Abstracts

Background and Aims PICU provides high level of care to critically ill or injured children. Our aim was to analyse the socioeconomic characteristics of their families.

Methods 127 children, hospitalized from 10/05/2008 to 10/5/2009, were analyzed retrospectively: age, gender, parents’ age, nationality, residence, marital status, number of children, parents’ education, employment, insurance, and way of transportation, and were correlated with the days of hospitalization, severity scores and outcome. Data analysis with the SPSS 17.

Results 73 (57.5%) were males and 54 (42.5%) girls, mean age 4.5 and 6.7 years respectively. 78.2% were from this country, and 4.1% tourists, 17.5% immigrants and 23% gypsy. No significant difference in the distribution for gender, but a statistically significant difference in educational level of both parents, in relation to nationality (p<0.011). 75% foreign and 10% Greeks parents were primary schools, 15% and 70% high school and only 7% and 20% university graduates, respectively. Higher TISS 28 and TISS 76 (worst condition) in foreigners. Higher PRISM and PRISM Predicted Mortality (%) severity scores (more serious condition), higher TISS 28 and TISS 76 and more days of hospitalization in children transported by ambulance/airplane. Foreigner children, transferred by ambulance or airplane, had the higher death rate.

Conclusions The severity of illness, duration of hospitalization and outcome, appear to be related to the socioeconomic characteristics of families and the way of transportation.

1740 EPIDEMIOLOGY OF SEVERE TRAUMATIC BRAIN INJURY (TBI) IN PEDIATRIC POPULATION OF THE WEST OF ALGERIA

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Background and Aims Algeria is in the fourth rank of road accidents in the world.

The Aim of the study was to provide recommendations to government and health authorities, based on hard evidence, for improving health care delivery to children with severe TBI in the referral region of the university hospital center in Oran.

Method In this cohort, all children with severe TBI was admitted to the Pediatric Intensive Care Unit (PICU) of the University Hospital Centre of Oran, between the January 1, 1995 and December 31, 2007.

Results The average age is 7 years 1/2. Road accidents are in the origin of more than 70% of the cases in which 80% are pedestrians. 65% of pedestrians are injured on roads in rural environment (countryside). The pre hospital management is unfortunately almost absent. 1/3 of children had GCS score < 5. Median Injury Severity Scale (ISS) score was 26 (IQR 21–33; Range 9–75). The polytraumatism represents 1/5 of the cases. The cerebral edema was found in 3/4 of the cases. On the 573 children, the rate of survival is 61%. In this study, the road accidents represent the main cause of severe TBI in children and are responsible of a more high mortality essentially due to the absence of prehospital management.

Conclusion The improvement of prehospital management must be reduce the mortality and improve the prognosis of severe TBI and the information of the population should be promoted to reduce the frequency of severe TBI.

1741 PULSE OXIMETRY IN HEALTHY NEWBORNS AFTER MIDWIFERY SUPERVISED UNCOMPLICATED HOME BIRTHS: USE OF INTERNATIONAL ACCEPTED PERCENTILES

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Background Percentiles of oxygen saturation as a function of time from birth in uncompromised infants born at term are now defined. However, in these percentiles infants born after assisted deliveries (ventouse, forceps), by cesarean, after augmentation of labour, or epidural analgesia were also included.

Aim To evaluate if international accepted percentiles of neonatal oxygen saturation and heart rate values are applicable in infants born after non-intervention vaginal deliveries.

Methods During ten consecutive months, 27 midwives in the Leiden region used a Masimo pulse oximeter and perform measurements directly after birth infants born after non-intervention vaginal deliveries. Data was stored and analyzed using the skewness-median-coefficient of variation (LMS) method.

Results During the study period oximetry was recorded in 101 births. Percentiles of oxygen saturation and heart rate are shown in figure 1 and 2. The percentiles are comparable to the international accepted values, except for the first 3 minutes for oxygen saturation and the first minute for heart rate.

