

**Abstract PO-0654 Table 2 Adjusted model estimating next sibling birth**

| Variable*    | HR   | 95% CI for Exp (B) |       |
|--------------|------|--------------------|-------|
|              |      | Lower              | Upper |
| Male         | 0.99 | 0.97               | 1.00  |
| <28          | 0.66 | 0.54               | 0.81  |
| 28–31        | 0.74 | 0.66               | 0.82  |
| 32–37        | 0.93 | 0.90               | 0.95  |
| >42          | 1.20 | 1.17               | 1.23  |
| Miscarriages | 0.77 | 0.76               | 0.79  |

(1.3%) and miscarriage data for 2964 (1.3%); 225650 children remained in analyses.

We utilised Cox regression for proportional hazards to analyse the effect of GA and history of miscarriages on sibling birth. **Results** A low GA at birth delayed subsequent sibling birth. The effect remained unchanged after introducing miscarriages in the model.

\*Numbers indicate completed gestational weeks. HR, Hazard Ratio (term group, females and no miscarriages as a referent).

**Conclusions** Prematurity postponed subsequent sibling birth. Accounting for obstetric history left this effect unchanged.

**PO-0655 THE EFFICACY OF SNAPPE-II IN PREDICTING MORBIDITY AND MORTALITY IN EXTREMELY LOW BIRTH WEIGHT INFANTS**

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**Background and aims** Various scoring system are used to predict morbidity and mortality. Among these the “Score for Neonatal Acute Physiology-Perinatal Extension-II” (SNAPPE-II) predicts the risk of mortality based on data collected within the first day of the newborn. We aimed to determine the efficacy of SNAPPE-II in predicting mortality in extremely low birth weight infants (ELBW). We also assessed its efficacy in predicting the potential causes of neonatal morbidity.

**Methods** Data from infants admitted between June 2012 and June 2013 to the neonatal intensive care unit with a birth weight less than 1500 gr were collected in a retrospective manner. SNAPPE-II score was calculated for the first 24 h of each infant. The efficacy of SNAPPE-II score in predicting intra ventricular haemorrhage (IVH), necrotizing enterocolitis (NEC) and bronchopulmonary dysplasia (BPD) as well as mortality was evaluated.

**Results** A total of 182 infants (98 males and 84 females) were enrolled in the study. Mean birth weight was  $1,134 \pm 264$  g. The most notable scores documented for SNAPPE-II were 33 for mortality (sensitivity 86.6%, specificity 76.4%), 23 for IVH (sensitivity 88.2%, specificity 64.6%), 39 for NEC (sensitivity 78.7%, specificity 72.6%) and 36 for BPD (sensitivity 87.8%, specificity 69.4%). Infants with a high SNAPPE-II score had significantly higher rates of IVH ( $p < 0,001$ ), NEC ( $p = 0,014$ ) and BPD ( $p = 0,003$ ).

**Conclusions** We found that a high score of SNAPPE-II in premature infants was independently associated with neonatal mortality as well as with factors know to be associated with neonatal morbidity, such as IVH, NEC and BPD.

**PO-0656 THE EVALUATION OF 263 NEWBORNS WITH MENINGOMYELOCELE: FIVE YEARS OF EXPERIENCE**

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**Background and objectives** Meningomyelocele (MMC) is a congenital malformation characterised by the herniation of a part of the spinal cord with surrounding meningeal structures as a sac through an open spinal canal. In this study we aimed to evaluate the demographic and clinical features of MMC cases followed in our neonatal intensive care unit, to investigate the accompanying congenital malformations and the effects of operation timing on mortality and morbidity.

**Methods** Patients between January 2009 and January 2014 were evaluated retrospectively. The patients were analysed according demographic features, additional malformations, operation timing and the ratio of an additionally ventriculoperitoneal shunt placement because of concomitant hydrocephaly. The effects of operation timing on mortality, complications and the length of hospital stay were investigated.

**Results** 263 patients were included in this study 152 male (57.8%), 111 female (42.2%). The ratio of prenatal diagnosis was 77.2% and the paternal consanguinity ratio was 51.3%. Ventriculoperitoneal shunting was performed to 72.6% of the patients after the MMC surgery. The length of hospital stay, total period of antibiotic use and the mortality ratio were significantly lower in the cases among whom the operation time was less than three days ( $p$  values are 0.006, 0.014, 0.004 respectively).

**Conclusions** The ratio of births with MMC is higher in our city when compared with another countries and the high ratio of paternal consanguinity might be responsible for this difference and. The mortality and rate of complications can be decreased by early performing of MMC surgery.

**PO-0657 ASSESSMENT OF EXTREMELY LOW BIRTH WEIGHT INFANTS IN A NEONATAL INTENSIVE CARE UNIT OF A TERTIARY REFERRAL HOSPITAL**

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**Background and aims** Due to severe postnatal complications, the morbidity and mortality rate of extremely low birth weight (ELBW) premature infants remains significantly high. We aimed to assess the morbidity and mortality rates as well as the demographic characteristics of ELBW infants admitted to a neonatal intensive care unit (NICU).

