



WELCOME, TENA KOUTOU KATOA, KIA ORANA, TALOFA LAVA, MALO LELEI, FAKAALOFA ATU.

This is the last issue of the MSCC's Newsletter for 2011. It has been another very busy year with much happening in the maternity sector, as well as in the MSCC office. We have mailed out hundreds and sometimes thousands of our pamphlets each month, as well as responded to the many requests we get for information on maternity services. We have attended a number of Ministry of Health and DHB meetings on various maternity issues throughout the year, produced our newsletters, and written dozens of grant applications. Despite running out of money in the middle of the year, thanks to Nicola's persistence and determination we end the year with some money in the bank.

However, the year has seen intervention rates continue to rise, while research is published revealing the harms that can occur as a result of many interventions that have become routine during childbirth. This issue of the newsletter contains two articles on such unnatural and harmful practices – cutting the cord straight after the baby is born, and putting the newborn in a cot soon after birth.

What needs to happen now is for all Lead Maternity Carers who do either of the above to immediately alter their practice regarding these routine interventions and inform mothers of the latest research on these issues.

What's in this issue of the newsletter

The December issue of the newsletter contains a report on the results of a recent Swedish study which found that delaying the clamping and cutting of the umbilical cord by at least three minutes reduces the chance of iron deficiency at four months, an article on Michael Sullivan's paper on cord blood banking which appeared in *Nature* in 2008, a summary of some of the maternity statistics in National Women's Annual Clinical Report for 2010, plus an item on Birthcare's statistics, and a report on some recent research which revealed that newborn babies' stress levels double when they are put in cots straight after birth.

Don't forget to check the dates for the MSCC's Steering Group meetings for 2012.

We wish you all a very happy Christmas and New Year, and hope you all find time for plenty of rest and relaxation over the summer break.

Happy Reading!

Lynda + Nicola

DELAYED CORD CLAMPING REDUCES IRON DEFICIENCIES

A large Swedish study published online in the *British Medical Journal* on 15 November 2011 has found that waiting at least three minutes before clamping the cord reduces the chances of iron deficiency at four months. The trial involved 400 full term infants, half of whom were randomly assigned to have their cords clamped within 10 seconds of delivery. In the other infants, umbilical cords were left to pulsate for three minutes or longer before clamping. (1)

Iron levels in the two groups were similar two days after delivery. But four months after birth, researchers found that iron levels in the blood were 45% higher in the delayed-cord clamping group, while infants whose cords were clamped early had increased rates of iron deficiency. Delayed cord clamping resulted in both improved iron status as well as reduced prevalence of iron deficiency at 4 months of age, and reduced prevalence of neonatal anaemia.

Iron deficiency and iron deficiency anaemia are major public health problems in young children worldwide, and are associated with poor neurodevelopment. Young children are at particular risk of iron deficiency because of high iron requirements during rapid growth in combination with low iron intake. Iron deficiency anaemia in young children is associated with long lasting cognitive and behavioural deficits. Iron deficiency without established anaemia has also been associated with altered affective responding, impaired motor development, and cognitive delays. Available evidence suggests that it is important to prevent iron deficiency in infants in order to achieve optimal brain development.

Lead author Ola Andersson, a paediatrician at the Hospital of Halland in Halmstad, Sweden, noted that many obstetricians believe that delayed clamping causes jaundice. But he and his colleagues found no link between delayed cord clamping and jaundice, or any other adverse effects.

The research confirms what many midwives have known and have practised for years. Unfortunately, but not unexpectedly, it seems that it may take a while to convince the obstetricians and get them to alter their guidelines. (2)

The authors of the paper concluded: "Iron deficiency even without anaemia has been associated with impaired development among infants. Our results suggest that delayed cord clamping also benefits infant health in regions with a relatively low prevalence of iron deficiency and should be considered as standard care for full term deliveries after uncomplicated pregnancies."

References

1. www.ncbi.nlm.nih.gov/pmc/articles/PMC3217058/pdf/bmj.d7157.pdf
2. www.theglobeandmail.com/life/health/new-health/health-news/delaying-cord-cutting-reduces-reduces-iron-deficienciesstudyfinds/article2258134/?utm_medium=Feeds%3A+RSS%2FAtom&utm_source=Life&utm_content=2258134



“BANKING ON CORD BLOOD STEM CELLS”

In 2005 the June issue of the MSCC’s Newsletter featured an article on cord blood banking, following the establishment of a new and highly profitable business being promoted to pregnant women and their families. Since then the MSCC has received a number of calls and emails from women about the issue, especially in regard to the impact on the baby of early cord clamping and cutting. (See article on previous page.)

