#### IDENTIFYING RESEARCH UNCERTAINTIES ABOUT PRETERM BIRTH WITH CLINICIANS AND SERVICE USERS

doi:10.1136/archdischild-2013-303966.355

<sup>1</sup>S Uhm, <sup>2</sup>D Brady, <sup>3</sup>S Carroll, <sup>4</sup>B Chambers, <sup>5</sup>Z Chivers, <sup>6</sup>S Crowe, <sup>7</sup>AL David, <sup>8</sup>S Deshpande, <sup>9</sup>I Dowling-Brady, <sup>10</sup>L Duley, <sup>11</sup>C Gale, <sup>12</sup>G Gyte, <sup>13</sup>CP James, <sup>14</sup>I Jeffrey, <sup>15</sup>J McNeill, <sup>16</sup>MA Turner, <sup>17</sup>A Shennan, <sup>18</sup>S Oliver, <sup>1</sup>Social Science Research, Unit Institute of Education, University of London, London, UK; <sup>2</sup>TinyLife – the premature baby charity for UK, Carryduff, UK; <sup>3</sup>Cleft Lip and Palate Association, London, UK; <sup>4</sup>Tavistock Clinic, London, UK; <sup>5</sup>Bliss – the premature and special care baby charity, London, UK; <sup>6</sup>James Lind Alliance, Oxford, UK; <sup>7</sup>UCL Institute for Women's Health, London, UK; <sup>8</sup>Royal Shrewsbury Hospital, Shrewsbury, UK; <sup>9</sup>Irish Premature Babies, Dublin, Ireland; <sup>10</sup>Nottingham Clinical Trials Unit, University of Nottingham, Nottingham, UK; <sup>11</sup>Academic Neonatal Medicine, Imperial College London, London UK; <sup>12</sup>National Childbirth Trust (NCT), London, UK; <sup>13</sup>UCL Institute for Women's Health, London, UK; <sup>14</sup>British and Irish Paediatric Pathology Association, UK and Republic of Ireland; <sup>15</sup>School of Nursing & Midwifery, Belfast, UK; <sup>16</sup>Liverpool Women's NHS Foundation Trust, Liverpool, UK; <sup>17</sup>Kings College London, London, UK; <sup>18</sup>Social Science Research Unit, Institute of Education, University of London, London, UK

Preterm infants have immature internal organs and often need help with breathing, feeding, and other life support. Those who survive may suffer ill health or disability in childhood, which could potentially continue to adulthood. Even modest improvement for these infants and their families would be important. Clinical research may not fully address the uncertainties in treatment and care that are of greatest importance to service users and clinicians. This research adapted a mixed-method approach developed by the James Lind Alliance to establish Priority Setting Partnerships (PSP). We recruited 44 clinical and service users' organisations across UK and Ireland from April 2011 and formed a Steering Group (SG). An on-line survey was conducted from March to September 2012. A total number of 1,050 participants started the survey, while 343 of them (service users: 57%, clinicians: 30% and both 12%) suggested about 200 research unique uncertainties. While we received feedback from clinicians of various specialities (neonatologist: 28%, nurse: 25%. obstetrician: 18%, midwife: 12% and others10%). Most service users were white British and middle class. Service users asked about aetiologies, interventions and outcomes for pre-pregnancy (12), antenatal (42), perinatal (18), postnatal (58) and other care (20), revealing interests in a broad range of issues surrounding preterm birth. If research agendas are to serve the interests of service users at higher risk of preterm birth there is a need to improve ways of engaging service users from ethnic minorities and disadvantaged backgrounds.

PP.81

#### PREGNANCY AFTER PREVIOUS STILLBIRTH

doi:10.1136/archdischild-2013-303966.356

ME Geisler, K O'Donoghue. Department of Obstetrics and Gynaecology, Cork University Maternity Hospital, University College Cork, Cork, Ireland

One in 200 pregnancies ends in stillbirth. The subsequent pregnancy requires increased surveillance and intervention. We aimed to examine management of this pregnancy with maternal and neonatal outcomes.

