

### Making Education Easy

#### Issue 9 – 2015

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Abbreviations used in this issue LMC = Lead Maternity Carer

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Time spent reading this publication has been approved by the Midwifery Council of New Zealand for NZ midwives as elective education.

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# Welcome to the latest issue of Midwifery Research Review.

Highlights include a NZ study of rural midwives' decision-making processes for women in 'slow labour', and a report of our Midwifery First Year of Practice programme and how it supports the retention of new midwives in the maternity workforce. We also present an analysis of the Growing Up in New Zealand longitudinal study that assessed timeliness of LMC engagement, and an initiative to reduce caesarean delivery rates in Canada. We finish with an interesting report of the use of telemedicine by parents after early postnatal discharge.

I hope you enjoy the selected studies and look forward to any feedback you may have.

#### Kind regards, Jackie Gunn

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# Midwives' decision making about transfers for 'slow' labour in rural New Zealand

### Authors: Patterson J et al.

**Summary:** This NZ study examined rural midwives' decision-making processes for women in 'slow labour'. 15 midwives who provided lead maternity care to women in rural areas shared their experiences. They described the 'mind shift' needed when considering the transfer of women in slow labour to secondary care. Their decision making process was influenced by colleague input, rural context and distance from specialist care.

**Comment:** This careful study explores midwives decision-making processes and relates them to decisionmaking theory in the literature. While this is a relevant and very useful study about rural midwives decisionmaking processes about transfer of women with 'slow labour', the findings are also useful for all midwives to use the processes described here to consider their own decision-making processes during for example, 'long labours'. The need to take a 'step back' to a more objective look at the situation or to call in a colleague to provide 'fresh eyes' will not be unfamiliar to many midwives. This is a very accessible article and I encourage midwives to access it and to read it in full as it provides food for reflection on practice for all practitioners.

Reference: Midwifery 2015;31(6):606-12 Abstract

### Independent commentary by Jackie Gunn MA Massey BHSC Ng C.Sturt RGON RM

Jackie is a Senior Lecturer in the Dept of Midwifery, Faculty of Health and Environmental Science at AUT University. She has been involved in leadership of midwifery education at AUT University for more than two decades and has practised midwifery in tertiary and primary maternity units and as an LMC midwife. She is a foundation member of the New Zealand College of Midwives. Jackie has a particular interest in midwifery practices that support physiological pregnancy, childbirth and transition to parenthood processes, midwifery education, and development of midwifery practice.





### Supporting New Zealand graduate midwives to stay in the profession: an evaluation of the Midwifery First Year of Practice programme

Authors: Dixon L et al.

**Summary:** The Midwifery First Year of Practice (MFYP) programme was introduced in NZ in 2007 as a structured programme of support for new graduate midwives for their first year of practice. This study examined the retention rate of new graduates in midwifery practice after their participation in the programme. Data were obtained from the MFYP register in 2007–2010 and cross-referenced with the Midwifery Council of New Zealand's register for 2012. 441 midwives graduated in 2007–2010; 415 of them participated in the MFYP programme. Most were of New Zealand European ethnicity with 10% identifying as Maori. The overall retention rate for new graduate midwives who had participated in the MFYP programme was 86.3% (358 midwives were still practising in 2012).

**Comment:** Nearly all New Zealand midwives will be familiar with the MFYP programme which is designed to support newly qualified midwives transition from student to practicing midwife. Many are involved as mentors to new midwives. The study is included because the programme was developed specifically to support new midwives graduating from the New Zealand Schools of Midwifery during their first year of practice. Attrition of newly qualified midwives from the workforce is an undesirable outcome for new midwives and families as well as for maintenance of the maternity workforce. It is in the national interest that new practitioners remain practising midwifery. The evaluation shows that the programme appears to support the retention of new midwives in the maternity workforce.

