

these patients have undergone emergency caesarean section ( $X^2 = 12.98, P = 0.003$ ). Although patients with isolated oligohydramnios tends to had a more CTG abnormalities, it was not stastically significant ( $X^2 = 4.29, P = 0.12$ ).

But incidence of significant meconium stained liquor was higher than normal pregnancies ( $X^2 = 6.02, P = 0.049$ ). However, the fetal outcome APGAR <7 at 5 minutes ( $X^2 = 0.33, P = 0.95$ ) short term perinatal morbidities ( $X^2 = 0.29, P = 0.59$ ) were shown no statistical difference between both group. Neonatal special care baby unit admissions were higher in pregnancies with isolated oligohydramnios ( $X^2 = 23.56, P = 0.0001$ ).

**Conclusion** Compared to normal pregnancies, pregnancies with isolated oligohydramnios didn't show any statistically significant difference in perinatal outcome. Oligohydramnios itself doesn't indicate the fetal compromise when other growth parameters were normal. However, as there are controversies in management further researches are needed in this field.

#### GEP6131

##### Postpartum haemorrhage prevention in Uttar Pradesh, India: A secondary data analysis

**Tursini, MS<sup>1</sup>; Sharma, G<sup>1</sup>; Powell-Jackson, T<sup>2</sup>; Filippi, V<sup>1</sup>**

<sup>1</sup>Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, London, UK; <sup>2</sup>Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, UK

**Introduction** Maternal mortality is unfortunately still a major issue worldwide and postpartum haemorrhage (PPH) is the single leading cause of maternal deaths. Active management of the third stage of labour (AMTSL) is recommended as a PPH prevention strategy as it has shown to decrease the incidence of PPH, but globally its correct implementation is very poor. The purpose of this project is to describe the implementation of AMTSL in a sample population in Uttar Pradesh, India, and to understand the determinants of AMTSL adherence.

**Methods** A secondary analysis was carried out on data from a cross sectional survey of direct observations of deliveries in the state of Uttar Pradesh, India. Information on 275 mother-neonate pairs was collected by trained observers from 26 health facilities. Logistic regression was used to identify determinants for AMTSL implementation.

**Results** We found high rates (92%) of uterotonic administration in this sample. Adherence to AMTSL package depended on the definition used: 0.4% for the WHO 2012 definition, 24.5% for the FIGO/ICM 2003 definition, 5.3% for the Cochrane 2015 definition and 75.4% for the Indian 2005 guidelines definition. Risk factors associated with improved AMTSL practice were socioeconomic status ( $P$ -value 0.007), being unemployed ( $P$ -value 0.006), being in private facility ( $P$ -value 0.042), the level of facility ( $P$ -value 0.002), if labour was augmented ( $P$ -value 0.043) and whether or not the uterotonic was present at the bedside ( $P$ -value <0.001). Being in private health care facility, after adjusting for and socioeconomic status, no longer showed increased odds of adherence to AMTSL ( $P$ -value 0.063).

**Conclusion** In this sample population, there were high rates of uterotonic administration but full adherence to AMTSL practices was generally low. AMTSL definition requires updating and universality and barriers to implementation of clinical guidelines should be investigated further in this local context with high PPH prevalence.

#### GEP6148

##### Pregnancy outcomes in women with and without PCOS: A systematic review and meta-analysis of prospective studies

**Khomami, MB<sup>1</sup>; Joham, A<sup>1</sup>; Arora, C<sup>2</sup>; Silagy, M<sup>2</sup>; Misso, M<sup>1</sup>; Boyle, J<sup>1</sup>; Piltonen, T<sup>3</sup>; Ranasinha, S<sup>1</sup>; Teede, H<sup>1</sup>; Moran, L<sup>1</sup>**

<sup>1</sup>School of Public Health and Preventive Medicine, Monash University, Monash Centre for Health Research and Implementation, Melbourne, Australia; <sup>2</sup>Department of Obstetrics and Gynecology, Monash Health, Melbourne, Australia; <sup>3</sup>Department of Obstetrics and Gynecology, Oulu University Hospital, University of Oulu, PEDEGO Research Unit, Medical Research Center, Oulu, Finland

**Introduction** While a number of studies have reported increased risk of adverse pregnancy outcomes in polycystic ovary syndrome (PCOS), these have not been designed considering the impact of body mass index (BMI) as an important contributor to both PCOS severity and pregnancy outcomes. We therefore aimed to explore the impact of BMI on adverse pregnancy outcomes in PCOS.

**Methods** A comprehensive search was conducted in Medline, Medline in-process and other non-indexed citations, EMBASE and all EBM reviews. Prospective studies reporting pregnancy outcomes including miscarriage, gestational diabetes, gestational hypertension, pre-eclampsia, preterm birth, small and large for gestational age birth in women with and without PCOS, until 4th April 2017, were identified as eligible for inclusion. Data were expressed as odds ratio (OR) with 95% confidence interval (CI) and analyzed using the random effect model for meta-analysis.

**Results** Out of a total of 4292 identified articles, 24 prospective studies were included in the meta-analysis. Women with PCOS showed higher risk for miscarriage (OR 2.85, 95% CI 1.74–4.65), gestational diabetes (OR 3.04, 95% CI 2.26–4.10), gestational hypertension (OR 2.24, 95% CI 1.71–2.95), pre-eclampsia (OR 1.90, 95% CI 1.32–2.74), preterm birth (OR 1.51, 95% CI 1.09–2.08) but similar risk for small for gestational age birth (OR 1.56, 95% CI 0.76–3.21) and large for gestational age birth (OR 1.19, 95% CI 0.90–1.58), compared to women without PCOS. On subgroup analysis by BMI-matched studies, this higher risk was maintained for miscarriage (OR: 4.00, 95% CI 2.59–6.18) and gestational diabetes (OR: 4.94, 95% CI 1.06–23.08), but not for gestational hypertension (OR: 2.50, 95% CI 0.69–9.05), pre-eclampsia (OR: 2.61, 95% CI 0.55–12.34) and preterm birth (OR: 1.64, 95% CI 0.61–4.41). The risks became significant for small for gestational age birth (OR: 4.52, 95% CI 1.92–10.61) and large for gestational age birth (OR: 1.99, 95% CI 1.05–3.77) in BMI-matched studies.

**Conclusion** PCOS is associated with a higher risk of pregnancy complications which occurs independent of BMI for miscarriage, gestational diabetes, small for gestational age birth and large for gestational age birth but not for gestational hypertension, pre-eclampsia and preterm birth. Given the association of PCOS with higher risk for both early and late adverse pregnancy outcomes, it is crucial to plan more comprehensive antenatal care with pre-conception weight management as a core component.

#### GEP6174

### Risk of placental abruption in first and second pregnancy

**Strøm-Roum, EM<sup>1</sup>; Dypvik, J<sup>1,2</sup>; Eskild, A<sup>1,2</sup>**

<sup>1</sup>Department of Obstetrics and Gynecology, Akershus University Hospital, Lørenskog, Norway; <sup>2</sup>Institute of Clinical Medicine, University of Oslo, Oslo, Norway

**Introduction** We studied the absolute risk of placental abruption in the first pregnancy and in the second pregnancy. We also studied whether women who had had placental abruption in their first pregnancy, had an increased risk of placental abruption in their second pregnancy.

**Methods** We included women with a first and a second pregnancy in Norway during the years 1967–2012 ( $n = 767\ 203$ ). We obtained data from the Medical Birth Registry of Norway. We calculated absolute risks of placental abruption in the first and second pregnancy as proportions (%). We also estimated the odds ratio (OR) with 95% confidence interval (95% CI) for placental abruption in the second pregnancy according to placental abruption (yes/no (reference)) in the first pregnancy.

**Results** Among the 767 203 women included in the study, 0.5% (3779) had placental abruption in their first pregnancy, and 0.5% (3480) had placental abruption in their second pregnancy. Among women with placental abruption in their first pregnancy, 3.6% (137/3779) had placental abruption in their second pregnancy, as compared to 0.4% (3343/763 424) among women without placental abruption in their first pregnancy (OR 8.6 (95% CI 7.2–10.2)). Most cases of placental abruption in the second pregnancy (3343/3480, 96.1%) were among women without a history of placental abruption. Also, the large majority (96.4%) of women with placental abruption in the first pregnancy did not have recurrent placental abruption.

**Conclusion** The absolute risk of placental abruption was similar in first and second pregnancy. However, women with placental abruption in the first pregnancy were at increased risk of placental abruption in the second pregnancy.

#### GEP6175

### Profile of dengue infection in pregnancy at Sanglah Hospital Bali

**Mulyana, RS<sup>1</sup>; Pangkahila, ES<sup>1</sup>; Pemayun, T<sup>2</sup>**

<sup>1</sup>Maternal-Fetal Medicine, Sanglah Hospital, Udayana University, Denpasar, Indonesia; <sup>2</sup>Obstetrics & Gynaecology, Sanglah Hospital, Udayana University, Denpasar, Indonesia

**Introduction** Dengue is the most important mosquito-borne disease in Bali. Based on data 2010 from Indonesia Ministry of Health, the highest incidence rate of DHF cases in Indonesia is Bali province, vertical transmission after maternal dengue infection to the fetus and pregnancy losses in relation to dengue infection have been reported.

**Methods** Prospective observational study was undertaken among dengue infection in pregnancy patients at Sanglah Hospital Bali from April 2016 to April 2017. Forty one patients were studied and analysed. All patients who were NS1 antigen/IgM dengue positive were included in the study. Clinical features, hematological and biochemical parameters were noted.

**Results** Forty one patients suffering with Dengue infection, data was collected regarding obstetric and fetal outcome during a period of 1 year. An upward trend was observed with 58.5% as multigravida and 41.5% as primigravida. Dengue infection without warning sign was seen in 31.7%, dengue infection with warning sign in 53.7%, dengue shock syndrome (DSS)/Severe dengue in 14.6%. 78% on third trimester, five cases (12.2%) mortality seen in third trimester. Preterm delivery was seen in 7 cases (17.1%) With some other outcomes that occur in the mother and fetus. Most of pastien 31 (75.6%) came to sanglah hospital or distric hospital at critical phase of dengue infection (day 3–6).

**Conclusion** Dengue in pregnancy requires early diagnosis and treatment. A high index of clinical suspicion is essential in any pregnant woman with fever during epidemic. Further studies are mandatory as evidence-based data in the management of dengue specific for pregnancy are sparse.

#### GEP6176

### Offspring birthweight and placental weight: Does type of maternal diabetes matter? A population study of 183 646 pregnancies

**Strøm-Roum, EM<sup>1</sup>; Eskild, A<sup>1,2</sup>**

<sup>1</sup>Department of Obstetrics and Gynecology, Akershus University Hospital, Lørenskog, Norway; <sup>2</sup>Institute of Clinical Medicine, University of Oslo, Oslo, Norway

**Objectives** Our aim was to estimate increase in birthweight and placental weight in pregnancies with diabetes type-1, diabetes type-2 or gestational diabetes as compared to pregnancies without diabetes. To our knowledge, no study yet has compared birthweight or placental weight in pregnancies with different types of diabetes, after adjustment for maternal body mass index (BMI) and pregnancy length.