QUALITY IMPROVEMENT COLLABORATIVE PROJECT PROPOSAL
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Project Aim:
1. To reduce the number of unexpected neonatal collapse on Delivery Suite and postnatal wards from five hours to five days post delivery on term babies.

2. Background
The project was started following a series of unexpected admissions of babies >37 weeks gestation to NICU which resulted in 2 neonatal deaths and 6 babies needing level 3 care. Following a multi-professional review there were some care and management problems identified relating to risk assessment, observations and appropriate escalation. In all except 1 case there was an absence of care plan. This led to the introduction of ‘Neonatal Early Warning Score charts’. This project will focus on monitoring the appropriate use of these NEWS charts to see whether midwives are able to recognize the deteriorating neonate and escalate appropriately to prevent unexpected collapse and admission to NICU.

3. Project scope: The project will cover all 3 sites and include the postnatal wards. Babies included in the project are those born at term (>37weeks) and appearing well at birth with no known complications.

Scope: >37 /40 weeks gestation with one or more Identified risk factors.
- Babies with Meconium stained liquor at delivery.
- Babies whose mothers have (Prolonged Rupture of Membranes) PROM
- Babies whose mothers have had risk factors for (Group B Strep) GBS
- Babies who are small for gestational age (SGA) and Intrauterine Growth Retardation (IUGR)
- Babies who are born to gestational diabetic mother

4. Definition
An infant who suffers a “sudden unexpected collapse in the post natal period includes term infant who is:
- Well at birth with normal Apgars ≥ 8 at 5 minutes and deemed well enough to have routine postnatal care and,
- Collapses unexpectedly (i.e) discovered in a state of cardio-respiratory extremes such that resuscitation with Intermittent Positive Pressure Ventilation (IPPV) is required and,
- Collapses within the first 7days of life, and
- Who either dies or goes to require intensive care in NICU.

5. Why is the project important?
Sudden and unexpected postnatal collapse (SUPC) of a healthy newborn infant is a very rare event, however, when it does occur, it carries a high risk of mortality and neurodisability in survivors. Estimated incidence of (SUPC) of a presumably healthy neonate after birth differs widely. British Association of Perinatal medicine (2011) reports an incidence of 0.03-0.08/1000 live births with an incidence of 1:20,000 in the first 12 hours within the UK. Herlenius & Kuhn (2013) in their study give an estimated incidence of 0.026 – 1.33/1000 births. They state that this variation is due to the fact that definitions, inclusion and exclusion criteria vary substantially between reports. A study conducted through the British Paediatric Surveillance Unit in 2009 estimated the UK incidence of SUPC in the first 12 hours as 0.05/1000 live births of whom 27% died (Becher, Shetty & Andrew 2011).

The estimated incidence at Barts Health based on data in 2013 was 0.71 which is far above the UK incidence but within the incidence given by Herlenius & Kuhn. This highlights the importance of the need for us to investigate the occurrence of SUPC to identify ways that this can be reduced and minimized. Investigating why they have occurred will enable the project to:
- Establish the most likely cause
- Identify the correct use of the NEWS Chart
- Identify Escalation policies
- Clarify care plans and ongoing management

6. Anticipated project benefits (anticipated cost benefit/ cost avoidance)
- Reduction in neonatal collapse of the previously well baby and the need for ventilation (cost of ventilating a baby)
- Reduction in unexpected NICU admissions
- Reduction in harm caused to baby and therefore possible litigation and payout
• Better outcomes for baby and family

Positive birthing experience for parents (providing emergency care in the presence of parents can be quite traumatic affecting their birthing experience)

8. Six PDSA Cycles developed.

9. Pilot study

10. Outcome From the 4 weeks analysis of the use of Mews results indicate that Midwives initiate the use of MEWS all neonates that fall within the demographics category 2 of the sample population. In all weeks but week 2 at least 80% of observations are done by Midwives in a timely manner. Drs Review and escalation also appears timely; however there is still variation between 40-60% documentation on babies’ notes and response time to escalation (20%). Results in week 2 were affected by the transition of documentation (CRS System).

WHY DO WE VACCINATE IN PREGNANCY?

