

of pregnancies, abortions, still birth, & intrauterine fetal death, multiple pregnancies, neonatal deaths, infant deaths, & low birth weight babies.

**Results** The study included 190 mothers of consanguinous marriage and 320 non consanguinous. there was no statistically significant relation between consanguinity and no of pregnancies, abortions, stillbirths or multiple pregnancies. however there was a statistically significant relation between consanguinity and nneonatal deaths, infant deaths and low birth weight babies.

**Conclusion** Consanguinity has an adverse effect on pregnancy and neonatal outcome and should be considered as a factor in high risk pregnancy, the neonatologist and obstetrician should be alerted to.

### 1365 THE RELATIONSHIP BETWEEN MOTHER'S CONDITION AND NEWBORN BIRTH WEIGHT

doi:10.1136/archdischild-2012-302724.1365

S Gatot-Irawan, A Sunardi, RP Rina-Pratiwi, A Agus-Fitrianto, MS Kosim. *Department of Pediatrics, Faculty of Medicine Diponegoro University - Dr. Kariadi Hospital, Semarang, Indonesia*

**Background** Birth weight is a powerful predictor of infant growth, intra uterine welfare and survival. The outcome of birth weight is a reasonable well-defined problem caused by factors that are potentially modifiable. Mother's condition were important risk factor for determining the outcome of birth weight.

**Objective** To determine the relationship between mother's condition and newborn birth weight

**Methods/design** Case control study in Dr. Kariadi Hospital Semarang, Indonesia. Data were taken from medical records of babies who fulfilled inclusion criteria and admitted from January 2011 until December 2011. The mother's condition included age, education, parity, nutritional status from Mid Upper Arm Circumference (MUAC), gestational age, antenatal care, (ANC), hypertension, and anaemia. Birth weight was determined at birth with same scale and categorized in to some categories. Statistical analyses used:  $X^2$  and logistic regression.

**Results** We obtained 30 mother of babies with low birth weight as a Case Group and 30 mother of babies/with appropriate birthweight as the control group. We found between groups: MUAC has (OR 0.10; 95% CI:0.01–0.6)  $p=0.01$ , anaemia has (OR 0.13; 95% CI :0.03–0.61)  $p=0.09$ , and gestational age has (OR 21.76; 95% CI :3.6–129)  $p=0.001$ , age has (OR 0.90; 95% CI :0.19–4.15)  $p=0.89$ , Hypertension has (OR 0.44; 95% CI:0.73–2.69)  $p=0.37$ , parity has (OR 0.36; 95% CI:0.11–1.20)  $p=0.09$ , education has (OR 0.12; 95% CI :0.10–1.60)  $p=0.11$ , ANC has (OR 0.01; 95% CI :0.02–0.6)  $p=0.99$ .

**Conclusion** MUAC, anaemia and gestational age as risk factor of LBW. Gestational age was the most important one.

### 1366 PERINATAL RISK FACTORS OF INTRAUTERINE GROWTH RETARDATION

doi:10.1136/archdischild-2012-302724.1366

<sup>1</sup>S Ali-Zade, <sup>2</sup>S Huseynova, <sup>3</sup>N Panakhova, <sup>4</sup>S Hasanov, <sup>5</sup>S Alasgarova, <sup>6</sup>H Duniyaliyeva. <sup>1</sup>Odlar Yurdu; <sup>2</sup>Neonatology, Azerbaijan Medical University, Baku, Azerbaijan

**Background and Aim** Intrauterine growth retardation (IUGR) is a serious health condition that causes significant morbidity and serious developmental problems in children. The aim of this study was the identification of the role of pregnancy complications in the development of growth retardation.

**Study Design** 210 women with complicated pregnancy and their newborn infants were included in study. Pregnant women were classified depending on different pathologies such as preeclampsia, anemia, somatic diseases and their combinations. IUGR identified

in infants whose estimated anthropometrical measurements was below the 10th percentile for its gestational age, and also confirmed using the Dubowitz/Ballard scale.

**Results** The IUGR was detected in 38.46% in women with different somatic diseases of pregnancy, in 50% in women with preeclampsia, 30.30% in women with different grade of anemia. Highest frequency (66.66%) of this syndrom was diagnosed in infants whose mothers suffered from both preeclampsia and anemia during pregnancy, and in 33.3% of these infants determined symmetrical type growth restriction.

**Conclusion** Preeclampsia is one of the main factor affecting maternal-placental-fetal interactions and it may be accepted as more serious risk factor when associates with anemia in pregnancy.