Abstract 1741 Figure 1

Abstract 1741 Figure 2

Conclusions The accepted percentiles for heart rate and oxygen saturation are applicable to infants born after a non-intervention
vaginal birth, but caution should be taken in the first three minutes as oxygen saturation is higher.

**1742**  
A COMPARISON OF NEONATAL BILIRUBIN DETERMINED BY BLOOD GAS ANALYZER AND AUTO ANALYZER  
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As high levels of serum bilirubin well known to be toxic to the brain especially preterm neonates, many methods adapted for bilirubin measurement. We evaluated total bedside blood gas analyzer bilirubin (BsB) in preterm and term newborns compared to central laboratory auto analyzer bilirubin (TsB). An observational study on term and preterm newborns paired samples were checked for BsB and TsB looking for the significantly compared values, time needed, gestational age, weight, and anemia and blood volume extraction. A hundred forty one term and preterm newborns were included, birth weights range from 460 to 3450 g with a mean of 1450 and gestational ages from 23 to 40 weeks with a mean of 30.4 weeks. The correlation of TsB to BsB was linear and statistically significant, as well as hemoglobin and hematocrit, especially preterm neonate or term neonates already given phototherapy when the transcannous bilirubin measurement cannot be recommended the bedside blood gas analyzer bilirubin, hemoglobin and hematocrit were found to be statistically correlated and minimizing the time and extraction blood volume.

**1743**  
EVALUATION OF NEONATAL COMPLICATIONS IN CAESARIAN SECTION AND VAGINAL DELIVERY  
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**Background** The appropriateness of the rising rate of cesarean delivery worldwide has been debated widely. U.S. cesareans have risen 40% since 1996. IRAN cesareans section rate is 40.40% now. IRAN cesareans section versus vaginal delivery. Method We conducted observational study of all women with a singleton gestation and a prior cesarean delivery at 2 academic medical centers in Masshad medical university. Perinatal outcomes were compared using frequency bar plotting to get the percentage of children in each segment. Results A hundred forty one term and preterm neonates were included, birth weights range from 460 to 3450 g with a mean of 1450 and gestational ages from 23 to 40 weeks with a mean of 30.4 weeks. The correlation of TsB to BsB was linear and statistically significant, as well as hemoglobin and hematocrit, especially preterm neonate or term neonates already given phototherapy when the transcannous bilirubin measurement cannot be recommended the bedside blood gas analyzer bilirubin, hemoglobin and hematocrit were found to be statistically correlated and minimizing the time and extraction blood volume.

**1744**  
IS THERE A ROLE FOR A PART-TIME POISON CONTROL CENTER IN A HUMAN RESOURCE LIMITED SETTING?  
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Background and Aims The poison control centers have been shown to reduce the morbidity and mortality in childhood accidental poisoning. The United Arab Emirates poison and drug information center does not operate 24/7 due to the shortage of well-trained staff. We aimed at identifying the time range of presentations of the poisoning cases to the emergency centers in the region as an indirect efficiency measure of the center.

**Method** We reviewed the electronic medical records for the documented triage check-in time for all the cases of accidental poison ingestion under the age of 10 years who presented in the year 2010 in the two tertiary emergency centers (ERs) in the region. We divided the 24 hour digital time clock into two distinct segments ie.0700 to 1500 hours (the working hours of the poison center in the region) and 1501 to 0659 hours (off working hours). The answers were compared using frequency bar plotting to get the percentage of children in each segment.

**Results** 200 children were seen between January 1st and December 31st 2010 in the ERs. Record was not available in six cases. 155 cases (76.5%) were checked-in in the 1501–0659 hours segment compared to the 41 cases (20.5%) during the working hours of the poison center.

**Conclusion** More than three-quarter of accidental poison ingestion cases presented to the emergency when the poison center was closed. Shifting the day time staff to provide evening and night time coverage can significantly improve the efficiency of the poison center and minimize cost.