Helen Campbell, Senior Clinical Scientist, PHE Immunisation Team
Additional Authors: Joanne Yarwood; Gayatri Amirthalingam; Angela Edwards; David Green; Matthew Olley; Claire Cameron; Laura Craig

Introduction:
Vaccination in pregnancy can prevent diseases with associated high morbidity and mortality in pregnant women, their unborn and newly born infants. The UK is a world leader in this area but more women and their babies should be protected with the flu and whooping cough vaccines that are routinely offered in pregnancy.

Aims:
This session aims to provide clear rationale for vaccinating pregnant women against flu and whooping cough and feedback what has been learnt about the uptake, safety and effectiveness of these programmes. Views on vaccination in pregnancy from national attitudinal surveys of parents will also be presented.

Design:
Public Health England’s (PHE) Immunisation Team routinely collects national information on vaccine uptake and on cases of vaccine preventable diseases, including flu and whooping cough. Each case is followed up for more details.

In 2015 PHE reinstated annual surveys that track the attitudes of parents of young children towards vaccine preventable diseases, vaccines and their experiences of the service. Questions were included on vaccination in pregnancy for the first time.

Results and conclusions:
Good evidence is available to demonstrate both effectiveness and safety for flu and pertussis vaccines in pregnancy and these vaccination programmes have averted deaths in pregnant women and young babies respectively. Uptake of 50-60% uptake has consistently been achieved for the whooping cough vaccination in pregnancy programme whilst around 44% of pregnant women are vaccinated against flu. Women or their partners were highly likely to have heard of these vaccination programmes with 68% reporting that they had received at least one vaccine in pregnancy. Of those who did not receive each vaccine, however, approximately a quarter did not feel there was a need to be protected against that disease. Advice from a confident, well informed health professional is of key importance in supporting pregnant women.

POST DELIVERY DEBRIEFING

Maureen McSherry, Consultant Midwife, NHS Lanarkshire

Project Charter Improvement Aims

95% of women will say staff took account of their personal needs and preferences during labour and birth by December 2015

95% of women will say they were given understandable information from their midwife present at their delivery with regards to their labour and birth experience by December 2015

Wishaw Maternity Unit staff is adopting different approaches in the way they provide information and how they support expectant mothers during labour and after their baby is born.
The post delivery debriefing project was introduced in January 2015 as a direct result of feedback from women who had accessed our services. They told us that they wanted understandable information from their delivering midwife about their birth experience. The project will be continually evaluated until December 2015.
The project aims to provide all women with understandable information:
· About their birth experience
· The method used to deliver their baby

Feelings and emotions associated with their delivery
The main change for staff working with women is using ‘teach back’ to confirm understanding of what has happened and what is planned; particularly in the immediate postnatal period. “Teach-back” is a method that healthcare providers can use to check understanding by asking a patient or family member to explain in their own words what they need to know or do.
Staff are encouraged to document the woman’s own words into the hand held record which every woman keeps and is used until approximately 14 days following delivery.
We hope that this different approach of post delivery debriefing will help women have a clear understanding of what happened during their birth experience and alleviate their fears and anxieties sooner, rather than them continuing until a future pregnancy.

OLIVE OIL, SUNFLOWER OIL OR NO OIL FOR BABY DRY SKIN OR BABY MASSAGE? NEW EVIDENCE FROM THE OBSERVE STUDY

Alison Cooke, Midwife/NIHR Doctoral Research Fellow, The University of Manchester
Additional authors: Michael J Cork, Suresh Victor, Malcolm Campbell, Simon Danby, John Chittock and Tina Lavender

Background: Topical oils used on baby skin may affect skin barrier function and potentially contribute to development of childhood atopic eczema. UK midwives, health visitors and other professionals routinely recommend olive oil and sunflower oil to new parents to use on their newborn’s skin. A pilot, assessor-blinded, randomised controlled trial was conducted to assess the feasibility of a definitive trial to investigate the impact of topical oils for newborn term babies. Aims included providing proof of concept that topical oils have some effect on skin barrier function, and data to inform optimal trial design.

Methods: 115 healthy, full-term babies aged <72 hours were randomly assigned to application of topical olive oil, topical sunflower oil or no oil, twice daily for 4 weeks, stratified by family history of atopic eczema. The spectral profile of lipid lamellae, trans-epidermal water loss (TEWL), stratum corneum hydration, and skin surface pH were measured on the thigh, forearm and abdomen. Clinical observations were recorded within 72 hours, and at 4 weeks post-birth. Mothers recorded skincare practices and medical treatments weekly.

