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Background Corticosteroids with or without ephedrine may have positive effects in viral pneumonia treatment accelerating the time to resolution of symptoms but the evidence is not strong enough to make specific recommendations.

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 patients 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 symptoms.

1540 AUDIT ON PRESCRIPTION OF CONTROLLED DRUG

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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 prescription.

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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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 sedated 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 FEASIBILITY OF USING HIGH FIDELITY SIMULATION EXERCISES TO EVALUATE AND ENHANCE NEONATAL RESUSCITATION SKILLS

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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

trend for improvement between the first and second sessions. However, differences of markers of NR performance were not statistically significant.

Conclusions We detected frequent deficiencies in NR skills and no significant improvement after exposure to a single HFS NR session. In order to achieve sustained improvement in NR skills, further practice and skills-based curricula may be necessary.

1543 THE RISK LEVEL OF CANCER AMONGST ADULTS WHO WERE EXPOSED TO SECOND-HAND SMOKE AT CHILDHOOD

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Objective To ascertain the level of risk of cancer amongst adults severely exposed to environmental tobacco smoke at childhood.

Methods We conducted this study among 1,280 adults who were diagnosed for lung cancer for a period of 6 years from 2005–2011. We checked hospital records at childhood for frequent hospitalization related to tobacco effects like middle ear infections, pneumonia, bronchitis and worsened asthma conditions.

Results We were able to show the relationship between exposure to environmental tobacco smoke during childhood and cancer risk. Out of the total number of participants, 2.5% percent (32 adults) had been exposed to environmental tobacco smoke (ETS) at childhood. We found that the overall cancer risk was greater for individuals with exposures to environmental tobacco smoke during both childhood and adulthood than for individuals with exposure during only one period. When specific cancer sites or types were considered, it was found that leukemia and lymphoma among adults were significantly related to exposure to maternal passive smoke before 10 years of age.

Conclusion Results of epidemiologic studies including this one provide evidence that exposure of children to environmental tobacco smoke is associated with increased rates of lower respiratory illness and increased rates of middle ear effusion, asthma, and sudden infant death syndrome. Exposure during childhood to environmental tobacco smoke may also be associated with development of cancer during adulthood.

1544 SOCIOECONOMIC STATUS LOWER LEVELS OF PARENTAL KNOWLEDGE ABOUT CHILD ABUSE, NEGLECT, EXPERIENCES AND DISCIPLINE METHODS USED

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Aim The purpose of this study is families with low socioeconomic status to determine level of knowledge about child abuse and neglect, experiences, disciplinary methods used by children of families and the factors affecting them.

Materials and Methods Children's Clinic admitted that the level of income below the poverty line in 1043 was the child's parent survey. Sociodemographic characteristics, parents' level of knowledge about child abuse-neglect, and about their own childhood experiences, their thoughts and behaviors were recorded in the survey.

Results 17.7% of the parents' have received information about child abuse-neglect, 43.2% has suffered neglect, and 37.6% has suffered abuse. We asked "How do you watch on an attitude of an experienced in the case of abuse" 68.6% of parents said 'consult official institutions', 31.4% of parents said 'family should be deal with a problem or saved within family'. 68.5% of the parents' said does not threaten, 22.3% of families said threatened emotionally then 2.0% of families said threatened with physical punishment.

With the increase of education level of parents an increase in the rate of parents who said 'I don't threatened'. We asked to parents 'How to punish your children?' 47.0% of families said not to punish.

Conclusion The majority of neglect and abuse suffered by the parents and they think that they deserve punishment was the same group of children. Emotional and physical abuse in our society children are still being used as an education and disciplinary methods.

1545 THE USE OF DRUG MANIPULATION TO OBTAIN DOSES REQUIRED IN PAEDIATRIC PRACTICE: A SYSTEMATIC REVIEW

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Background and Aims To determine whether there is an evidence base for drug manipulation to obtain the required dose, a common feature of paediatric clinical practice.

Methods Systematic review, including studies that considered the dose accuracy of manipulated medicines of any dosage form, evidence of safety or harm, bioavailability, patient experience, tolerability, contamination and comparison of methods of manipulation.

Results 43 studies were eligible for inclusion, 42 of which involved tablets being cut, split, crushed or dispersed. The remaining one study involved the manipulation of suppositories of one drug. No eligible studies concerning manipulation of oral capsules or liquids, rectal enemas, nebuliser solutions, injections or transdermal patches were identified. Seventeen of the tablet studies considered dose accuracy using weight and/or drug content. In studies that considered weight using adapted pharmacopoeial specifications, the percentage of halved tablets meeting these specifications ranged from 33% to 93%. Nine studies investigated bioavailability outcomes following the manipulations of five delayed release formulations. In all nine studies all of the dosage form was administered. Only one study was identified where drugs were manipulated to obtain a proportion of the dosage form, and that proportion administered. The eight studies that considered patient experience found that having to manipulate the tablets did not have a negative impact on adherence. Of the 43 studies only two studies reported investigating children.

Conclusion This review yielded limited evidence to support manipulation of medicines. The results cannot be extrapolated between dosage forms, methods of manipulation or between different brands of preparation.

1546 CONGENITAL HYPOTHYROIDISM: A REVIEW OF THE RISK FACTORS

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Objective Higher prevalence of CH among Iranian population necessitates review of risk factors and distribution of these factors among whole populations.

Method In Guilan province during years 2006 to 2010, neonatal screening for TSH was measured in 3–5 days after birth. All neonate with TSH level ≥ 5 mu/l refer to endocrinologist and serum TSH,