### 1367 NEONATAL MORTALITY AND MORBIDITY RATES WHO WERE ADMITTED TO THE NEONATAL ICU OF KONYA IN TWO YEARS

doi:10.1136/archdischild-2012-302724.1367

<sup>1</sup>H Altunhan, <sup>2</sup>A Annagür, <sup>3</sup>YÜ Özdemir, <sup>3</sup>M Konak, <sup>3</sup>R Örs. <sup>1</sup>Department of Neonatology, Abant İzzet Baysal University, Medical Faculty, Bolu; <sup>2</sup>Department of Neonatology, Selçuk University, Selçuklu Medical Faculty; <sup>3</sup>Department of Neonatology, Konya University, Meram Medical Faculty, Konya, Turkey

**Objective** Our purpose was to determine mortality and morbidity rates and selected outcome variables for infants especially weighing less than 1500 grams, who were admitted to the neonatal intensive care unit of our hospital from January 2007 to December 2008.

**Material and Methods** We evaluated infants who were admitted to the neonatal intensive care unit of our hospital (Konya University, Meram Medical Faculty) from January 2007 to December 2008.

**Results** The percent of VLBW admissions to the our NICU was 14.3% in 2007 and 17.4% in 2008. The mean birth weight and gestational age of the infants were 1027±308grams (min-max: 400–1470gr), 28.3±3.8weeks (min-max:22–36weeks) in 2007, 998±309grams (min-max:400–1490gr), 28.4±3.4weeks (min-max:22–36weeks) in 2008, respectively. Overall survival rate was 50% during two years. Respiratory support were given to 65% and 69.4% VLBW newborns, in 2007 and 2008, respectively. Among selected outcomes, bronchopulmonary dysplasia, retinopathy of prematurity(ROP), severe intraventricular hemorrhage (IVH), nosocomial infection, necrotizing enterocolitis(NEC), respiratory distress syndrome (RDS) were encountered in 1.66%, 4.6%, 1.9%, 10.8%, 1.2%, 16.3% of the premature infants during two years, respectively.

**Conclusion** As a result the majority of neonatal deaths were due to complications of premature labor. Scientific and technological advances in Neonatology have led to increased rates of survival and long term morbidities in very low birth weight infants. Prevention of premature labor, sufficient antenatal maternal care and establishment of good delivery conditions to decrease neonatal infections and medical care after delivery could help to decrease neonatal mortality rates.

### 1368 PERINATAL MORTALITY RATE OF SELÇUK ÜNİVERSİTESİ FACULTY OF MEDICIN IN YEAR OF 2008

doi:10.1136/archdischild-2012-302724.1368

<sup>1</sup>H Altunhan, <sup>2</sup>A Annagür, <sup>3</sup>YÜ Özdemir, <sup>3</sup>M Konak, <sup>3</sup>R Örs. <sup>1</sup>Department of Neonatology, Abant İzzet Baysal University, Medical Faculty, Bolu; <sup>2</sup>Department of Neonatology, Selçuk University, Selçuklu Medical Faculty; <sup>3</sup>Department of Neonatology, Konya University, Meram Medical Faculty, Konya, Turkey

**Objective** Our purpose was to determine the perinatal mortality rate of our hospital in 2008.

**Material and Methods** We evaluated newborns who were born alive or dead with a birth weight of more than 500 grams and a gestational age over 22 weeks between January 2008 and December 2008 in our hospital.

**Results** In 2008, 3019 babies were born alive or dead with a birth weight of more than 500 grams and a gestational age over 22 weeks. Of these, 49 babies died in the perinatal period. Perinatal mortality rate was 36.7%, stillbirth rate was 20.5%, early neonatal mortality rate was 16.5%. The causes of deaths according to a modified Wigglesworth classification were stillbirths, congenital malformations and prematurity and its complications, respectively.

**Conclusion** In our hospital, perinatal mortality rate has been declining in recent years. As a result, the some of neonatal deaths were due to complications of premature labor. Prevention of premature labor, sufficient antenatal maternal care and establishment of good delivery conditions to decrease neonatal infections and medical care after delivery could help to decrease neonatal mortality rates.

### 1369 NEONATAL MORBIDITY IN HYPERTENSIVE PREGNANCY

doi:10.1136/archdischild-2012-302724.1369

DS Krstic. *Neonatology, Health Centre Vranje, Vranje, Serbia*

Research conducted at the Gynaecology-obstetrics and neonatology department of the Health Center Vranje in 2011./2012 included 80 mothers and 80 infants. The study included 40 mothers of patients with hypertensive syndrome in pregnancy and 40 mothers and infants in the control group.

Hypertension is registered in the 3–7% of pregnant women. The average age of pregnant women from the control group was 31 years and 26 years.

For mothers with hypertension, the labor was completed in 28 (70%) by caesarean section and only in 12 (30%) spontaneously, whereas in the control group leads spontaneously in 32 (80%) mothers.

The average body weight of infants of mothers suffering from hypertensive syndrome was 2970 grams in the control group was 3235 grams.

Average Apgar score (cumulative score of cardiorespiratory function of newborns and nerve function) in the study group in the first minute was 6.55, in the fifth 7.78, while in the control average Apgar score in the first minute is 7.67, and in the fifth minute 8.73.

