Welcome to the seventh issue of Midwifery Research Review.

We begin this issue with an interesting study looking at a practice-based approach to leadership within NHS maternity services in the UK and discover that person-centred care might be achieved through practice-based leadership rather than adherence to organisational requirements. Next we review a study investigating the prevention of peri-operative maternal and neonatal hypothermia after skin-to-skin contact. Also in this review we look at midwifery sustainability and resilience, induced labour in Sweden 1999-2012, healthcare professional attitudes to illicit substance use in pregnancy, young primiparas’ concerns about labour and birth, birth trauma and post-traumatic stress among Australian midwives, trends in maternal and newborn health in WA, an oral health education program for midwives, and skin-to-skin contact in the operating theatre and recovery.

We hope you enjoy reading this review and look forward to your comments and feedback.

Kind Regards,
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Professionalism and person-centredness: developing a practice-based approach to leadership within NHS maternity services in the UK

Authors: Deery R and Fisher P

Summary: This analysis of data from a critical ethnographic study used information from in-depth interviews with senior midwives and obstetricians to argue for greater appreciation of person-centred, value-led midwifery using an adapted Aristotelian conceptual framework of emergent practice-based leadership derived from MacIntyre A (2007). After Virtue (3rd ed.). London: Duckworth. The study highlighted professional dissonance in repositioned managers expected to be field leaders. The authors contend that person-centred care might be achieved through practice-based leadership rather than adherence to organisational requirements. Such leadership may nurture a professional environment promoting qualities such as agency, commitment and high competence levels among midwives.

Comment (MS): This paper was generated by data obtained from interviews within the UK, but Australian midwives will be able to identify with many of the points and analogies made by the authors. The senior midwives interviewed in the study describe their frustration and the feeling that their midwifery values and professionalism are being eroded by the continual demand from the organisation and “their manager above” to meet targets, monitor guideline adherence and complete the never ending paperwork. They also described the feeling of being disconnected from the midwives on the shop floor, and feeling “stuck in the middle”. Some midwives interviewed described their inability to motivate and promote a change to person-centred practice-focused care, citing the disinclination of midwives to change, and midwives preference for a command and control model that meant they could avoid accountability. The authors describe an emphasis on getting the task completed efficiently and conforming to the rules, which many Australian midwives feel there is increasing pressure to do. The important message in this paper is the need to move beyond the now and create a different tomorrow. The authors discuss the importance of re-engaging with our work as midwives, with each other and with the professional values that are core to the role of the midwife. Creating a supportive collegial community of practice where midwives are supported and encouraged to achieve excellence is the key to improving midwifery wellbeing and inevitably improving outcomes for women and families. I would strongly encourage every midwife to read this paper.

Reference: Health Sociology Review. 2016;13 Apr [Epub ahead of print]

You are invited to a presentation

Jo Kuller is coming back to Australia to Brisbane, Sydney & Melbourne in 2016 to discuss her role in developing the AWHONN (Association of Women’s Health, Obstetrics and Neonatal Nursing) Neonatal Skin Care Evidence-Based Guideline guidelines and the latest evidence based science on skincare in newborns.

Please contact your Johnsons Baby Healthcare Specialist for more details on presentations by US based Clinical Neonatal Nurse Specialist Joanne Kuller
Preventing peri-operative maternal and neonatal hypothermia after skin-to-skin contact

Authors: Vilinsky A et al.

Summary/Comment (KB): This small Irish feasibility study involving 20 pregnant women booked for elective caesarean section aimed to examine whether the active administration of peri-operative warming of IV fluids (38°C) compared to the normal practice of administering room temperature (25°C) IV fluids contributed to the prevention of peri-operative neonatal temperature drop during or after skin-to-skin contact up to 2 hours post-birth. All women were normothermic at the pre-operative stage, however, there were significant differences found in the maternal body temperatures between the two groups as they progressed from theatre to recovery and the postnatal ward. The mother’s temperatures in the usual care group were recorded as generally colder, with four of the ten women in the control group becoming mildly hypothermic; in comparison, only one woman out of the ten developed mild hypothermia in the pre-warmed fluids group. There were no significant differences found between the groups in the rest of their temperature checks. There were no statistically significant differences between the temperatures of the newborns in either groups, however, it is worth noting that during the first episode of skin-to-skin contact in the operating theatre there were clinically significant differences, with three of the 10 babies of the control group becoming mildly hypothermic (36.1°C and 36.2°C) in comparison with only one baby from the intervention group (36.4°C). Whilst this small pilot study demonstrated that the effective use of pre-warmed IV fluids has the potential to reduce the incidence of maternal peri-operative hypothermia, it does not provide sufficient evidence to conclude whether it has an effect on the prevention of neonatal hypothermia.


 Indyed labor in Sweden, 1999-2012: A population-based cohort study

Authors: Ekéus C and Lindgren H

Summary/Comment (KB): The rate of induced labours has steadily increased over the last two decades in most high-income countries and in Sweden the rate has increased by 60% during the last 14 years. Previous studies in this area have shown contradictory results about the impact of induction of labour on caesarean section rates. For example, in some studies, induced labour has been associated with decreased caesarean section rates, whereas in contrast other studies have reported increased or similar risks of caesarean section after induced labour for both medical and non-medical reasons. However, it is worth noting that the differences could be explained by external factors related to the population and methods employed. This large study used data from the Swedish Medical Birth Registry, which covers 99% of all births in Sweden. The modes of birth were categorised into vaginal birth, unplanned caesarean section, and vacuum extraction. The relationship between induced labour and instrumental birth whilst stratifying by parity and medical complications was investigated. Overall, 9.6% of the pregnancies were induced. Amongst primiparous women, the induction rate had increased from 7.7% in 1999 to 12.9% in 2012, and for multiparous women the rate was 7.5% vs 11.8%. Between 37-38 weeks’ gestation, 15.9% of the pregnancies were induced with 8.3% being induced between 39 and 41 weeks’ gestation. Women who were induced were more likely to be older and overweight. Overall, the rates of the caesarean section and vacuum extraction were 10.1% and 14.4%, respectively, among primiparas and 4.8% and 3.0% among multiparas. Compared with spontaneous onset of labour, the proportion of women having a caesarean birth was almost 3-fold higher among primiparas with an induced labour (24.8% vs 8.5%) and 2.5-fold among higher multiparas with induced labour (9.8% vs 4.3%). Additionally, the rates of instrumental births were also significantly higher among women with induced labour compared with those with a spontaneous onset of labour; 16.2% vs 14.2% among primiparas and 4.1% vs 2.9% among multiparas. The odds for vacuum extraction were more than 40% higher among primiparas with an induced labour, regardless of the length of gestation. The findings from this particular study clearly demonstrate that an induced labour does increase the risk of either a caesarean section and/or a vacuum extraction among primiparous women irrespective of the gestational age.

Reference: Birth 2016;43(2):125-33

The attitudes of healthcare professionals towards women using illicit substances in pregnancy: A cross-sectional study

Authors: Forst S et al.

Summary: This cross-sectional quantitative study examined healthcare practitioners and final-year midwifery student attitudes towards illicit drug use by pregnant women using a previously validated attitudinal survey tool. Survey participants (n = 147) had largely positive or neutral attitudes towards pregnant substance-using women. Most participants strongly agreed or agreed that their provision of care can make a significant difference to outcomes. Midwifery students had lower mean attitude scores reflecting more positive attitudes, than other groups.

Comment (MS): This small Australian study examines the attitudes of a range of health professionals to pregnant women who use illicit drugs. This is an important study as research confirms that women who use drugs are likely to avoid services if they believe they will be stigmatised. It was really encouraging to see that the majority of respondents acknowledged the importance of providing supportive non-judgemental care to these women and recognised that pregnancy presented a window of opportunity to work with women to enable them to improve health outcomes. This positive finding could be the result of current service provision, as the authors acknowledge that all women who report drug use are referred to a specialised antenatal service where they receive continuity of care in the antenatal period. The interesting feature of this paper was the inclusion of student midwives in the sample. Though numbers were small it was really encouraging to see the positive supportive attitude of final-year midwifery students. The authors suggest this could be due to the current exposure students had to working with women in a continuity-of-care relationship. By having the opportunity to work closely with women, the students are more likely to develop relationships and individualise care when compared to those participants working in a standard shift-based system. This small but important study presents interesting findings, but is based within one defined area only and did not survey professionals working in the private sector. It is important to recognise that illicit drug use is present across society and all women should be able to access safe supportive non-judgemental care. Other organisations should consider replicating this study in order to identify and subsequently meet any local education needs.

Reference: Women Birth 2016;Feb 4 [Epub ahead of print]

Sustainability and resilience in midwifery: A discussion paper

Authors: Crowther S et al.

Summary: This discussion paper examined the concepts of midwifery workforce sustainability and resilience using published primary midwifery research from the UK and New Zealand. Despite differences in models of midwifery care, resilience and sustainability concepts emerged as overarching themes with comparative evidence of crucial themes in sustaining healthy, resilient midwifery practice. Four themes were identified: self-determination, ability to self-care, cultivation of professional relationships and relationships with women/families, and a passion, joy and love of midwifery.

Comment (MS): There have been many reports over recent years of the risks of emotional burden, stress and vicarious trauma midwives encounter due to the nature of their work with women and families. In addition, in recent years there have been rising reports of work-based bullying, complaints of being overworked and stretched resources. One of the responses to this has been a call for midwives to become more resilient, or a need to look at how practice can become sustainable. This paper explores and discusses the terms resilient and sustainable and their application to the midwifery workforce by comparing and contrasting the findings from two midwifery workforce studies undertaken in New Zealand and the UK. The authors acknowledge the vastly different practice contexts present in the two studies, but identify the common themes that appear to contribute to sustainable resilient practice. Four common themes were evident across both studies including: 1) Midwives expressing a joy and passion for midwifery, and feeling like they had the ability to make a difference to women’s lives, 2) Midwives who were self-determining and had some control over their work and work-life balance were likely to be resilient and sustain practice. Both studies also confirmed the importance of 3) relationships and recognised the need for midwives to be 4) self-caring. This coming together of international midwifery leaders has opened a door that has generated ongoing discussion and debate and created a much needed collaboration around these important issues that will hopefully drive ongoing research and reaffirm the need for implementation studies to be designed around service change.

Reference: Midwifery 2016;40:40-48
**Summary/Comment (KB):** Teenage pregnancy continues to be a public health concern and it has been suggested that poor outcomes for teenage mothers are in fact associated with socioeconomic deprivation, rather than biological or psychological factors. This interesting paper set out to examine the associations between women of young maternal age, their worries about labour and birth, and postnatal maternal outcomes. A secondary analysis of data was conducted relating to 2598 primiparous women’s experience of maternity care in England in 2010. In total, 226 women aged 20 years or younger and 2372 were aged 21 or older at the time of completing the survey. Results from the survey indicated that women under 20 years of age or younger were more likely than those over 21 years of age to be more worried about pain (88% vs 83%) possible interventions (86% vs 84%) and uncertainty (81% vs 76%) associated with labour and birth, although these differences were not statistically significant. About two-thirds of the women were anxious about the length of labour and about having an instrumental birth. It would appear that women aged 20 years or under worried about all aspects of their labour and birth and experiencing a long labour, and an instrumental birth, and not knowing the duration of labour. However, despite having such worries, women aged 20 years or younger were substantially and significantly more likely to experience a normal birth than other women (72% vs 51%). They were also less likely to have an episiotomy and more likely to have an intact perineum. In the postnatal period they also had a shorter stay in the postnatal ward. However, younger women were considerably less likely to report feeling well at 3 months after birth (55.4% vs 65.3%) and more likely to feel stressed (17.0% vs 8.3%). The rates of self-reported depression at 10 days, 1 month and 3 months were about twice that of women aged 21 years and older, demonstrating that women aged 20 years and under were at an increased risk of poorer mental health outcomes. The results from this particular study also support similar findings from other studies in that women having a baby at a young age are significantly more likely than older mothers to be living in disadvantaged areas, to have left full-time education aged 16 years or less and to be single parents. Such findings suggest that it may be more appropriate to actually focus on what emotional and social support young women with multiple disadvantages may require, rather than the main focus being on their young age.

Reference: Birth 2016;43(2):151-8

**Abstract**

Responses to birth trauma and prevalence of posttraumatic stress among Australian midwives

Authors: Leinweber J et al.

Summary: In an aim to assess exposure to different types of birth trauma, perinatal reactions and prevalence of post-traumatic stress among midwives, these researchers enlisted members of the Australian College of Midwives, who completed an online survey. Witness of a traumatic birth event that included interpersonal care-related trauma features was reported by more than two-thirds of midwives (67.2%), who reported that they recalled strong emotions during or shortly after witnessing the event, including feelings of horror (74.9%) and guilt (65.3%) about what happened to the woman. Compared to midwives who witnessed non-interpersonal birth trauma, those who witnessed birth trauma that included care-related features were significantly more likely to recall perinatal distress including guilt (OR 1.90; 95% CI 1.36-2.65) and feelings of horror (OR 3.89; 95% CI 2.71-5.59). Overall, probable post-traumatic stress disorder was identified in 17% of midwives (95% CI 14.2-20.0). Furthermore, the witnessing of abusive care was associated with more severe post-traumatic stress than other types of trauma.

Comment (MS): While there has been an increase in knowledge in recent years on women’s experience of traumatic birth, little is known quantitatively on what the impact of witnessing traumatic birth events has on midwives. This paper adds to the current knowledge base and provides interesting data as to the types of events that cause distress amongst midwives. Sadly, disrespectful abusive care was a commonly reported aspect of care that midwives described as traumatic. Some readers are likely to identify with the reported sense of helplessness, guilt and anger experienced by these participants midwives due to the potential of prevalence of such care within their units. Midwives also described the impact on them of being involved in events leading to death, or injury and it is shocking that disrespectful, abusive care featured in these events too. The authors provide a helpful reminder that organisations have a legal responsibility to provide a safe workplace. They suggest the introduction of Trauma-Informed Care and Practice (TICP) to firstly promote an organisational culture change that increases trauma awareness and systematically targets how to reduce trauma. They also suggest strategies including “trauma stewardship” and “birth trauma literacy” be considered to enable midwives to understand and manage their responses when faced with traumatic birth events. Importantly though we should all accept that the prevalence of abusive non-respectful care should be eradicated from maternity service provision. In order to achieve this goal every health professional should be encouraged and supported to openly challenge and report such practice and be protected when they do.

Reference: Women Birth 2016;Jul 14 [Epub ahead of print]

**Summary/Comment (KB):** It is well documented that poor health outcomes of Aboriginal people can be attributed to a greater number of health risk factors such as smoking, substance abuse and poor diet. Other factors include poverty, high rates of unemployment, poorer housing, low health literacy and limited access to culturally appropriate care. The aim of this particular study was to examine in detail the trends in maternal and newborn health characteristics for all mothers who were recorded as Aboriginal in the Western Australian Midwives’ Notification System from 1986 to 2009. From 1986 to 2009, 37,424 births to Aboriginal mothers had been recorded. Trends in maternal demographic characteristics, pre-existing medical conditions, pregnancy complications and neonatal characteristics were examined. In regard to maternal characteristics the proportion of mothers giving birth aged less than 15 years and 15-19 years decreased (1.1% to 0.4% and 30.1% to 22.1%, respectively). Whilst for mothers aged 25 years and older the rate increased (2.0% to 8.0%). The percentage of mothers who reported smoking during pregnancy did not change significantly but on a positive note there was a decrease in the prevalence of pre-eclampsia, antepartum haemorrhage and urinary tract infections. There was an increase in the prevalence of asthma, diabetes in pregnancy, threatened preterm labour and PROM. There was also an increase in obstetric interventions such as induction of labour and caesarean birth. No significant change was found in the rates of premature births (15.4% to 15.9%). However, there was a slight increase in the prevalence of extremely premature births (1.6% to 2.0%). The rate of LGA also decreased from (9.6% to 7.9%), whereas the rate of high POGD increased from (9.6% to 11.2%) and there were no significant changes in the rates of stillbirth or neonatal death.

The findings from this study showed a significant decrease in teenage pregnancies and pregnancy complications such as pre-eclampsia and antepartum haemorrhage, which is a positive outcome and very likely to lead to significant health improvements. However, conversely there were increases in the rate of asthma, diabetes in pregnancy and PROM with the rate of mothers and smoking in pregnancy remaining high along with the rate of preterm birth, stillbirth and neonatal death. The prevalence of stillbirth was also nearly two times higher in Aboriginal mothers compared to the Western Australian population. Such outcomes would suggest that maternal health initiatives should address as a priority smoking during pregnancy, metabolic disorders such as diabetes in pregnancy and caesarean birth. No significant change was found in the rates of premature births (15.4% to 15.9%). However, there was a slight increase in the prevalence of extremely premature births (1.6% to 2.0%). The rate of LGA also decreased from (9.6% to 7.9%), whereas the rate of high POGD increased from (9.6% to 11.2%) and there were no significant changes in the rates of stillbirth or neonatal death.


**Trends in maternal and newborn health characteristics and obstetric interventions among Aboriginal and Torres Strait Islander mothers in Western Australia from 1986 to 2009**

Authors: Diouf I et al.

**Abstract**

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The Role of Sleep in Happy, Healthy Baby Development

Sleep has important cognitive, social, emotional and behavioral benefits

Sleep plays an important role in baby’s brain maturation, learning and memory,1 helping to retain existing memories and create new ones.2-4 Sleep also helps improve baby’s social skills, including the ability to form relationships and relate to others.5-6 Babies who sleep better have been shown to be more approachable and adaptable.7 Improving babies sleep has been shown to improve maternal mood.

Sleep problems are universal

Sleep problems are common, especially in the first three years.2 Difficulty falling asleep and night wakings were found to be the most common sleep problems during infancy.2

There are a number of treatment strategies for bedtime behavior problems and night wakings in children, including behavioral management techniques, parent education, and medication. Studies have shown that use of behavioral (non-pharmacological) therapies for sleep problems are highly effective during infancy and toddlerhood.8

Routines help babies learn

The developing brain thrives on routines. Studies show daily routines in general lead to predictable and less stressful environments for young children and are related to greater parenting sense of competence and improved daytime behaviors.9,10

Why experts recommend a consistent before bed routine

The sleep-wake cycle is regulated by light and dark and these rhythms take time to develop, resulting in the irregular sleep schedules of newborns. The rhythms begin to develop at about six weeks, and by three to six months most infants have a regular sleep-wake cycle.10

Before bed routines help make sleep times and wake times different and distinguishable, supporting the child’s ability to self-regulate their sleep states.11 A consistent bedtime routine gives baby the opportunity to fall asleep in a relaxed, calm and secure state and get better sleep overall. The more frequent the routine, the better the sleep outcomes.12

Simple strategies to help parents at Bedtime

Recommended routines include a warm bath, a soothing massage, and quiet activities to wind down, such as a lullaby, or reading a book.13 In a clinical study, a 3-step bedtime routine was proven to help baby fall asleep faster and sleep longer.13

A routine that includes multisensory stimulation through a warm bath followed by massage is a simple behavioral intervention for improved quality and quantity of sleep in babies.13 Better sleep outcomes are associated with a consistent before bed routine. The earlier the routine is started the better.13
The evaluation of an oral health education program for midwives in Australia

Authors: George A et al.

Summary: The effectiveness of an online evidence-based midwifery-initiated oral health (MOOH) education program, developed as a professional development activity, was assessed in this study. Evaluation was undertaken via a pre-post test design involving 50 midwives purposively recruited from two states in Australia. The pre-post questionnaires contained 24 knowledge items as well as items exploring confidence in promoting oral health and perceptions of the program. A significant (p < 0.001) improvement of 21.5% in the oral health knowledge of midwives after completion of the program was observed, with the greatest improvement in key areas vital to promoting maternal oral health including the high prevalence of dental problems and its impact on birth and infant outcomes. Confidence in introducing oral health into antenatal care and referring women to dental services was reported in 82% and 77.6% of midwives after undertaking the education program.

Comment (MS): This paper reports on an evaluation of an education program designed to improve midwives knowledge and enable them to promote good oral health to women during pregnancy. It is encouraging to see the growing emphasis on the value the midwife can add to routine antenatal care by taking on this wider health promotion role. Pregnancy is a window of opportunity during which women may make lifestyle changes in order to promote the health and wellbeing of their baby. If the mother knows and understands more about the importance of good oral health, she is likely to share this with her family, leading to an overall improvement. Similarly the improvement in midwives knowledge suggests there could be personal gains for the midwives too as it is clear that there was an improvement in knowledge following the education program. It is therefore important that this gap in knowledge is acknowledged and provision made within midwifery curricula for an improvement in knowledge of new graduates as suggested by the authors. Raising awareness of the need to promote good oral health depends on there being appropriate services available for midwives to refer women to. The authors make an important point that many women may be unable to access services due to cost. Midwives taking on this role may also use their heightened knowledge to lobby for access to dental services for women during pregnancy (similar to the UK where women receive free access and no cost treatment to dental care during pregnancy and for the first year following birth).

Reference: Midwifery 2016;37:41-8

Abstract

This paper reports on an evaluation of an oral health education program for midwives in Australia aimed to provide insight into the facilitators and barriers of providing skin-to-skin contact in the operating theatre. A total of 21 low-risk mothers having a repeat caesarean section, 26 support people, >125 staff members involved in their care and 42 staff members involved in focus groups/interviews were recruited. Feedback from staff suggested that skin-to-skin contact in this environment can be improved by increasing staff and parent knowledge, writing and implementing a policy, improving staff communication, addressing staffing issues, addressing time constraints, adjusting the placement of equipment in the environment and making small changes to the way equipment is utilised.

Comment (KB): The evidence is clear that skin-to-skin contact promotes a longer duration of breastfeeding, helps to keep newborns physiologically stable and potentially improves the maternal and infant early relationship. It is also acknowledged that skin-to-skin contact immediately or soon after a caesarean section promotes breastfeeding and emotional wellbeing and reduces maternal pain and anxiety. Many hospitals have or are attempting to achieve the Baby Friendly Health Initiative, which promotes immediate and uninterrupted skin-to-skin contact following birth for at least one hour. The aim of this Australian study was to determine the facilitators and barriers of providing immediate skin-to-skin contact in the operating theatre. Several organisational and environmental barriers were identified in this particular study, including a lack of education, lack of time, equipment obstacles and staff. Birth in the operating theatre environment definitely appeared to challenge some staff members. Whilst the majority of the staff recognised that the birth experience is an important social and emotional event for the mother and her partner, they also recognised that the operating theatre is a complex environment, which is inherently focused on undertaking surgical procedures safely and efficiently. In the main, the communication about skin-to-skin contact was found to be lacking, for example in standard care, midwives acknowledged that the mother’s preferences for newborn contact were not communicated to other members of staff. Whereas, caseload midwives stated that they would customise the mother’s care because continuity of care allowed for prior knowledge and an acknowledgement of the mother’s wishes. This paper has provided an insight into the organisational and barriers to providing skin-to-skin contact in a medicalised environment where birth and surgery are in opposition of one another. Nevertheless what this paper does show is that differences and barriers can be overcome allowing skin-to-skin contact in the operating theatre.

Reference: Midwifery 2016;29(3):208-13

Abstract

Midwifery Research Review — independent commentary by Associate Professor Mary Sidebotham & Dr Kathleen Baird

Associate Professor Mary Sidebotham is a registered midwife and is currently employed by Griffith University as the Program Director of Primary Maternity Care degree programs. She is a visiting Associate Professor at the Gold Coast University Hospital Queensland and a member of the research ethics committee. Mary is the Midwifery Editor of the Nurse Education in Practice Journal. She contributes to maintaining professional standards through her work as a midwifery educational program assessor for the Australian Midwifery Accreditation Council, an approved panel member for the NMBA and as an assessor for the Queensland Civil and Administrative Tribunal.

Dr Kathleen Baird is a Midwifery Lecturer within the School of Nursing and Midwifery at Griffith University, Queensland, Australia and is the Director of Nursing and Midwifery Education, Women’s and Newborn Services, Gold Coast University Hospital. She is also joint director of the newly formed Centre for Women’s and Newborn Research, Gold Coast University Hospital and Metro's Health Institute Queensland. Kathleen is an educational program assessor for the Australian Midwifery Accreditation Council, and holds an appointment as a Senior Research Fellow with the University of the West of England.

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