**Making Education Easy** 

Issue 21 - 2020

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#### Abbreviations used in this issue

**AMU** = alongside midwifery unit

**LMC** = lead maternity carer

**MOH** = Ministry of Health

**WHO** = World Health Organization

### **Midwifery** Council of N7

Time spent reading Midwifery Research Reviews has been approved by the Midwifery Council for NZ midwives as Continuing Midwifery Education.

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# Welcome to the latest issue of Midwifery Research Review.

In this issue, we present useful information for counselling women planning future pregnancies after a stillbirth, disappointing results for ursodeoxycholic acid treatment in women with intrahepatic cholestasis of pregnancy (its routine use for this condition should be reconsidered), and an interesting survey of NZ midwives that provides a broad perspective on the transition from being a student to a midwife. A meta-analysis evaluates the effectiveness of aromatherapy during labour, and a local study determines underlying social contributors to inequity in maternal health outcomes and experiences in NZ.

We hope you find the selected papers of interest, and look forward to hearing your comments, feedback and suggestions.

Kind regards,

Nimisha Waller

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#### Association between interpregnancy interval and adverse birth outcomes in women with a previous stillbirth

Authors: Regan A et al.

Summary: This international cohort study investigated the association between interpregnancy interval after stillbirth and birth outcomes in a subsequent pregnancy. 14,452 pregnant women whose most recent pregnancy had ended in stillbirth at ≥22 weeks' gestation were identified from birth records in Finland, Norway, and Western Australia. Median interpregnancy interval after stillbirth was 9 months. Of the 14,452 births, 2% were stillbirths, 18% were preterm births, and 9% were small-for-gestational-age (SGA) births. Compared with an interpregnancy interval of 24-59 months, intervals shorter than 12 months were not associated with an increased likelihood of subsequent stillbirth, preterm birth, or SGA birth.

Comment: According to the MOH (2018), 1 in 200 pregnancies end in a stillbirth i.e. losing a baby after 20 weeks of pregnancy. WHO guidelines suggest that women should wait ≥2 years before contemplating another pregnancy following a live birth and ≥6 months following a miscarriage or termination of pregnancy. Until this study, there had been no quidance for optimal interpregnancy interval following a stillbirth. The findings suggest that for women in developed countries, pregnancy shortly after a stillbirth (≤12 months) did not increase the risk of adverse outcomes (another stillbirth, preterm birth or SGA baby) compared to women who had a longer interpregnancy interval. The editorial by Mark A. Klebanoff, MD, of the Research Institute at Nationwide Children's Hospital in Columbus, Ohio suggests that when counselling women several maternal factors should be taken into consideration. These include current health status, age, the woman's preference regarding child spacing, ultimate family size and emotional readiness for another pregnancy especially following the loss. The countries included in the study have access to universal health care and free antenatal care plus the populations are primarily white, hence the results cannot be generalised. Further research is needed in developing countries with diverse ethnic groups and services that may not be as accessible, and where maintaining optimal nutritional status may be challenging.

Reference: Lancet 2019;393(10180):1527-35

**Abstract** 

#### **Independent commentary by Nimisha Waller** RGON, RM, ADM, Dip. Ed, MM, DHSc

Dr Nimisha Waller is a Senior Lecturer in the Department of Midwifery, Faculty of Health and Environmental Science at AUT University. She has practised midwifery in tertiary units and as an LMC. She has been a supervisor and a member of the competency review

panel for MCNZ, reviewer for NZCOM Midwifery Standards Review, NZCOM educator for the Midwifery First Year Practice (MYFP), an expert advisor and an Academic member/Deputy Chair on the MOH Compliance panel that monitors the Code in New Zealand (Breastfeeding). Nimisha has a particular interest in maternal wellbeing, diabetes and obesity, newborn, postnatal distress, traumatic birth and PTSD. Her doctoral study is titled 'How are post-birth reflective conversations experienced by those involved?'.