Infants of mothers suffering from hypertensive syndrome in pregnancy have lower values of erythrocytes, pH, PO<sub>2</sub> and PCO<sub>2</sub> greater value.

Duration of hospitalization, mothers suffering from hypertension of the newborn is longer.

The observed groups There were no maternal or fetal mortality.

### 1370 THE RELATIONSHIP BETWEEN PREGNANT MOTHER'S CONDITION AND NEONATAL MORTALITY RATE

doi:10.1136/archdischild-2012-302724.1370

MS Kosim, NA Nenden, B Saad, AR Farid. *Department of Pediatrics, Faculty of Medicine Diponegoro University - Dr. Kariadi Hospital, Semarang, Indonesia*

**Background** Neonatal mortality is still a problem around the world. The rate is varies from country to country. Mother's condition was associated with the outcome of conception and mortality rate.

**Objective** To determine the relationship between mother's condition and neonatal mortality rate.

**Methods/design** Case control study. Case group was 40 mothers of neonates who died in high risk neonatal ward Dr. Kariadi Hospital Semarang Indonesia within period of January to December 2011

who fulfilled inclusion criteria. Control group was 40 mothers of neonates who survived. Mother's condition that was studied included mother's age, parity, gestational age, antenatal care, mother's infection, diabetic mother, severe anemia, preeclampsia, eclampsia, hypertension, heart disease, and antenatal bleeding. Data was taken from medical records. Statistical analyses used X<sup>2</sup> and logistic regression.

**Result** Between groups respectively: age >30-year old, has OR 0.70; 95% CI 0.27–1.82). multiparity (OR 1.22; 95% CI 0.51–2.96). preterm, (OR 2.78; 95% CI 1.12–6.89). ANC, (OR 0.87; 95% CI 0.31–2.44). Mother's infection, (OR 0.29; 95% CI 0.05–1.58). diabetic mother, (OR 4.33; 95% CI 0.46–40.61). severe anemic, d (OR 2.29; 95% CI 1.76–2.98). preeclampsia mothers, (OR 0.23; 95% CI 0.02–2.16). eclampsia mothers, (OR 2.71; 95% CI 0.49–14.90). hypertension mothers, (OR 4.33; 95% CI 0.46–40.60). heart disease (OR 2.02; 95% CI 1.62–2.53). antenatal bleeding (OR 2.33; 95% CI 1.78–3.05).

**Conclusion** Gestational age (preterm), severe anemia, and antenatal bleeding were associated with neonatal mortality, where gestational age as the major risk factor.

### 1371 NEONATAL MORTALITY REVIEWS IN A TERTIARY NEONATAL UNIT IN UK: AN USEFUL LEARNING EXPERIENCE

doi:10.1136/archdischild-2012-302724.1371

S Mitra, K Beardsall, H O'Reilly. *Neonatal Unit, The Rosie Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK*

**Background and Aims** Neonatal care has developed dramatically over the last few decades. In spite of this, the neonatal mortality remains high. As clinicians we strive to deliver high quality care and by reviewing the care in all neonatal deaths we hope to identify the avoidable risk factors, areas of good practice and areas for improving care and optimising future service delivery.

**Methods** Patient notes of all neonates died over one year (1<sup>st</sup> Jan 2010–31<sup>st</sup> Dec 2010) period in a tertiary neonatal unit in UK were reviewed by members of a multidisciplinary team. Reviews were performed using a structured format assessing all areas of care including resuscitation, clinical management, transfer, communication and documentation.

**Results** 1018 infants were admitted to the neonatal unit, 878 infants were in-born and 140 infants were ex-utero transfers. Most deaths (14 infants (1.3%)) occurred within first seven days of life, 8 infants (0.7%) died in the late neonatal period and 5 infants (0.5%) died after 28 completed days.

Several areas of good practices were identified, including evidence of good multi-disciplinary team working. Key themes were identified as areas for improvement including documentation and continuity of care at consultant level for infants with complex needs and longer stay. An annual report summarising all cases and recommendations was produced.

**Conclusion** Mortality case reviews are an important source of learning. In order to successfully influence the service development these reviews must be structured, include input from a multi-disciplinary team and result in specific and achievable recommendations.

### 1372 RISK FACTORS OF PERINATAL MORTALITY: MOROCCAN DATA

doi:10.1136/archdischild-2012-302724.1372

<sup>1</sup>A Barkat, <sup>1</sup>N Sabir, <sup>2</sup>M Kabiri. *<sup>1</sup>Faculté de Médecine et de Pharmacie de Rabat; Université Souissi; <sup>2</sup>CRECET; Faculté de Médecine et de Pharmacie de Rabat, Rabat, Morocco*

**Objective** The objective of this study was to analyze the main factors of perinatal mortality.