Reference: Midwifery 2015;31(6):633-639 Abstract

# Early engagement with a Lead Maternity Carer: results from Growing Up in New Zealand

### Authors: Bartholomew K et al.

**Summary:** This study analysed data from the Growing Up in New Zealand longitudinal study to determine factors associated with timeliness of LMC engagement. The longitudinal study enrolled a diverse sample of pregnant women in 2009–2010. Timely engagement was defined as before 10 weeks' gestation. 6822 women were enrolled in the study and 6661 of them stated they had an LMC. 86–92% of women engaged their LMC in a timely manner. Factors independently associated with delayed engagement were Maori (odds ratio 0.59), Pacific (0.63) or Asian (0.51) ethnicity; first pregnancy (0.71); age <20 years (0.62); socio-economic deprivation (0.69); and LMC type being a hospital midwife (0.47), or a combination of care providers (0.60).

**Comment:** These results from the Growing Up in New Zealand longitudinal study are welcome. In 2014 the New Zealand Perinatal and Maternal Mortality Review Committee reported that "the National Maternity Monitoring Group, had identified timely registration with maternity services as one of their five priority areas". The 2015 report identified that "Barriers to access and/ or engagement with care increase in frequency among women living in increasing levels of socioeconomic deprivation. One in six perinatal related deaths among women residing in the most socioeconomically deprived households might have been avoided by improved access to antenatal care." The Growing Up in New Zealand study included women recruited from three North Island DHB areas including areas with low numbers of midwife LMCs (at the time), and a high proportion of families living in high socioeconomic deprivation. The results shown here are encouraging in that 86–92% of the women in the study *did* engage with an LMC in a timely way. However, the study underscores the need to continue to prioritise reducing barriers to timely (i.e. first trimester) engagement with LMCs at both systems and local levels.

### Reference: Aust NZ J Obstet Gynaecol 2015;55(3):227-232 Abstract



# A cluster-randomized trial to reduce cesarean delivery rates in Quebec

Authors: Chaillet N et al., for the QUARISMA Trial Research Group

**Summary:** This cluster-randomised study investigated the impact of an intervention on caesarean delivery rates. The intervention was carried out over a 1.5-year period at 32 hospitals in Quebec, and involved audits of indications for cesarean delivery, provision of feedback to health professionals, and implementation of best practices. 53,086 women delivered in the year before the intervention and 52,265 women delivered in the year after the intervention. There was a small but significant reduction in the rate of caesarean delivery from the pre-intervention period to the post-intervention period in the intervention group compared with controls. When adjusted for hospital and patient characteristics, the odds ratio for incremental change over time was 0.90 (p=0.04). The caesarean delivery rate was significantly reduced among women with low-risk pregnancies but not among those with high-risk pregnancies.

**Comment:** This very carefully designed and conducted cluster randomised trial shows that a real difference can be made to caesarean section rates using well known quality monitoring methods to create a climate where a real reduction in caesarean section rates can be made. The study used a 1-year pre-intervention period and a 1-year post- intervention period to gather data. The reduction in the caesarean section rate was seen most strongly in the effect of the intervention on the indications for elective repeat caesarean sections and caesarean section undertaken in situations of prolonged labour. The authors report that when the 4 hospitals which did not completely adhere to the trial protocols were excluded from the analysis the intervention effect was more marked than in the 'intention to treat' analysis.

Reference: N Engl J Med 2015;372:1710-1721 Abstract

# Concordance of maternal and paternal decision-making and its effect on choice for vaginal birth after caesarean section

### Authors: Robson S et al.

**Summary:** This study compared the opinions of fathers and mothers about the prospect of vaginal birth after previous caesarean section (VBAC). Couples were recruited from 3 Australian hospitals. Questionnaires were scheduled for 20 weeks' gestation, 32–36 weeks' gestation and 6 weeks postnatal. 75 couples completed the full set of questionnaires. 41% of the women ultimately attempted vaginal delivery, and 59% were delivered by planned caesarean section. When the paternal rating of risk fell between the second and third trimesters, the couple was likely to attempt vaginal birth (p<0.05). Where the maternal rating of importance was 3 or less, 92% had a planned caesarean compared to 63% for the same paternal scores (p=0.02).