The original MSCC article referred to a paper on cord blood banking published in the *New Zealand Medical Journal* in January 2005 by Michael Sullivan, Director of Research at the Children’s Cancer Research Group at the Christchurch School of Medicine. In 2008 Dr Sullivan published a further paper entitled “Banking on Cord Blood Stem Cells,” this time in the July 2008 issue of *Nature*. This paper is available under “Hot Topics” on the MSCC website – www.maternity.org.nz.

As outlined in the article in *Nature*, the collection and storage of the umbilical cord blood of newborn babies by private cord blood banks is now available in most parts of the world, with some notable exceptions, such as Spain and Italy, where private cord banking is not permitted. For a fee these private banks offer expectant parents the opportunity to store their newborn child’s cord blood for future treatment of cancer and genetic diseases, and for possible future stem cell therapy.



Dr Sullivan points out that commercial banks rely on the local health-care provider, the midwife or doctor, to collect the cord blood at birth and forward it to the bank for long-term storage. Although this may be convenient for the purposes of collection, he argues that it introduces the potential for poor-quality or low-yield cord collections. In fact, a complaint about the misplacement and incorrect storage during transportation of a newborn baby’s cord blood featured on page 11 of the NZ Health and Disability Commissioner’s latest annual report. By the time the sample arrived it was deemed unsuitable for cryopreservation.

Confusing and misleading information

Dr Sullivan’s research included a systematic review of information on the English language websites of 148 commercial cord blood banks that revealed a pattern of confusing and potentially misleading information regarding the benefits of autologous and family cord blood storage. He found that private cord banks all publish remarkably similar lists of diseases that “can be treated” by umbilical cord



blood transplants, including cancer, bone marrow failure syndromes and genetic disorders. Most of these are diseases treatable only with an allogeneic cord blood transplant (related or unrelated), but many commercial banks do not explain the difference between autologous and allogeneic cord transplantation clearly enough, leaving parents to assume that the indications for related and unrelated allogeneic transplantation also apply to autologous transplants, which they do not.

Marketing, ethics and public policy

The ethical issues surrounding the marketing of commercial cord banks were outlined in the article that appeared in the MSCC newsletter in June 2005. Dr Sullivan wrote that “many would argue that commercial cord blood banking represents a considerable ‘medical industry’ that markets a service to parents and health-care providers as a leading-edge medical technology. Attempts to justify this are based on the success of unrelated public domain banking and allogeneic cord blood transplantation, and not on the use of autologous cord transplantation, the efficacy of which remains unproven.” He refers to the exploitative nature of the advertising statements such as “a once in a lifetime opportunity, “storing your baby’s umbilical cord blood could save their life,” and “don’t let a precious resource go to waste.”

Given the increasing number of studies showing the benefits to the newborn of delaying the clamping and cutting of its umbilical cord (benefits which include but are not confined to improved iron status and optimal brain development as well as reduced prevalence of iron deficiency at 4 months of age, and reduced prevalence of neonatal anaemia), it could be argued that commercial cord blood banks are promoting and encouraging a practice that is harmful to infants.

Dr Sullivan points out that “commercial cord banks currently offer a service for the treatment of diseases for which proven alternatives are now available. Moreover, speculative banking for future stem cell therapies might well be made obsolete by the rapid advances in stem cell technology, such as the development of induced pluripotent stem cells.”

His conclusion is that in the absence of any published transplant evidence to support autologous and non-directed family banking, commercial cord banks currently offer a superfluous service. The MSCC would argue that it is also a service that seeks to rob newborns of the blood they need to maintain their present and future health and may deprive them of their chance for optimal brain development.



NATIONAL WOMEN'S CLINICAL REPORT FOR 2010

National Women's released its Annual Clinical Report for 2010 in August 2011. The report is the 18th in the current series. The annual seminar examining the information contained in the report took place on 16th August.

The 281-page report contains a wealth of statistical information on the 7688 women who gave birth at NWH in 2010 and the 7845 babies they gave birth to plus the 21 women who gave birth before they actually got to the delivery unit. Five women gave birth twice during 2010 and are counted twice in the report. In 2010 there were 149 sets of twins (156 in 2009) and 4 sets of triplets (3 sets in 2009).

Normal births

While the intervention rates have remained much the same over the past few years, each year sees a small decrease in the number of normal births. In 2010 54.7% (4217 out of 7709 birthing mothers) had what the report refers to as a "spontaneous vertex birth" and 0.8% (59 birthing mothers) had a vaginal breech birth. This represents a 1% decrease in the percentage of normal births compared to 2009.

In 2010 only 45.2% of first-time mothers had a spontaneous vertex birth compared to 47.8% in 2009.

Waterbirth

In 2010 there were recorded as having been 29 babies born in water. Nine of the mothers were under the care of National Women's LMC service, 18 were under the care of an independent midwife, one was cared for by a GP, and one by a private obstetrician. The reports notes that there may be some undercounting of waterbirths. None of the babies were admitted to NICU.