A retrospective cohort study of subsequent pregnancies in women who had a stillbirth from 2007 to 2011.

One hundred women were identified in a new pregnancy. Median maternal age was 32 years (range 20–44). Median gestational age at prior stillbirth (infant > 500 g) was 34 weeks (range 22 + 6-41 + 4). 25% of the stillbirths were classified as unexplained and 23% were due to a congenital abnormality. Nineteen women (19/100; 19%) had a first trimester miscarriage. Seven women were diagnosed with gestational diabetes (7/81; 9%) and six developed gestational hypertension (6/81; 7%). Median number of antenatal clinic attendances was ten (range 3–21) and median number of ultrasound examinations was six (range 1–22). One woman experienced a stillbirth at

26 weeks due to recurrent non-immune hydrops, two had a preterm placental abruption, and three developed early-onset fetal growth restriction. Eight women (8/81; 10%) delivered preterm (28–36 weeks). The remainder had a term delivery (37 + 0–40 + 5 weeks). Of these, 11 (11/73; 15%) had an elective caesarean section (CS), and 41 (41/73; 56%) underwent induction of labour, with 81% delivering vaginally. Eleven infants were admitted to the neonatal intensive care unit, but there were no significant morbidities.

Pregnancy after stillbirth results in increased medical intervention and a demand on hospital resources. Both can be justified but are of unproven medical benefit. Here, the majority of women delivered a liveborn infant after an uncomplicated pregnancy.

PP.82

## DOES USE OF ENDO-ANAL ULTRASOUND EFFECT THE MANAGEMENT OF WOMEN WHO HAVE SUSTAINED A 3A TEAR?

doi:10.1136/archdischild-2013-303966.357

<sup>1</sup>S Harrison, <sup>2</sup>D Farrar, <sup>1</sup>K Wilkinson, <sup>1</sup>C Ramage. <sup>1</sup>Bradford Women's and Newborn Unit, Bradford, UK; <sup>2</sup>Bradford Institute for Health Research, Bradford, UK

**Introduction** Third degree tears complicate 1.7 to 18% of vaginal births. Although many women are asymptomatic by twelve month follow-up, there is concern regarding management of future pregnancies, particularly mode of birth. It has been suggested that lesions identified by endo-anal ultrasound (EAUS) and the presence of symptoms can be used to inform decision making about mode of birth in subsequent pregnancies. We aimed to ascertain the incidence of 3A tears, the proportion with symptoms and/or observable sphincter defects using EAUS and mode of birth in subsequent pregnancies. **Method** A Retrospective three year analysis was undertaken on all third/fourth degree tears between 2009 and 2011.

**Results** 361 cases (2.2% of vaginal births) of third/fourth degree were identified, 182 were 3A tears. Information was available for 96/182 women at twelve week postnatal follow-up, overall 78/96 (81%) had EAUS and 68/96 (71%) were asymptomatic.

Of the women who had EAUS, 56/68 (82%) were asymptomatic and 22/28 (79%) were symptomatic, 49/56 (88%) and 19/22 (86%) respectively had no observable defect.

17/96 women with 3A tears went on to have subsequent pregnancies. 15/17 (88%) delivered vaginally. All women with EAUS identified sphincter defects delivered vaginally. 66% of symptomatic women delivered vaginally.

**Conclusion** Our third degree tear rate is within expected limits. Flatal/faecal incontinence is a poor indicator for the presence of a significant sphincter defect on EAUS. Neither symptoms nor detection of sphincter defect appears to influence subsequent management or mode of birth, therefore the use of this invasive test is of questionable clinical benefit.