Results: Recruitment was challenging (recruitment rate 11.1%; completion rate 80%). Protocol compliance was reasonable (79%-100%). At 4 weeks there was significantly less improvement in the lipid lamellae structure in both oil groups compared to the no oil group, implying that the use of topical oils impedes the development of the lipid lamellae structures of the skin barrier from birth. There were no significant differences in TEWL, skin surface pH or erythema/skin scores across groups. Both oil groups had significantly improved hydration.

Conclusions: This pilot study provided novel baseline data and important information on trial parameters/processes to guide future study design. The study was not powered to detect clinical significance, but until further research is conducted caution should be exercised when recommending oils for newborn babies’ skin.

PUTTING COMPASSION, CARE AND KINDNESS INTO PRACTICE BY DEVELOPING THE ROLE OF THE BEREAVEMENT SPECIALIST MIDWIFE

Emma Lane & Victoria Holmes, Specialist Bereavement Midwives, St Marys Hospital, Manchester

Having a baby should be an exciting and wonderful chapter in our lives, with dreams and expectations for the future. Sadly for many parents in the U.K they will experience the tragic loss of their baby, leaving them devastated, vulnerable and confused. As two midwives working on the delivery unit we recognised the need for a Bereavement Specialist Midwife to support families through their grieving and this life changing experience.

In 2013 we started the Bereavement service with the aim of supporting parents with kindness and continuity to develop a gold standard of bereavement care in our Trust. We shared the drive and vision to transform Bereavement care at our busy hospital and quickly developed and led a service to be proud of.

Parent’s views and opinions shaped our service in the initial stages by engaging with bereaved families at our focus groups and coffee mornings. We continue to listen to parent’s feedback and with the addition of the bereavement service questionnaire we can quality assure the service we provide.

Our role is vast, too vast to express our work here but underpinning all of the care we provide to bereaved parents is our vision to show compassion and respect for their loss in a kind and caring environment. Our support begins as an inpatient, we continue their care postnatally at home, attend appointments for results and debriefing and we have the privilege to now share the lead on their care in a future pregnancy. The bond and trust parents have with us as the Bereavement Team has shaped into a novel service whereby we provide antenatal care in a pioneering clinic where their journey is understood and respected. We are humbled that parents choose to access antenatal care from our
Bereavement Service but we know it is because of the high standard of compassionate care they receive from our Bereavement Team at the time of their loss.

We have increased awareness of bereavement care by training not only in our trust but to the next generation of compassionate midwives by teaching at the University. We have now taken the model of bereavement care regionally by being authors on the Strategic Clinic Network Integrated Care Pathway. We are passionately providing an excellent quality of care within our Bereavement Service but we endeavour to ensure compassionate bereavement care is accessed for all parents within U.K maternity services.

Format: Presentation of how we developed the service, listening to parents (to include extracts of feedback) and sharing skills of how to provide compassionate bereavement care.

EVALUATING PERINATAL MENTAL HEALTHCARE: EXPLORING CLIENT EXPERIENCE. A QUALITATIVE STUDY
Karen Murray, Midwife and Christine Chester, Child Psychotherapist within Stockport’s Infant Parent Service, Stepping Hill Hospital, Stockport

Specialist services for perinatal mental health care are developing throughout maternity services in Great Britain. Whilst governing bodies have focused on recommendations for clinical care, there has been comparatively little attention on understanding the client experience. This evaluation used a person centred approach to explore client experience of attending a perinatal mental health antenatal clinic in Stockport.

Methods: A focus group piloted ideas for the evaluation, 4 mothers were then interviewed using a semi-structured technique. 2 participants had attended the perinatal mental health antenatal clinic regularly and 2 had attended on a less frequent basis. Data were analysed using thematic analysis. Results and findings: The analysis showed that their experiences of perinatal mental health care varied. Three core categories were identified and termed “Improving mental health”, “Excessive care” and “Vulnerability”. The findings also suggested a number of recommendations for practice which the author has taken forward for development on a local level at the hospital featured in the evaluation. These included the participants’ idea for a marker on maternal notes, the development of a support group, production of appropriate patient information leaflets, and the provision of more flexible options for antenatal care.