Induction of labour

More than one in three first time mothers – over 34% – had an induction of labour in 2010. The rate for multiparous mothers was 25%.

The report notes "Post dates pregnancy and PROM (premature rupture of membranes) were the most common primary reason given for induction of labour in 2010, similar to 2009. When post-dates was the primary indication for induction, 11% occurred prior to 41 weeks and 21% occurred at or beyond 42 weeks."

Induction of labour increases with maternal age – from 26% among mothers under 20 years of age to 45.6% of mothers over 41, while spontaneous onset of labour dropped from 69.9% to 18.8% in these age groups. Induction of labour is also associated with maternity care provided by private obstetricians (30.6%)



who also have the lowest rate of spontaneous onset of labour at 32% compared to 62.2% for GPs and 64.3% for independent midwives.

The report notes that there was a significant rise in the overall induction rate in 2008, due in part to accurate identification of inductions performed in the labour and birthing suite. While the rate has not changed significantly since then, it continues to increase and concerns remain that the rate of induction is still too high.

32.3% caesarean section rate

In 2010 the caesarean section rate was 32.3%, compared to 31.2% in 2009, and 20.8% in 1995 and 1996. There was little difference between the caesarean section rate for first-time mothers (33.5%, compared to 32% in 2009) and for mothers having subsequent births (31.2%, compared to 30.5% in 2009). This is because 60% of women who had one prior caesarean section had an elective repeat caesarean.

The elective caesarean rate is highest among women attending a private obstetrician (35%) and lowest among independent midwives (8%). European women are twice as likely to have an elective caesarean than women of other ethnicities.

The vaginal birth rate in women who had a trial of labour varied significantly by onset to labour, from 71% if labour started spontaneously to 54% if labour was induced.

The report comments: “In the mid-90s, the total caesarean section rate at NW was around 20%. In the last couple of years we have put a lot of effort into reducing the caesarean section rate, however it remains high at 32%. The low rate of spontaneous vertex birth is still disappointing.”

Forceps and Ventouse

The rate of forceps and ventouse deliveries (combined under the term “operative vaginal deliveries”) was 12.2% of all births. The rate has varied little since 1992.

Forceps were used for 6.8% of vaginal births and ventouse for 11.3%.

Epidurals

The epidural rate among labouring women was 60.4% in 2010. For first-time mothers it was 83.9% if labour was induced and 56.8% if labouring spontaneously. For multipara it was 53.4% if labour was induced and 28.5% if labouring spontaneously.

Multiple births

The percentage of babies born in a multiple pregnancy has remained stable over the past six years, and was 3.9% in 2010 compared to 4.1% in 2009.



Out of the total of 310 babies born in a multiple pregnancy 16 died. Of the 106 twin pregnancies that reached term, 50 were delivered by caesarean section. Only 8 (7.5%) went into spontaneous labour. The report states: “one third of twin pregnancies result in both twins being delivered vaginally compared with 54% in 2000, which is a statistically significant reduction and indicates that caesarean section is now the norm.”

The majority of twin pregnancies are pre-term and 41% will spend time in NICU.

Breech birth

Of the 340 singleton babies presenting as a breech, 292 were delivered by caesarean section. Among the 39 breech births at 32-36 weeks the percentage of caesarean deliveries was 91%, despite the fact there is absolutely no evidence to support such a practice. For the 230 breech births at 37 weeks and over the percentage of caesarean sections was 97%.

As in previous years the report again acknowledges that the findings of the Hannah Term Breech Trial has had a major effect on clinical practice and resulted in a dramatic increase in the number of caesarean sections performed for breech births, despite the flawed methodology of this trial.

Unfortunately the publication of numerous papers on the short and long term harms to the health of both mothers and babies of non-labour caesarean birth has not had the same effect on clinical practice.

Postpartum Haemorrhage

The postpartum haemorrhage (PPH) rate continues to rise and it remains a cause for considerable concern. It is associated with the increasing caesarean section rate. The overall primary PPH rate (500mls and over) was 36%. It was 16% for spontaneous vaginal birth to 78% for emergency caesarean section. It also varied by onset of birth, from 25% in spontaneous onset to 35% in induced labour.

Postpartum Hysterectomy

In 2010 seven women had an emergency postpartum hysterectomy. Hysterectomies following birth are usually associated with repeat caesarean sections.

Breastfeeding

In 2010 over 83% of mothers were discharged from National Women's exclusively breastfeeding their babies.

- **A copy of the 2010 Annual Clinical Report** can be found at:
<http://nationalwomenshealth.adhb.govt.nz/Portals/0/Annual%20Reports/Annual%20Clinical%20Report%202011.pdf>



LABOUR & BIRTH AT BIRTHCARE

Birthcare Auckland is a primary birthing unit that is located in Titoki Street, not far from National Women's Hospital. It provides labour and birth care and postnatal care in normal pregnancies and labours and does not have anaesthetists or obstetricians available.