**Comment:** A focus continues to be on reducing the caesarean section rates in affluent countries. In NZ, the attempted VBAC rate appears to have not kept pace with the number of women who have had a caesarean section in their first pregnancy. This is an interesting study as it explores area of decision making influences not often addressed. Any study that informs practitioners' understanding is a useful addition to practice knowledge.

Reference: Aust NZ J Obstet Gynaecol 2015;55(3):257-261 Abstract

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**Disclaimer:** This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on its merits. **Research Review publications are intended for New Zealand health professionals.** 

# How do pregnancy and birth experiences influence planned place of birth in future pregnancies?

### Authors: Coxon K et al.

**Summary:** This longitudinal, narrative study explored the influence of previous pregnancy and birth experiences on women's intended place of birth in current and future pregnancies. 41 women in 3 English National Health Service sites were interviewed a total of 122 times. During the postnatal interviews, the women reflected on their recent birth and discussed where they might plan to give birth in a future pregnancy. Their experience of care in their eventual place of birth had more influence on decisions about the next pregnancies usually planned place of birth during pregnancy did. Women with complex pregnancies usually planned hospital (obstetric unit) births. Healthy women with straightforward pregnancies also chose an obstetric unit birth and would often plan the same for the future.

**Comment:** This English research provides some insights into the effect on healthy women's subsequent choices about place of birth after choosing an obstetric unit for their first birth. It would be interesting to know if a similar situation is found in NZ as the majority of NZ women give birth in a secondary or tertiary maternity facility. It is also included because it is a prospective longitudinal narrative study which is not a very common research method.

#### Reference: Birth 2015;42(2):141-148 Abstract

## Women's experiences of fetal movements before the confirmation of fetal death – contractions misinterpreted as fetal movement

### Authors: Linde A et al.

**Summary:** This study described women's experiences of fetal movement before the confirmation of fetal death. Data were collected via an online questionnaire. The statements from mothers of a stillborn at 28–36 weeks' gestation were compared with those of a stillborn at term. In the 2 days before confirmation of fetal death, 49% of participants described decreased and weak movement, 16% described no movement at all, 6% described contractions interpreted as movement, 18% described fetal movement as normal, and 10% described extremely vigorous fetal activity followed by no movement at all. 15% of women with a stillbirth in week 28–36 compared with 5% of women with a stillbirth at term interpreted contractions as fetal movement.

**Comment:** This study reinforces current practice knowledge, but also reminds all of us that women can misinterpret uterine contractions as fetal movements. This knowledge may assist midwives in formulating questions to ask when the woman calls. In the devastating situation that is the loss of a baby, women may blame themselves for 'not knowing'. It may be helpful for them to know that this misinterpretation is not unknown.

Reference: Birth 2015;42(2):189-94 Abstract



For further information, please visit: www.midwife.org.nz

# Weight gain in healthy pregnant women in relation to pre-pregnancy BMI, diet and physical activity

### Authors: Merkx A et al.

Summary: This cross-sectional survey explored gestational weight gain in healthy women. 455 healthy pregnant women of all gestational ages who were receiving antenatal care from an independent midwife in the Netherlands were included. 42% of the women surveyed gained weight within the guidelines, 14% gained weight below the guidelines and 44% gained weight above the guidelines. Weight gain within the guidelines, compared to both above and below the guidelines, was not associated with pre-pregnancy body mass index or diet. Weight gain above the guidelines was associated with a decrease in physical activity (odds ratio 0.54) whereas weight gain below the quidelines was seen more often in women with sleep deprivation (1.20).