PP.83

# CAN WE PREDICT POOR PREGNANCY OUTCOMES IN WOMEN PRESENTING WITH REDUCED FETAL MOVEMENTS?

doi:10.1136/archdischild-2013-303966.358

K Skorupskaite, C Love. New Royal Infirmary of Edinburgh, Edinburgh, UK

**Objectives** Reduced fetal movements (RFM) are associated with adverse pregnancy outcomes, including intrauterine growth restriction (IUGR) and stillbirth. The aim was to review risk factors which could predict poor perinatal outcomes in women presenting with RFM.

**Methods** A retrospective patient record review was performed of women presenting to a Scottish tertiary centre with RFM during November 2011.

**Results** 118 women were assessed for RFM. The study population had the majority of risk factors known to be associated with

IUGR/stillbirth. Women with RFM and risk factors for IUGR/stillbirth had statistically significant more pre-term deliveries and more babies born with low birth weight compared to women with no risk factors (Table 1).

Abstract PP.83 Table 1 Pregnancy outcomes compared between women with/without risk factors for IUGR/stillbirth.

Pregnancy outcomes (%)	With risk factors for IUGR/stillbirth n = 42	With no risk factors for IUGR/ stillbirth n = 76
Livebirth- term	85.7*	98.7*
Livebirth- preterm	11.9*	0*
Stillbirth	1.24	1.3
Birth weight ≥ 2500 g	76.2*	98.7*
Birth weight 1500-2499 g	19*	1.3*
Birth weight ≤ 1499 g	2.4	0

<sup>\*</sup>p < 0.05

Although women with recurrence of RFM had more pre-term and stillbirth deliveries and babies with low birth weight compared to women presenting once with RFM, the results failed to show statistical significance. There was no difference in pregnancy outcomes between women with reassuring CTG and ongoing perception of RFM compared with those women with reassuring CTG and perceived fetal activity during the assessment (Table 1).

**Conclusion** Risk factors for IUGR/stillbirth are significant determinants of poor pregnancy outcomes in women presenting with RFM.

PP.84

### THE IMPACT OF MATERNAL AGE AND CHORIONICITY ON OBSTETRIC OUTCOME IN TWIN PREGNANCY

doi:10.1136/archdischild-2013-303966.359

<sup>1</sup>AM O' Mahoney, <sup>2</sup><u>S Meaney</u>, <sup>3</sup>K O' Donoghue. <sup>1</sup>School of Medicine, University College Cork, Ireland; <sup>2</sup>National Perinatal Epidemiology Centre, University College Cork, Ireland; <sup>3</sup>Dept. of Obstetrics and Gynaecology, University College Cork, Ireland

**Introduction** The number of twins born in Ireland has increased from 11.8 sets per 1,000 live births in 1988 to 17.9 in 2011. This study aims to investigate the impact of advanced maternal age and chorionicity on obstetric outcome in twin pregnancies.

**Methods** A retrospective cohort study of all twin pregnancies delivered from 2009 to 2011 in a large, tertiary hospital (~8,000 deliveries per annum) in the Republic of Ireland was conducted. Birth registers and clinic records were reviewed to examine obstetric outcomes.

**Results** Of the 523 twin pregnancies included in the study 9.6% (n = 50) of mothers were ≥40 years and 47.5% (n = 247) were nulliparous. Advanced maternal age, mother aged ≥40 years, was associated with increased ART (52% vs. 25.2%; p < 0.001) and increased caesarean delivery (78.0% vs. 60.9%; p < 0.001). Differences between the age groups were noted for GDM (9.8% vs. 3.1%; p = 0.007) and PET/PIH (30.8% vs. 13.8%; p < 0.001). 16.3% (n = 87) of twins were monochorionic who had a higher incidence of PTD (65.1% V 47.9%, p = <0.001) and iatrogenic reasons for PTD (69.4% V 52.4%, p = 0.006) than dichorionic twins.

**Conclusion** As a greater number of women are delaying childbearing, and with advances in ART, there are considerable more first time births, including sets of twins, to older women. The findings of this study indicate that advanced maternal age and nulliparity were associated with adverse obstetric outcome in twin pregnancies.