Conclusions: Despite the applauded standards of care and support provided at the perinatal mental health antenatal clinic, identification of significant perceived barriers necessitated the recommendation for future development of a community based service model. The need for wider social change was also identified, where collaborative efforts both within and beyond the health care professions require consideration to redefine the ways in which persons’ distress is understood and solutions within perinatal mental healthcare are conceptualized and implemented.

Based on one of the recommendations from the paper - within Stockport’s Infant parent service child psychotherapist Christine Chester has initiated an antenatal group which we would like to focus on at the event; this has offered a therapeutic space for mothers with mental health conditions. The group attendees have enjoyed this time together and have reported significant gain from participating.

CASELOADING FOR ALL RISK WOMEN – BENEFITS AND OUTCOMES
Katie Wainwright, Consultant Midwife and Maureen Collins, Clinical Governance Lead, One to One North West Ltd

Caseloading Midwifery is not a new concept, but alternative providers of midwifery delivering the caseloading concept are. Delivering NHS care to women, without the constraints of the NHS is a liberating and productive environment for midwives to flourish and produce quality outcomes and increase service user satisfaction.

Caseloading midwifery offers women an innovative, flexible high quality standard of care. Care that is tailored to their needs, affording them continuity, an element of care which is crucial in midwifery but not often achieved. Care provided by a know and trusted care giver empowers women to make informed choices about their pregnancy, birth and new family, with a strong support network, receiving guidance and the best evidence based care. This impacts greatly on satisfaction, outcomes, and empowering confident parents.

Building strong relationships, support networks and taking the time with women and families that they need, results in positive outcomes, satisfaction, and wellbeing well beyond the initial postnatal period. Caseloading midwives are in an advantageous position to achieve this by working in a true caseloading model within the NHS, but not constrained by it. Midwives within the NHS traditional system work hard, and care deeply about the women in their care, but with limited resources and being ‘pulled’ into other areas of the service to provide care, outcomes and satisfaction can be affected.

In an age where care is political, resources are stretched, it is imperative models of care such as the caseloading model, which is cost effective and produces excellent outcomes and rates of satisfaction are embraced, explored, and implemented for the women and the babies who access maternity services.
I have recently carried out research into childbirth trauma, as part of an MSc in psychological trauma, the research looked at the knowledge, beliefs and attitudes of health professionals surrounding childbirth trauma. The perinatal mental health team at Wirral University Teaching Hospital have been able to put this knowledge into practice. We have been able to assess and support many pregnant women who have found their previous childbirth experiences traumatic, and put plans in place for them which address the themes of their previous trauma, working closely with consultants, and reinforcing the concept that it’s not the medical version of events that we need to be looking at but the woman’s experience, and the subsequent meanings to them in the context of their lives.

We have referrals from consultants regarding women requesting CS, with no medical reason, we are therefore able to act as an advocate for these women, some are happy to have a vaginal delivery following this, with a plan in place so staff are aware of the themes which have previously traumatized the woman, others we have recommended that they are offered CS, if appropriate, and their psychological needs indicate this.

We have also been able to develop a pathway for postnatal care, in terms of psychological trauma and have introduced the use of simple assessment tools to use for all health professionals, relating to trauma; this is outlined in my recommendations section of the research. So we assess them for trauma, some women do just want to know what happened, which is fine, and we are also able to discuss the meaning of this in greater depth. We have started to offer assessment for postnatal women since March, and have referred those who do fit criteria for PTSD for psychological therapy. This is proving to be a welcome and much needed intervention for this population of women.

To date no research evidence exists highlighting what it means to midwives and student midwives to care for this group of women during antenatal, intrapartum and postnatal care delivery within the UK. This abstract aims to provide a brief outline of the author’s original research (PhD study), highlighting some of the findings.

Interpretative Phenomenological Analysis (IPA) was the methodology chosen. Sixteen midwives were recruited from four Hospital Trusts in England and eight student midwives from a University in England. Data collection was conducted via one to one low-structured interviews and data analysis was performed following the principles of IPA. Rich data emerged from the interviews. The findings demonstrate both the similarities and unique differences between the two groups of participants. Major issues of concern to the midwives and students are centred around communication, problematic care delivery and the negative impact on resources. Interestingly, the students feel better educated in caring for this client group, than midwives. Positively, both groups endeavour not to judge but ‘see beyond obesity’, exhibiting care, compassion and awareness of societal obesity stigmatisation.