Time spent reading this publication has been approved for CNE by The College of Nurses Aotearoa (NZ) for RNs and NPs. For more information on how to claim CNE hours please **CLICK HERE** 



## Ursodeoxycholic acid versus placebo in women with intrahepatic cholestasis of pregnancy (PITCHES)

Authors: Chappell L et al.

**Summary:** Intrahepatic cholestasis of pregnancy (ICP) is associated with increased rates of stillbirth, preterm birth, and neonatal unit admission. This randomised controlled trial investigated whether treatment with ursodeoxycholic acid reduces adverse perinatal outcomes in women with ICP. 605 pregnant women with ICP at 20–40 weeks' gestation were recruited at 33 hospital maternity units in England and Wales and were randomised to ursodeoxycholic acid 500mg twice daily or placebo. Treatment was continued until the infant's birth. The primary composite outcome (perinatal death, preterm delivery, or neonatal unit admission for at least 4h) did not differ significantly between the ursodeoxycholic acid group (23%) and the placebo group (27%). No serious treatment-related adverse events were reported.

**Comment:** Severe itching, in the absence of a rash, and often more noticeable in the hands and feet can be a sign of obstetric cholestasis, or ICP. ICP affects 0.1–2% of pregnant women. Other symptoms may include dark urine, jaundice and pale bowel movements. Some research has shown that babies born of mothers with ICP are more likely to be born premature or even be stillborn. Stillbirth in singleton pregnancy is lowest for women with serum total bile acids <40 μmol/L after 24 weeks' gestation and highest with total bile acids of 100 μmol/L or higher. Increased bile acids are associated with cardiac arrhythmias and placental vessel spasm. The main drug used to treat ICP is ursodeoxycholic acid. Earlier study by the authors suggested that it may protect the unborn baby from poor outcomes, but was not large enough to be certain. This larger trial compared the effects of ursodeoxycholic acid and placebo on the rate of adverse outcomes for the baby. The authors suggest that routine use of ursodeoxycholic acid should be reconsidered as it does not reduce adverse perinatal outcomes in women with ICP. A finding that will be viewed with disappointment due to the high recurrence rate (45–90%) of ICP in subsequent pregnancies.

Reference: Lancet 2019;394(10201):849-60

**Abstract** 

## Outcomes for women with BMI >35kg/m² admitted for labour care to alongside midwifery units in the UK

Authors: Rowe R et al.

Summary: This prospective cohort study evaluated birth outcomes in severely obese women admitted to AMUs in the UK. Data were collected from the UK Midwifery Study System for 1122 severely obese women (body mass index [BMI] >35 kg/m²) and 1949 comparison women (BMI ≤35 kg/m²). The composite primary outcome was 1 or more of: augmentation, instrumental birth, caesarean section, maternal blood transfusion, 3rd/4th degree tear, or maternal admission to higher level care. Severely obese multiparous women were no more likely than comparison women to experience the composite primary outcome, but nulliparous women had a slightly increased risk (37.6% vs 34.8%). 67.9% of nulliparous and 96.3% of multiparous severely obese women had a straightforward vaginal birth. Severely obese women were more likely to have an intrapartum caesarean section than comparison women (4.7% vs 4.1%).

**Comment:** It will be no surprise to anyone of the increase in the prevalence of obesity in pregnant women globally, increasing the clinical and economic burden on health services. In NZ, 26.5% of women giving birth in 2017 were identified as obese at first registration with their primary care provider, and 25% of women were identified as obese at first registration in 14 of the 20 District Health Board regions (MOH, Report on Maternity, 2019). Providing best care and improving outcomes is important for women with BMI >35 kg/m². It can help to enhance midwife-woman partnership and not pathologise the whole childbirth continuum. In this UK study, women with BMI 35.1–40 kg/m² were selected to birth in AMUs to ensure best care and improve outcomes. They found that there was no evidence of increased risk associated with planning a birth in an AMU for carefully selected multiparous women with BMI 35.1–40 kg/m², and the rates of vaginal birth were high. However, women having their first baby (nulliparous) may have an increased risk of having an urgent caesarean section or a severe postpartum haemorrhage compared with other women admitted to AMUs. The absolute risks of these adverse outcomes can also be used to inform women's decision-making in consultation with their care providers. As suggested by the authors the results should not be considered applicable to women with BMI >40 kg/m².

Reference: PLoS One 2018;13(12):e0208041

**Abstract** 

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## Becoming a midwife: a survey study of midwifery alumni

Authors: Patterson J et al.

**Summary:** This NZ survey evaluated how well midwives feel their midwifery programme prepared them for beginning midwifery practice. An online survey was completed by 42 alumni of the Bachelor of Midwifery programme who graduated in 2011–2014. The respondents viewed optimal midwifery education as a combination of: (1) gaining the necessary knowledge and practical skills; (2) self-management and business skills; (3) gaining confidence; and (4) having appropriate support.

**Comment:** Previous studies have highlighted practice placements, confidence acquisition, support of midwives, and a blended curriculum delivery model as important aspects in becoming a midwife. This study shows that for recently graduated midwives, management skills, building confidence, and receiving continuous support are also essential when making the transition to midwifery practice. The authors propose a model for undergraduate midwifery education that has been developed from the feedback collected from alumni. The model suggests that the alumni are continuously in a state of becoming a midwife just as the midwives are continuously working towards being ready for whatever they may encounter in midwifery practice. The online survey provided a broad perspective rather than depth on alumni experiences around transitioning from a student to a midwife. The alumni were both LMC and Core midwives who worked in urban or rural environments covering the broad range of birthing environments from home birth to tertiary facilities. The authors suggest that the model may be useful not only for planning/adjusting midwifery curricula, but also for planning curricula educating other health professionals. The new theme of management skills reflects the unique way in which midwives practice in NZ. Worth reading if you have not read it yet!

Reference: Women Birth 2019;32(3):e399-408

**Abstract** 

#### Labour pain control by aromatherapy

Authors: Chen S et al.

**Summary:** This meta-analysis of randomised controlled trials evaluated the effects of aromatherapy on labour pain and duration. A search of PubMed, EMBASE, Cochrane Central Register of Controlled Trials, Google Scholar and Clinicaltrials.gov identified 17 randomised controlled trials that were suitable for inclusion. Meta-analysis of the data showed that aromatherapy reduced labour pain in the transition phase, and the duration of active phase and third stage labour. It had no influence on emergency caesarean section rates, membrane rupture, or spontaneous labour onset.

**Comment:** The information about the effectiveness of aromatherapy to reduce labour pain and duration has been conflicting and Cochrane in 2011 recommended further research as there was a lack of studies that evaluated the role of aromatherapy for pain management in labour, Labour pain can be intense with anxiety and fear making it worse. Women often want to consider a non-pharmacological approach to cope with pain before consenting to pharmacological approaches. Essential oils have been found to be noninvasive, affordable and have not had any documented cases of harm, though they may not be appropriate for women with allergies to specific plants or breathing problems. In this study the main oil used was lavender, though other oils have been used in other studies. The meta-analysis suggests a benefit of aromatherapy during transitional phase of labour as well as during second and third stage of labour but it appears not to have any effect in reducing latent or first stage of labour. However, the variation in study outcomes does not give the authors confidence to strongly recommend the findings, although the meta-analysis did include randomised controlled trials. It is worth reading as it provides detailed information about each trial used in the meta-analysis.

Reference: Women Birth 2019;32(4):327-35

**Abstract** 

# Brief Report. A qualitative study of maternal mental health services in New Zealand: perspectives of Māori and Pacific mothers and midwives

Authors: Holden G et al.

**Summary:** This study explored current maternal mental health (MMH) screening practices and support in NZ, from the perspective of Māori and Pacific mothers and midwives. Interviews and focus groups with Māori and Pacific maternity carers and mothers found that MMH screening in NZ is *ad hoc*, with multilevel barriers hampering screening and access to support.

Comment: The Perinatal Maternal Mortality Review Committee (PMMRC, 2017) reported high rates of maternal suicide, particularly among Māori women. This is the first study that explores LMCs' and mothers' perceptions of MMH screening in NZ. International studies have identified gaps in MMH screening processes but this is yet to be explored in NZ. The areas explored in the study were current screening practices, gaps, MMH supports available, barriers to supports, and recommended improvements. Four themes were identified. These themes require reflection and discussion by midwives as well as other primary care providers involved in caring for childbearing mothers on how these can be improved for Māori and Pacifica mothers. Hopefully improvements made/suggested for Māori and Pacifica mothers will also be applicable for other mothers who access maternity care in NZ. It is disappointing that tools for MMH screening, though validated for Pacifica mothers in NZ (Ekeroma et al., 2012), have not been validated for Maori mothers as tangata whenua. Mellor, Payne and McAra-Couper (2019) identified a lack in service for midwives to refer women with mild to moderate MMH issues in pregnancy and suggested a need for this to be addressed prior to introducing routine antenatal screening in pregnancy. Hence it requires those that fund the services as well as providers of services to address the devastating consequences of maternal suicide among Māori women.

Reference: Asia Pac Psychiatry 2019:e12369

**Abstract** 

#### Barriers to equitable maternal health in Aotearoa New Zealand

Authors: Dawson P et al.

**Summary:** This review examined the underlying social contributors to inequity in maternal health outcomes and experiences in NZ. Analysis of data from a variety of published sources identified 6 factors (physical access, political context, maternity care system, acceptability, colonialism, and cultural factors) that were barriers to equitable maternal health. The structure of the maternal health system in NZ (including free maternity care) should help ameliorate the inequity in maternal health but does not appear to do so.

Comment: It is important to note that there is renewed commitment to health inequalities by the MOH, and the Director General of Health has signed off a new definition of equity this year. This pertinent literature review identifies six social determinants that interlock with each other creating a barrier to maternal health equity in NZ. The inequality that results has been measured by outcomes, systems of care, and women's experiences. The interlocking of the six social determinants suggests that it would not be possible to apply a single solution as an intervention to eliminate inequality as that solution could result in a negative impact on another social determinant. The author suggests a holistic approach, specific to Aotearoa New Zealand that honours the principles of Te Tiriti O Waitangi, to address the barriers and when considering solutions. Further suggestions include the importance of identifying inequity programmes that are working as well as ensuring community participation. A must read as we all need to work towards ensuring that there is equity especially in maternal health care. The following report 'A window on the quality of Aotearoa New Zealand's Healthcare 2019' if not already read is also relevant.

Reference: Int J Equity Health 2019;18(1):168

<u>Abstract</u>



# Complementary medicine products: information sources, perceived benefits and maternal health literacy

Authors: Barnes L et al.

**Summary:** This systematic review investigated the use of complementary medicine products (CMPs) in pregnant and breastfeeding women. A search of 7 databases identified 56 quantitative or mixed-methods studies that were suitable for inclusion. Analysis of the data showed that herbal medicines were the main type of complementary medicine used during pregnancy and breastfeeding. Women used the products for various self-perceived benefits related to their own health or to their unborn or breastfeeding babies' health. Healthcare professionals were the most commonly reported information sources, followed by other interpersonal relationships and the media.

**Comment:** This review supports what has been known by many of us. Women use CMPs such as micronutrient supplements and herbal medicines to support their general health, health during their pregnancies, and that of their unborn babies as well as while breastfeeding. Women access a number of information sources to be informed on CMP. They will often use CMPs in conjunction with other pharmacological preparations. The interactive health literacy framework review describes the decision-making processes women go through when deciding to use CMPs. According to the authors, a woman's individual capacity to assess CMP information, the variety of information sources, and the people and relationships of the health systems in a woman's health literacy environment impact on decisions regarding CMP use, whether self-prescribed or taken on advice from a health care professional. Motivation for use of CMPs and their perceived effectiveness were not always linked to perceptions of safety, although this remained a consideration for many women. The choice of using CMPs is also influenced by tradition and culture. Hence more needs to be known about how the combined use of CMPs with pharmacological preparations as well as tradition and culture influence women and their health. You need to read the full article to get further information on how health literacy is discussed and the findings from the review.

Reference: Women Birth 2019;32(6):493-520

<u>Abstract</u>

# "Fitting-in Australia" as nurturers: meta-synthesis on infant feeding experiences among immigrant women

Authors: Joseph J et al.

**Summary:** This meta-synthesis investigated maternal infant feeding experiences pre- and post-resettlement among immigrant women in Australia. A search of CINAHL, ScienceDirect, MEDLINE, Social Sciences, SCOPUS and PubMed databases from 1980 to 2018 identified 14 studies of migrants and refugees that were suitable for inclusion. Analysis of the data revealed an overarching theme: "Fitting-in" to nurture a healthy child in a new homeland. This theme comprised 2 major themes: beliefs about breast milk and breastfeeding; and beliefs about complementary feeding. Western hospital policies were considered to be a deterrent to lactation, while familial disconnections and unfamiliarity with health care and societal norms undermined the women's infant-feeding confidence.

**Comment:** We are all aware that the infant feeding decision made by women/whānau can impact on the health of their children. This meta-synthesis and ecological analysis looks at the impact of 'fitting' into a culture of breastfeeding or complementary feeding in a country women have decided to reside in either as a refugee or a migrant. The differing needs of breastfeeding information, including risk of not breastfeeding and support required from health professionals by refugee and migrant women have been addressed in this article. Different cultures will view things differently in relation to feeding as well as childcare. Hence it is important to understand their beliefs about breastmilk, breastfeeding and complementary feeding. Mothers with knowledge/possessions may negotiate specific areas that enable adaptation to a new country differently from those that have limited knowledge/possessions. As the net migration rate in NZ is 11.4 per 1000 people in the year to June and the quota for refugees is 1000 per year we are likely to provide care to women who have migrated or come as refugees to NZ. Hence reading this article in full is pertinent for all involved in the provision of maternity care (including policy makers) to ensure care is better integrated in relation to Western medicalised notions, and is culturally sensitive.

Reference: Women Birth 2019;32(6):533-42

**Abstract** 

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# Relationships between working conditions and emotional wellbeing in midwives

Authors: Cramer E et al.

**Summary:** This systematic review evaluated the relationship between working conditions and emotional wellbeing in midwives. A search of various databases identified a number of studies that were suitable for inclusion. The results of these studies were synthesised into a thematic literature review of qualitative and quantitative research. Analysis of the data showed that poor emotional wellbeing in midwives correlated with low staffing/high workload, low support from colleagues, lack of continuity of carer, challenging clinical situations, and low clinical autonomy. While some of these working conditions were considered to be non-modifiable, others (e.g. staffing levels and continuity of carer) are within the control of organisational leadership.

Comment: Over the months there have been various reports in the NZ media of a national shortage of midwives. Various strategies have been used, such as employing nurses, allocating extra hours to healthcare assistants and an oncall midwife system. The hospital's case load has been weighted towards women more likely to need more complex care. This has resulted in increased stress and burnout in staff unabling them to work in that environment for long. The maternity report also noted that many hospitalbased midwives left to work in the community or primary birthing units. This literature review is timely and looks at the qualitative and quantitative evidence on the relationships between working conditions and emotional wellbeing in midwives. Emotional wellbeing was defined widely, including all aspects of mental health as well as outcomes such as frustration. The authors suggest that risks to midwives' emotional wellbeing are not intrinsic to midwifery but are modifiable. They feel addressing staffing/ workload is a priority and that interventions must avoid taking time away from midwifery hours, or exacerbating any workload issues, since staffing seems to be such a crucial factor in midwives' emotional wellbeing. This needs to be read by all involved in ensuring appropriate staffing and staff wellbeing especially as more graduates are entering the profession, but it does not appear to alleviate staff shortages.

Reference: Women Birth 2019;32(6):521-32 Abstract

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