PP.85

# EVALUATION OF THE EARLY PREGNANCY CLINIC – INCLUDING PATIENT AND STAFF PERSPECTIVES ON THE QUALITY OF SERVICE PROVISION

doi:10.1136/archdischild-2013-303966.360

CM Coakley, K O'Donoghue. Department of Obstetrics and Gynaecology, Cork University Maternity Hospital, University College Cork, Cork, Ireland

**Objectives** Early pregnancy loss occurs in 15–20% of clinically-confirmed pregnancies. A dedicated early pregnancy clinic (EPC) with provision of diagnostic services such as transvaginal ultrasonography and on-site laboratory investigations contributes to a reduction of repeated assessments for ectopic pregnancy and miscarriage, and is a necessary facility in every maternity unit. Our objectives were to (i) examine clinical records for EPC attendances, (ii) obtain staff and patient feedback to identify areas for improvement and (iii) review EPC incident reports and complaint forms.

**Study design** A retrospective audit was performed on EPC attendances during 2011 using clinic databases; subsequently categorised according to referral sources, indications, new cases, diagnosis and management. Incident and complaint forms were analysed for recurrent themes. Staff and patient satisfaction questionnaires were distributed obtaining a random sample of 70 patients and all 24 staff.

**Results** There were 5,233 attendances during 2011, with GPs the main source of referrals. Emergency room referrals contributed the highest workload for repeat scans and blood tests. While 95% of staff expressed job satisfaction, 83% reported encountering stress attributed to individual workload and co-worker conflict, while junior medical staff were concerned about lack of training. Overall, 95% of patients were satisfied with staff and clinic organisation, with many instead highlighting concerns with the physical space and ability to overhear confidential medical information. All 6 patient complaints related to communication issues.

**Conclusion** High levels of job satisfaction and good teamwork were identified and we received largely positive feedback. Areas of improvement include staff workload and training.

PP.86

#### OUTCOME OF PREGNANCIES WITH UTERINE LEIOMYOMA: A POPULATION BASED RETROSPECTIVE STUDY

doi:10.1136/archdischild-2013-303966.361

D Mitra, S Bhatti, J Iskaros. University College London Hospital (UCLH), London, UK

Uterine leiomyoma (fibroids), which are often found in childbearing age, can lead to complications in pregnancy and hence are considered to be of high risk.

**Aims and Objectives** To observe the effects of fibroids in pregnancy and look at associated maternal and fetal complications.

**Methods** A population-based retrospective study was conducted in a central London tertiary hospital. Women were identified from first Trimester Ultrasound scans (done between January and December 2011) database using search word 'Fibroids' and their pregnancy outcome noted from the local obstetric electronic system.

**Results** 201 women were identified, of which 42 did not deliver at our hospital, making final sample size 159. We looked into the incidence of preterm birth (PTB), low birth weight (LBW) babies (<2500 gm), operative delivery (abdominal and vaginal) and the occurrence of Postpartum Haemorrhage (PPH).

Among the 159 women, 13 (8.17%) delivered preterm (<37 weeks), while 4 (2.53%) had miscarriages. The occurrence of LBW was 16 (10.06%). Spontaneous vaginal delivery (SVD) occurred in 53 (33.33%) cases, instrumental vaginal delivery (forceps and ventouse) in 32 (20.12%) cases, and Caesarean section (CS) was performed in 70 cases (44.02%). The primary indications for CS included failure to progress in labour 11 (15.71%), fetal distress 15 (21.43%), previous Caesarean section 15 (21.43%), and malpresentation 12 (17.14%). Minor and major PPH were observed in 41 (25.78%) and 6 (3.77%) cases, respectively.

**Conclusion** We found pregnancies with fibroids to be statistically correlated with increased Caesarean section and PPH. These results highlight the necessity for good antenatal, intrapartum, and postpartum care for optimum outcome.