Of note was a finding within both groups, that women were unaware of the risks of becoming pregnant with BMI $> 30$ kg/m$^2$. Midwives can find themselves in an invidious situation of communicating the risks to an unsuspecting maternity population. This can lead to unpredictable responses from the women and is not a good start to the commencement of building a relationship with them. This study therefore wishes to raise awareness of the realities from practice of caring for this client group for midwives and student midwives, and to highlight training requirements to assist midwives and students in current practice.

At least 1 in 10 women of all pregnant women suffer with mental health problems such as depression and anxiety$^1$; yet data suggests that disorders in pregnancy may not be diagnosed until the postnatal period, or even at all.$^2$ Although rates do not differ between pregnant and non-pregnant women, it has been suggested that identification and treatment are lower in pregnancy.$^2$ The data also suggests that in a third of cases, ‘postnatal’ depression actually starts during the pregnancy but it is often not recognised or treated at this point.$^3$

Tommy’s wanted to improve parity of esteem between mental and physical health in its pregnancy information service. Following in depth face to face research with 30 families with and without lived experience and 20 health professionals about how to provide information in an informative and accessible way, a suite of resources were produced. Input was gained from experts in midwifery and perinatal mental health as well as families with and without lived experience.

Materials include: a short viral 60 second film highlighting awareness of antenatal depression and the importance of talking to someone; ten filmed case studies including eight from families with varying experiences of antenatal mental health problems and two films from a midwife and a GP; a wellbeing plan to support conversations between midwives, health visitors and women about feelings and support during pregnancy and beyond; a wealth of digital content on
mental health in pregnancy from what are ‘normal’ emotions in pregnancy through to psychosis and the various treatment options available.

The work was launched during the first week of July and to date (7/7/15) has reached over 159K viewers through Facebook, Twitter and Youtube plus more through blogs and media coverage in popular press including Grazia, Closer and RedOnline.

www.tommys.org/mentalhealth

EATING FOR 1, HEALTHY AND ACTIVE FOR 2; COMPACT TRAINING FOR MIDWIVES TO BUILD KNOWLEDGE AND CONFIDENCE IN GIVING NUTRITION, PHYSICAL ACTIVITY AND WEIGHT MANAGEMENT ADVICE DURING PREGNANCY

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Background:
Midwives are ideally placed to explore nutrition, physical activity and weight management concerns however qualitative studies indicate they lack confidence in raising the sensitive issue of weight with pregnant women [2, 3]. Acknowledging this and the reality of finite time and resources, this study aimed to deliver compact training to increase the knowledge and confidence of midwives.

Methods:
A compact training package was developed comprising of evidence based nutrition, physical activity and weight management guidance for pregnancy. Training was promoted via midwifery leads within the Health Board. Questionnaires based on national guidance were used to assess changes in self-reported knowledge and confidence pre and post training. Descriptive statistics were applied.

Results:
43 midwives registered for training, 32 (74%) attended and completed questionnaires. Pre training knowledge and confidence varied between participants but statistically significant improvements in self-reported knowledge and confidence were observed post training. 97% indicated knowledge of pregnancy specific food and nutrition messages as ‘better’ (95% CI 85 to 100), 83% indicated confidence to explain the risks of raised BMI in pregnancy was either ‘much’ or ‘somewhat better’ (95% CI 66 to 93), 89% indicated confidence to discuss eating habits and physical activity was ‘much’ or ‘somewhat better’ (95% CI 73 to 97). Emergent themes highlighted the training was positively received and relevant to midwifery practice.

Discussion:
NHS services must be equipped to support pregnant women with a raised BMI to minimise risks to mum and baby, however scope to reach midwives with training can be limited. This compact training model offers a feasible solution; with potential to improve midwives knowledge and confidence in a way that is consistent with national guidance, and is cost efficient.

Conclusion:
Cascading the training and conducting further studies to elicit longer term impact on midwifery practice and patient outcomes are recommended.

References: