Welcome to our first issue of Midwifery Research Review.

This review is a unique Australian publication providing topical, relevant and accessible information for health professionals with an interest in midwifery. In essence, the review is a summary of what we consider to be some of the most significant new studies in this area. For each paper we have provided commentary on why the findings are important and, where relevant, have suggested how they can potentially affect local practice.

We hope you find our inaugural selection for Midwifery Research Review stimulating reading and we welcome your feedback. Furthermore, if you have discovered or been involved with what you think is significant global research, please let us know and we will consider it for inclusion next time.

Kind Regards,
Dr Kathleen Baird
kathleen.baird@researchreview.com.au

Associate Professor Mary Sidebotham
mary.sidebotham@researchreview.com.au

Hands-poised technique: The future technique for perineal management of second stage of labour? A modified systematic literature review

Authors: Petrocnik P and Marshall JE

Summary/Comment (KB): Some midwives may still be perplexed about the current evidence and best practice concerning the practice of hands-on or hands-poised (HOOP) techniques. Therefore, this modified systematic review of the literature by Petra Petrocnik and Jayne Marshall is both timely and necessary. The authors conducted a modified systematic literature review of both methods of perineal management at birth with a particular interest in intact perineum. The review only included quantitative primary research papers that had been conducted after the original HOOP trial. All studies were assessed using the Critical Appraisal Skills Framework (CASP). In total, five studies were included in the review. All studies used differing variables; therefore, comparisons must be viewed with caution. One study indicated that there was no difference between the hands-on and hands-poised techniques, which is consistent with the findings from the HOOP study. In relation to perineal trauma, two studies did not find any differences between the two methods. Two studies which used a modified Ritgen’s manoeuvre (hands-on technique) found maternal postpartum perineal pain to be significantly higher, however, such findings are in contrast to the findings from the HOOP trial, where the hands-on technique was associated with less perineal pain. In conclusion, based on the evidence utilised in this review, the evidence around hands-on and hands-poised techniques continues to be limited, with the authors themselves concluding that the modified systematic review did not provide any definite answers and that further research is needed.

Reference: Midwifery 2015;31(2):274-9

Abstract
Exploring midwifery students’ views and experiences of caseload midwifery: A cross-sectional survey conducted in Victoria, Australia

Authors: Dawson K et al.

Summary: This cross-sectional survey examined 129 Australian midwifery students’ views and experiences of models of maternity care that promote continuity of care with a known midwife (caseload midwifery) and their post-graduation intentions to work in a caseload model. Among all the midwifery course pathways (Post Graduate Diploma, Bachelor of Midwifery, Bachelor of Nursing/Bachelor of Midwifery), students felt that continuity of care is important to women and their experience of continuity models was very positive. Two-thirds (67%) of students felt they wanted to work in a caseload model; 5% were discouraged from future continuity of care work. Most students wanted a consolidation period of midwifery experience before engaging in a caseload model. Perceived barriers were on-call time, work-life balance and family commitments.

Comment (MS): This Australian study examines the career intentions of graduating midwifery students from one state in Australia with a specific focus on addressing their readiness and intent to work in midwifery caseload models. It is very encouraging to see that the vast majority of respondents do see this as their ultimate career destination. Within Australia, midwifery education standards mandate that students be required to complete continuity of care experiences within their program. This exposure to the model and the benefits to be gained in terms of job satisfaction, due largely to the ability to build relationships with women, could explain the reason why the numbers of newly graduated midwives willing to work in these models appears to be greater than those midwives within the current workforce. The paper does highlight the need to provide employment opportunities for those midwives wishing to working in caseload models. The benefits of caseload care to women are well known but further research is needed to promote the positive aspects of working in this way to midwives. This includes the need to provide solutions to ensuring midwives can achieve a work-life balance thus making this way of working sustainable for midwives in the long term.

Reference: Midwifery 2015;31(2):e7-15

Abstract

Women’s use of complementary and alternative medicine in pregnancy: A search for holistic wellbeing

Author: Mitchell M

Summary/Comment (KB): Currently there is limited knowledge and understanding about why women choose to use complementary therapies and alternative medicine (CAM) during pregnancy so this study attempts to fill in some of the gaps in this area. The narrative analysis method is an appropriate method to explore the meaning and significance of CAM to women, thereby validating the women’s experiences.

All fourteen participants in this study engaged in several CAM methods. They had all made the decision to engage with CAM as a way of meeting their own needs. They sought to seek relief from the physical and the emotional impact of pregnancy. The main themes to emerge from the research included searching for their physical and emotional wellbeing, suggesting that the midwife was not meeting those needs. Certainly engaging with CAM seemed to provide the women with an opportunity to address the emotional and physical aspects of pregnancy and their feelings of vulnerability. The findings from the study suggest that the women’s holistic needs were not being met within a fragmented medical model of care. The relationship that the women appeared to have with their therapist could be emulated by midwives practising within a continuity of care model. Indeed there is great latitude for midwives themselves to learn the skills of CAM and provide women with holistic care within a continuity of care model. The author acknowledges the limitations of this study in that all fourteen participants self-selected and all were frequent users of CAM. Nevertheless, the research clearly demonstrates the benefit of women accessing CAM during their pregnancy.


Abstract

Fear of childbirth and risk of cesarean delivery: A cohort study in six European countries

Authors: Ryding EL et al.

Summary: This longitudinal European cohort study of 6422 pregnant women examined the relationship between fear of childbirth (assessed by the Wijma Delivery Expectancy Questionnaire [WDEQ]) and cesarean delivery. In primiparous women (n = 3189), women with a severe fear of childbirth were more likely to have an elective cesarean (OR 1.66; 95% CI 1.05-2.61). Among multiparous women (n = 3233), the risk of elective caesarean was increased in those with a severe fear of childbirth (OR 1.87; 95% CI 1.30-2.69). Lack of positive anticipation, was the dimension most strongly related to elective caesarean (OR 2.02; 95% CI 1.52-2.68). Indications for caesarean were more likely to be “nonmedical” among those with severe fear (16.7% vs 4.6% primiparous; 31.7% vs 17.5 % multiparous).

Comment (MS): There is increasing concern being raised internationally about the upward trend in the caesarean section rate. The reasons for caesarean birth vary greatly but one of the topics thought to contribute to the phenomena is the influence of maternal request for an elective caesarean because of fear of childbirth. This interesting prospective study investigated the prevalence of fear of childbirth across six European countries using a validated tool (WDEQ). A strength of this study is the linkage of WDEQ scores to birth outcome data, which gives strong evidence of the impact of childbirth fear on birth outcomes. It will come as no surprise to readers that fear of childbirth is associated with an increased risk of undergoing caesarean birth (elective and emergency). The results provide us with some useful and interesting information that should enable further translational research to be conducted to address the issue. The reasons why women experience fear of childbirth are complex and multidimensional but it is interesting that this study identifies those women who reported “lack of positive anticipation” within the fear of childbirth scales as being at higher risk of caesarean birth. This is an area where an intervention approach could make a difference. One of the factors known to improve outcomes for women is continuity of care from a known midwife; further research should be carried out to demonstrate whether the midwife could provide an intervention to reduce the prevalence and impact of childbirth fear on mode of birth.


Abstract

Contact Research Review

Email geoff@researchreview.com.au
Phone 1300 132 322

www.researchreview.com.au

Different Measures of Safety

With over 100 years of history, JOHNSON’S® Baby has been a leader in conducting research and sharing scientific findings through professional education, scientific collaborations and publication. In just the last five years, Johnson & Johnson Family of Consumer Companies has the most peer reviewed clinical studies in baby skincare, and has the only global baby toiletries clinical study conducted on newborns.*

* Results based on Published searches (2010 - 2015)
Evaluating the ‘Focus on Normal Birth and Reducing Caesarean Section Rates Rapid Improvement Programme’: A mixed method study in England

Authors: Marshall JL et al.

Summary/Comment (KB): In view of the ever-increasing rising caesarean section rate, with several countries now reporting an overall caesarean section rate of over 30%, this is an important study. The Focus on normal Birth and Reducing Caesarean Section Rates was an initiative developed to promote opportunities for normal birth and reduce caesarean section in England. The study involved twenty maternity units in England. A mixed methods approach was utilised, data collection of mode of birth data, web-based questionnaires and in-depth telephone interviews with key individuals in six of the twenty hospital Trusts.

The intervention programme was facilitated by a team comprising of an obstetrician, two senior midwives and an improvement associate who liaised and worked with maternity services to utilise a toolkit which was used to self-access the process and behaviours, to develop a shared vision with the purpose to promote normal birth and thereby reduce caesarean section rates and encourage multidisciplinary working and provide training in service improvement tools. The toolkit provided a focussed and practical application with a framework in which to focus on areas that required addressing. Evaluation of the intervention programme revealed a reduction in caesarean sections in eight Trusts, all of these Trusts had a high rate at the beginning of the programme. Of the six Trusts invited to participate in the qualitative interviews, with caesarean section rates of 20% to 30%, only one managed to achieve a reduction of 1% in caesarean sections rates. In the main, the programme was well received in most Trusts. The environment and culture of each Trust influenced the activities selected to promote normality of childbirth, thereby reducing the caesarean section rate. However, despite the practical use of the toolkit, it was key characteristics that appeared to lower the caesarean section rates within certain Trusts. This included a shared vision for maintaining normality, a clear communication strategy across all disciplines with a greater degree of multidisciplinary team working. Strong opinion leaders and leadership across all levels of the organisation were also important factors in achieving change within an organisation. In contrast, the Trusts with higher rates of caesarean sections experienced challenges in achieving multidisciplinary working. Clearly Trusts must adopt a shared philosophy and work in collaboration to identify leadership at all levels of the organisation to increase the normal birth rate and reduce caesarean section rates.

Reference: Midwifery 2015;31(2):332-40

Extreme macrosomia – obstetric outcomes and complications in birthweights >5000 g

Authors: Hefir MP et al.

Summary: This retrospective analysis of prospectively gathered data (from 2008 to 2012) examined outcomes in infants with extreme macrosomia (> 5000 g), delivered at a tertiary level institution with standardised management of labour. Among 46,126 deliveries, 182 infants had a birth weight >5000 g (incidence of 0.4%); most (133) mothers were multiparous. Among 49 nulliparous women, 23 (47%) had a vaginal delivery and 26 (53%) a caesarean delivery. Among the multiparas, 97 (86%) had a vaginal delivery, and 16 (14%) a caesarean delivery. Induction was required in 69 of 162 deliveries and was more common in nulliparous than multiparous women (29 of 49 [58%] vs 40 of 133 [30%]; OR 3.4; 95% CI 1.7-7.6; p = 0.005). Forty-nine of 162 (30%) labours were accelerated with oxytocin, with higher oxytocin use rates in nulliparas versus multiparas (27 [55%] vs 22 [16.5%]; OR 6.2; 95% CI 3-12.8, p < 0.0001). Seventeen of 120 (14.2%) vaginally delivered infants had shoulder dystocia; three suffering Erbs palsy, all resolved before 6 months of age. One baby experienced clavicular fracture.

Comment (MS): Risk and risk management is increasingly becoming the language of birth and influencing decision-making and birth outcomes across many countries and environments. There is a global epidemic of obesity, and as maternal weight rises so too does the risk of gestational diabetes and the associated risk of giving birth to a macrosomic infant. This retrospective analysis of birth outcomes for macrosomic infants born in a large tertiary maternity unit in Ireland provides an interesting perspective on this increasingly important issue and provides data that may be helpful to others to guide management. The paper retrospectively examined birth outcome data where women had received standardised care. The prevalence of macrosomia in this study population was relatively low (0.4%) – and within this population the majority of babies were born vaginally. The paper concludes that vaginal birth is possible particularly for nulliparous women (83%). The paper also reports a higher risk of shoulder dystocia and its associated outcomes, but suggests the need to balance this when determining management. The paper reports on the difficulty of accurate detection of macrosomia antenatally and subsequent ability to manage “the risk” before birth. The results of this study provide important outcome data that women who are deemed to be at “high risk” of giving birth to a large baby should have access to when making decisions about mode of birth.


A meta-ethnographic study of health care staff perceptions of the WHO/UNICEF Baby Friendly Health Initiative

Authors: Schmied V et al.

Summary/Comment (KB): The Baby Friendly Health Initiative (BFHI) now takes place in 152 countries, so this meta-ethnographic study is both timely and interesting. It included seven qualitative studies published between 2003 and 2013 and the purpose of the meta-ethnographic study was to identify the facilitators and barriers for implementation of BFHI. The papers were reviewed using the quality appraisal framework developed by Walsh and Downe (2006). It should be noted that six of the seven papers were graded as B as they did not have a transparent methodological framework or determine congruence between the findings and data presented. Nevertheless, the first of three overarching themes ‘BFHI a desirable innovation or an unhelpful imposition’ identified that in the main, participants held mixed views. BFHI was viewed as an intervention that would impact in healthier communities and reduce a reduction in health costs at both a local and global level. However, some participants considered BFHI as another workload commitment, ‘mother unfriendly’ and a costly exercise for little gain. The second theme ‘cultural and organisation constraints and obstacles’ identified the difficulties of successful BFHI implementation, including early discharge, admission to the special care baby unit, inadequate staffing, busy units and ingrained staff practices including an inconsistent approach by professionals. Theme three ‘seeking the positive and being collaborative’ proposed a level of optimism for BFHI implementation when a transformational approach was undertaken with a credible and transformational leader leading the change. The findings from this paper suggest that a successful BFHI implementation requires creative thinking about the translation of global policy, the use of experienced peer supporters to work in collaboration with health professionals and a committed transformational leader to drive the BFHI.


Abstract
A randomized controlled trial of a psycho-education intervention by midwives in reducing childbirth fear in pregnant women

Authors: Tootill J et al.

Summary: This study assessed the use of an antenatal psycho-education intervention by midwives to reduce childbirth fear in 1410 Australian women in the BELIEF trial. Those reporting high fear were randomised to a telephone counseling intervention (n = 170) at 24 and 34 weeks of pregnancy or control (usual care; n = 169). Post-intervention fear of birth scores were significantly different between groups (p < 0.001) as was childbirth self-efficacy (p = 0.002).

Comment (MS): Childbirth fear is attributed to increasing caesarean section rates in developed countries and rising caesarean rates without obstetric indication in healthy women are a major health concern. Childbirth fear has been associated with mental health distress impacting on women’s preparation for birth, their experience of birth, healthy adaptation to parenting, and ability to meet the developmental needs of their children. Testing the effect of brief interventions may assist women avoid unnecessary major surgery, reduce physical and perinatal mental health morbidity, and reduce health care costs. Although some countries such as Sweden offer specialist services for fearful women, psycho-education strategies such as BELIEF could be offered through continuity of care models. Midwives offering continuity of care can effectively assess and meet the emotional and psychological needs of women suffering childbirth fear to improve their pregnancy, birth and parenting experience.


Abstract

Outcome of planned home and hospital births among low-risk women in Iceland in 2005 – 2009: A retrospective cohort study

Authors: Halfdansdottir B et al.

Summary/Comment (KB): This study from Iceland adds to the growing evidence that a planned home birth is as safe as a planned hospital birth. The retrospective cohort study compares the population of 307 planned home births to a matched 1:3 sample of 921 planned hospital births in Iceland in 2005-09 in a low-risk group. Regression analysis was used to adjust for confounding variables. The characteristics of the participants planning a home birth were more likely to be married with a professional occupational status and had previously experienced a home birth. The key findings from the study demonstrated that neither study group had incidences of maternal or neonatal mortality. Women having a planned home birth had a significantly short first stage of labour, but a longer third stage; they were more likely to have a water birth. Babies born at home were less likely to have congenital anomalies. They also had lower rates of instrumental and caesarean section births, and required less oxytocin augmentation or epidural pain relief when compared with the hospital group. The home birth group also experienced lower rates of postpartum haemorrhage, episiotomy, cervical tear and blood transfusions. They did however experience a higher rate of vaginal tears when compared with women in the hospital group. Neonates in both groups had similar rates of APGAR scores of less than 7 at 5-minutes, although the admission rates to NICU and neonatal resuscitation were higher in the home birth group. However, the home birth group had lower rates of morbidity in the first week postpartum. Intervention and adverse outcome rates in both study groups were higher among primigravida as opposed to multigravida women, including the transfer rates from home to hospital. The lower rates of oxytocin use and epidural rates in the home birth group could be related to the philosophies of the midwives who provide care at a home birth and of course such interventions are not available without transfer to the hospital. Whereas the increased intervention rate in the hospitals may be inherent in the existing technocratic culture.

Reference: Birth 2015;42(1);16-26

Abstract

RESEARCH REVIEW screen international peer reviewed journals to identify what really matters and bring it to you in a quick and easy electronic format. We also capture the independent opinion of an Australian specialist in each area for every study featured.

Midwifery Research Review will be a regular publication with papers selected by and commented on by Associate Professor Mary Sidebotham and Dr Kathleen Baird. Live links allow readers to delve deeper into the topic. It is free to receive and the electronic format means you can print, save, and share with ease.

Click here to subscribe or download previous editions of Research Review.