**Comment:** This quantitative study from the Netherlands is of interest because it highlights an association between higher weight gain in pregnancy and reduced physical activity during pregnancy. The weight gain guidelines used in the study are the same as those in the current NZ Ministry of Health (NZMOH) Guidance for weight gain in pregnancy. Current approaches to physical activity in pregnancy are to encourage women to at least meet the NZMOH guidelines of 30 minutes of moderate physical activity at least 5 times a week. The 30 minutes can be undertaken in 'snackercise' i.e 10 or 15 minute 'bites'.

Reference: Midwifery 2015;31(7):693-701 Abstract

32nd Conference of the **Infection Prevention** and Control Nurses **College (NZNO)** 



Napier, New Zealand 2-4 September 2015

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### Perineal management techniques among midwives at five hospitals in New South Wales

### Authors: Ampt A et al.

Summary: Midwives are reported to have changed from 'hands on' to 'hands poised or off' approaches to birth at the same time as obstetric anal sphincter injuries (OASIs) are increasing. This cross-sectional survey determined which perineal protection techniques midwives prefer for low-risk non-water births, and whether they change their preference according to the clinical scenario. Midwives in Northern Sydney Local Health District were surveyed over a 2-week period in 2014. 108 midwives participated (76.7% response rate). 63.0% of then preferred a 'hands poised or off' approach for a low-risk birth (current practice was associated with technique taught). For scenarios with increased OASI risk, 83.4% of midwives reported switching to a 'hands on' approach.

**Comment:** This study is a thorough examination of Australian midwives reported practices to protect perinea during uncomplicated non-water births. It documents an apparent change in practice to hands poised or off during these births and demonstrates that midwives change their practice when they perceive that the perineum may need additional support/protection to prevent injury during the birth. This is, of course the purpose of 'hands poised' (ready for action). What isn't discussed is that the change of practice when the situation appears to be/have changed reflects significant assessment expertise on the part of the midwives in the study. In addition, while the authors are very careful in the body of the article not to make an association between the change in practice to hands poised and the observed increase in OASIs, the conclusion in the abstract juxtaposes a sentence that could readily be interpreted as drawing such an association. This is very unfortunate, as the study clearly shows a change in practice to 'hands on' when the clinical situation warrants it. Preventing perineal trauma remains an important goal for all practitioners. The May issue of Midwifery Research Review included commentary on a systematic review and metaanalysis by La Cross et al. that showed a significant association between perineal trauma (episiotomy and third- or fourth-degree perineal laceration) and anal incontinence. Appropriate assessment and response to each clinical situation should ensure appropriate intervention is used when it is required. The midwives surveyed in this study showed that they assess the risk of perineal injury and select their practice to suit the individual clinical situation.

Reference: Aust NZ J Obstet Gynaecol 2015;55(3):251-256 Abstract

## Intervention among new parents followed up by an interview study exploring their experiences of telemedicine after early postnatal discharge

Authors: Danbjørg D et al.

Summary: This study examined the use of telemedicine by parents after early postnatal discharge from hospital. 42 new mothers who were discharged within 24 hours after childbirth were given access to an app (including chat, a knowledgebase and automated messages) for 7 days after discharge. 28 sets of parents agreed to be interviewed about their use of the app. They reported being confident using it, and did not experience any barriers in contacting the nurses. They received timely information and guidance online, and felt that their follow-up support needs were met.

**Comment:** This study is included because the development of such an app is what happens when there is no postnatal midwifery home visiting service provided by the maternity service. It is noted that parents regarded the app as a 'lifeline'. The NZ midwifery postnatal home visiting service includes 'after hours' access to a midwife for emergencies/feeding issues etc. for 4-6 weeks, provides advice, support, direct assessment and monitoring of mother and baby well-being and support for infant feeding. The service is mostly provided by midwives that the women already know. NZ women and their families are well served by the delivery of this service by well-educated midwives. It is very hard to tell if the parents in this study felt the app met their needs because it did, or because it was better than nothing and they had not had the benefit of proper postnatal care as provided in the NZ maternity service.

### Reference: Midwifery 2015;31(6):574-581

Abstract



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