**Methods** ELBW infants admitted to the NICU between March 2010 and 2013 were included in the current study. Demographic characteristics, the type of surfactant and the need for a repeat dose, the need for mechanical ventilation and etiologic factors associated with morbidity and mortality were retrospectively assessed.

**Results** A total of 134 infants were enrolled in the study. Mean birth weight was  $836 \pm 155$  g and mean gestational week was  $26.4 \pm 1.7$  weeks. While all the infants received surfactants, 41.8% were treated with beractant, and 58.2% with proctant alfa. Overall mortality rate was 59.7%. The need for repeated

doses of surfactant was more and the mortality rate was higher in infants who received beractant as opposed to those who received proctant alfa (p 0.024; 0.032, respectively). Infants who were referred from other centres had higher mortality and intraventricular haemorrhage (IVH) rates (p 0.011; 0.016, respectively).

**Conclusions** We found that sepsis and ICH were the leading causes of mortality in ELBW infants. We also found that the type of surfactant administered to ELBW infants could influence the rate of mortality. Finally, the transport of ELBW infants from one centre to another may increase the rate of IVH and mortality and hence necessitates extreme caution.

**PO-0658 'WARM' TO PREVENT HYPOTHERMIA**

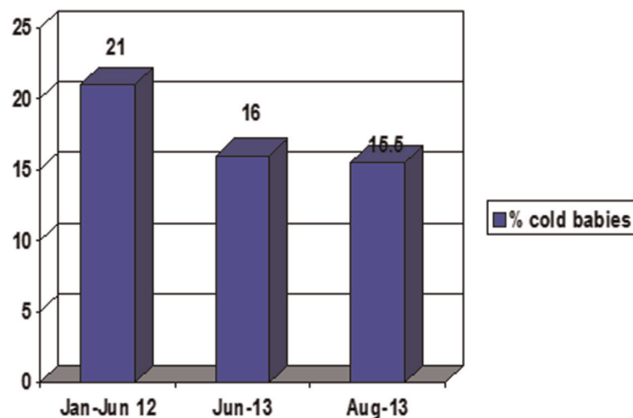
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**Background** Hypothermia of new born babies occurs throughout the world and in all climates. Low birth weight and sick neonates are most vulnerable. The Epicure study showed that premature neonates who were 26 weeks gestation or less with a temperature lower than 35°C on admission to neonatal unit were independently associated with mortality. Heat loss resulting in hypothermia is a significant problem during neonatal resuscitation.

**Objectives** Re-auditing of the practice and establish incidence of hypothermia following implementation of 'WARM' concept (Incidence of hypothermia 21% Jan-June 2012) in neonatal admissions to the neonatal unit at L&D Hospital.

**Methodology** Prospective re-audit of all neonatal admissions recorded on pre-designed pro-forma in which temperature at source of referral and at admission along with interventions in place to prevent hypothermia are recorded. Any admission temp



**Abstract PO-0658 Figure 2**

<36.5°C will be defined as hypothermia (based on WHO definition and local guideline).

Concept of WARM based on WHO recommendations and rising awareness of parents and professionals about prevention of hypothermia.

Mandatory documentation of temperature and measures already put in place (eg. Hats, clothes etc) from source of admission and again at NICU which acted as a prompt for the professionals.

All professionals involved in new-born care were regularly given teaching session on importance of prevention of hypothermia (Exclusion of cooling babies).

Trainees were educated about importance of monitoring temperature at resuscitation scenario and emphasising importance in simulation scenarios.

**Result** Ourre-audit has shown a significant reduction in incidence from 21 to 15.5%.

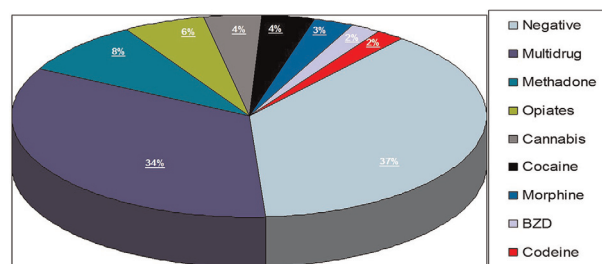
**PO-0659 ROLE OF URINE TOXICOLOGY AS AN ADJUNCT IN MANAGEMENT OF BABIES BORN TO SUSPECTED DRUG USERS AT L&D HOSPITAL**

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**Background** Anecdotally there is increasing trend of drug usage in pregnancy and hence neonatal withdrawal (NAS).

There are difficulties in early detection because of a) Reluctance of expectant mothers, late booking and poor attendance at antenatal follow up due to fear of social services.



**Abstract PO-0659 Figure 1 Urine toxicology outcomes**



- W** Warm environment (Delivery suite temperature of 25°C)
- A** Appropriate bedding & clothing- Hats, clothes
- R** Remove wet clothes, Record temperature & documentation
- M** Mother & baby together- skin to skin contact, breast feeding

**Abstract PO-0658 Figure 1**