Only 1 child had side effects including headache, confusion and tiredness while taking melatonin. He was on high dose of 10 mg/day.

Conclusion Most parents reported improvement in sleep of their children after being started on melatonin. Also majority reported better quality of life due to less interruption to their sleep.

1538 USE OF PROPRANOLOL FOR TREATING EPISTAXIS - FIRST EXPERIENCES

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[1]B Bjelakovic, [2]M Bojanovic, [3]S Lukic, [1]G Kostic, [4]N Zivkovic, [5]V Vukomanovic, [5]S Prijic, [6]B Marinkovic. *[1]Clinic of Pediatrics, Clinical Center, Medical Faculty, University of Nis; [2]Clinic of Othorinolaringology, Clinical Center, Medical Faculty, University of Nis; [3]Clinic of Neurology, Clinical Center, Medical Faculty, University of Nis; [4]Institute of Pathology, Medical Faculty, University of Nis, Nis; [5]Mother and Child Health Institute, 'Dr Vukan Cupic', Belgrade; [6]Clinic of Othorinolaringology, Clinical Center, Nis, Serbia*

Beta blockers are considered to be the most common prescribed class of drugs in treating cardiovascular diseases. However they are very useful in treating other conditions, such as migraine, glaucoma, hemangiomas, cirrhosis, etc.

We hypothesized that some beta blockers characteristics including their negative inotropic, peripheral vasoconstrictor and antiangiogenic effects might be potentially useful in the management of children with epistaxis.

To test this we sought to determine the efficiacy of propranolol as a second line therapy in children with reccurent primary epistaxis, resistant to conventional management. From June 2010 to October 2011, a total of six children with this features were seen a our institution.

The overall effectiveness of propranolol for terminating epistaxis, given in dosage of 1.5–2 mg/kg/day, three times a day, was successful in all six treated children (100 % efficacy) becoming evident within 24 hours after the after the initiation of treatment. The epistaxis free interval period lasted at least one year, in five children and 43 days in one children.

Based on our first experiences with propranol, we believe this drug could be promising treatment option for children with primary epistaxis.

1539 LENGTH OF HOSPITAL STAY IN CHILDREN WITH ACUTE VIRAL PNEUMONIA TREATED WITH CORTICOSTEROIDS, A RETROSPECTIVE STUDY

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[1]S Claudia, [2]B Neamtu, [2]H Mirela, [3]MBl Octavia, [4]M Ionela, [5]NM Leonida, [6]M Melaniea, [5]I Sorin. *[1]Research, Pediatric Hospital Sibiu; [2]Research, Pediatric Hospital, Lucian Blaga University Sibiu; [3]Pediatric Hospital, Lucian Blaga University of Sibiu; [4]Applied Informatics, Faculty of Science, Lucian Blaga University; [5]Pediatric Hospital, Lucian Blaga University; [6]Laboratory Research, Pediatric Hospital, Lucian Blaga University Sibiu, Sibiu, Romania*

Background Corticosteroids with or without ephedrine may have positive effects in viral pneumonia treatment accelerating the time to resolution of symtpoms but the evidence is not strong enough to make specific recommandations.
Objectives Evaluating the hospital length stay of the children with viral pneumonia treated with corticosteroids, single or in combination with ephedrine.
Material and Methods The retrospective study included pacients admitted in our clinic with viral pneumonia during 2011. From 167 cases, 78 cases were selected according to specific criteria: patients having received cortisone (hydrocortisone hemisuccinate and/or fluticasone propionate) associated or not with ephedrine (aerosol therapy) and no previous corticotherapy before admittance. Three groups have emerged: group A, children treated with hydrocortisone hemisuccinate (27 cases), group B, children treated with hydrocortisone hemisuccinate and fluticasone propionate (27 cases), group C, children treated with hydrocortisone hemisuccinate and aerosol therapy with ephedrine (24 cases).

A comparative analysis for the three groups regarding hospital length stay, days of treatment for each medication, C reactive protein values and hemogramme profiles has been made using ANOVA test.
Results The doses of corticosteroids were similar in all the groups with no statistical differences. Hospitalization period was significantly reduced ($p<0.05$) in patients receiving hydrocortisone hemisuccinate for a longer period and significantly ($p<0.05$) increased in children with marked lymphocytosis.

Association of ephedrine to corticosteroids didn't reduce the hospitalization period.
Conclusions Corticosteroids could be recommended for a longer period during hospitalization, for their positive effects in accelerating the time to resolution of symtpoms.

1540 AUDIT ON PRESCRIPTION OF CONTROLLED DRUG

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A Kage. *Community Paediatrics, St Mary's Hospital, Kettering, UK*

Background Prescriptions for controlled drugs are subject to prescription requirements as per UK Department of Health guidance (June 2006). A Pharmacist is not allowed to dispense a Controlled Drug unless all the information required by law is given on the presrciption.
Aim

1. To analyse prescription practice in the department.
2. To analyse different formulations of Methylphenidate and Melatonin prescribed.

Methods Retrospective audit. All prescriptions between October 2011 and January 2012 analysed. Prescriptions compared against the standards given in British National Formulary (2011).
Results

Total prescriptions - 212
Controlled Drug prescriptions (methylphenidate) - 119
Melatonin prescriptions - 75
Incorrect prescriptions - 66 (55.5%)

Conclusions and Recommendations Most of the incorrect prescriptions were due to the form of the drug (tablets or capsules) not being specified.

Physicians made aware of the guidelines on prescribing controlled drug.

Re-Audit in 6 months.

1541 EVALUATION OF SEDATION - ANALGESIA BUY SCALE COMFORT B IN VENTILATED CHILDREN

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Z Addou. *Anesthesie-Reanimation EHS Canastel, Oran University, Oran, Algeria*

Introduction In children, the use of scale COMFORT B and a written protocol would allow the obtaining of an adequate level of sedation-analgesia, the adjustment of the dosages of midazolam and sufentanil, and finally to decrease the duration of sedation, mechanical ventilation and length of stay (LOS) in intensive care.
Materials and Methods Retrospective study over 1 year period in sédated and ventilated children, evaluated by scale COMFORT B.

Recorded parameters are: age, sex, underlying disease, dose of drugs, score of sedation COMFORT B, duration of mechanical ventilation (MV) and LOS.
Results A total of 72 (27%) ventilated children and sedated on 380 hospitalized children, 25 patients who benefited from evaluation by the scale COMFORT B according to protocol.

66% were infants, 48% had infectious disease.

The association of drugs for sedation-analgesia were (64 %) HYPNOVEL SUFENTANIL.

The mean evaluation with scale comfort B were 6 to 8.

The mean score of COMFORT B in the 6eme hour before protocol were; (36%) had adequate level, (48%) had an excessive level of sedation-analgesia, (16 %) had an insufficient level, the mean duration of ventilation was 6 days and the mean duration of (LOS) was 9 days. After protocol (94%) had adequate level and (4%) had inadequate level, the mean duration of (MV) was 3 days and LOS 6.8 days.
Conclusion The evaluation by the scale comfort B, would allow to adjust the dosages of midazolam and sufentanil, and to reduce the duration of ventilation and LOS .

1542 FEASIBILTY OF USING HIGH FIDELITY SIMULATION EXERCISES TO EVALUATE AND ENHANCE NEONATAL RESUSCITATION SKILLS

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[1]MA Attar, [1]J McAllister, [1,2]HM Haftel. *[1]Department of Pediatrics and Communicable Diseases; [2]Department of Medical Education, University of Michigan Health System, Ann Arbor, MI, USA*

Background and Aims Pediatric house officers (HO) use neonatal resuscitation (NR) skills during their rotations in the neonatal intensive care unit (NICU). To improve HOs' competence and retention of skills in NR we implemented NR practice sessions using high fidelity simulation (HFS) twice for each HO during their NICU rotation. This study explored the feasibility of using HFS to assess key NR skills, both at baseline and following exposure to assess improvement.
Methods We administered two standardized NR HFS sessions for each HO (n=46) during their NICU rotation in 2010. HOs served as team leaders in during the NR scenario. We assessed total time to complete the scenario, total time to successful intubation, and the frequency of markers of NR and teamwork skills during the first and second HFS sessions.
Results We detected multiple failures in key NR and team work skills at the initial HFS sessions, such as ineffective positive pressure ventilation (PPV) (28%), more than one attempt of intubation (30%), incorrect decision to start chest compressions (CC) (30%), and failure to coordinate CC and PPV (52%), not asking for help (59%), roles not defined (22%). Assessment of teamwork showed a