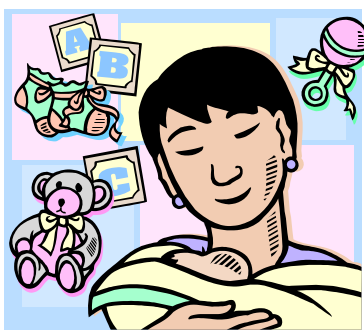
In April 2009 Birthcare started an initiative to give more women the opportunity of birthing there, and to give midwives the opportunity of providing LMC services within a supported environment. This resulted in an increase in the number of births which occur at Birthcare.

In 2010 577 women started labour at Birthcare and 129 (22%) transferred to National Women's in labour – 36% were first-time mothers and 10% were mothers having subsequent babies.

Of the 448 women who gave birth at Birthcare 295 lived in the Auckland DHB area, 96 lived in the Waitemata DHB area, 55 lived in the Counties Manukau DHB area, and two were from other DHBs.

Of the 275 first-time mothers who either birthed at Birthcare or transferred to National Women's 216 (78.5%) had a normal vaginal birth, 28 (10.2%) had an operative vaginal birth (forceps or ventouse), and 31 (11.3%) had a caesarean section. The pain relief used by these mothers included 82 who had an epidural, 40 had pethidine, 119 had entonox, 4 had TENS, and 62 used water. The transfer rate to National Women's was 36%.

Of the 302 mothers having subsequent babies who either birthed at Birthcare or transferred to National Women's 293 (97%) had a normal vaginal birth, 6 (2%) had an operative vaginal birth (forceps or ventouse), and 3 (1%) had a caesarean section. The pain relief used by these mothers included 17 who had an epidural, 17 had pethidine, 72 had entonox, 3 had TENS, and 47 used water. The transfer rate to National Women's was 9.9%.



NEWBORN BABIES' STRESS LEVELS DOUBLE IF THEY ARE PUT IN COTS

A South African study published in *Biological Psychiatry* in November 2011 revealed that babies' stress levels double if they are put in a cot straight after being born. The research showed that the practice of putting newborns in nearby cots to give their mothers some rest after labour can cause stress. The scientists at the University of Cape Town also found that separating infants from their mothers at night makes them far less likely to sleep.

Researchers looked at the effect of early separation by monitoring the heart rates of two-day-old babies when they were alone in a cot or being nursed by their mothers skin to skin. The results showed that stress levels among babies rose 176% when they were alone, and that they were 86% less likely to sleep soundly

Further research is being planned to see whether early separation has long-term effects on the health and development of newborn babies.

Dr Barak Morgan, the author of the study, said: "It is standard practice in a hospital setting, particularly among Western cultures, to separate mothers and their newborns. Separation is also common for babies under medical distress or premature babies who may be placed in an incubator."



Researchers also separated newborn animals from their mothers to monitor stress levels. "This research addresses a strange contradiction: in animal research, separation from the mother is a common way of creating stress in order to study its damaging effects of the developing newborn brain. At the same time, separation of human newborns is common practice, particularly when specialised medical care is required, such as incubator care."

Dr John Krystal, the editor of *Biological Psychiatry*, said: "This paper highlights the profound impact of maternal separation on the infant. We knew that this was stressful, but the current study suggests that this is a major physiologic stressor for the infant."

Reference

Barak E. Morgan, Alan R. Horn, Nils J. Bergman. "Should Neonates Sleep Alone?" *Biological Psychiatry* 2011; 70(9): DOI:10.1016/j.biopsych.2011.06.018



MATERNITY MANIFESTO

The Maternity Services Consumer Council and other organisations and individuals have created New Zealand's first Maternity Manifesto and website to gain national support for evidence-based maternity issues needing implementation.

The Maternity Manifesto seeks support for normal labour and birth, alternatives to hospital birthing, mother-baby unity care of all sick newborns, human milk banks, and full implementation of the WHO International Code on the Marketing of Breast-milk Substitutes.

Alternative to Hospital Birthing

The place of birth dramatically affects birth outcomes – specifically, healthy women giving birth in hospital maternity units have more interventions than at birthing centres or at home. However, perinatal morbidity and mortality at birthing centres and at home are comparable to hospital, with higher maternal satisfaction. Yet the vast majority of New Zealand births occur in hospitals with increasing intervention rates.

Human Milk Banks

When mother's milk is not available for a baby, the next best choice is human milk from another mother. New Zealand must join other countries like Australia in re-establishing human milk banks utilising the high level of screening techniques now available.

Please join this important initiative by signing up on the website:

www.maternitymanifesto.org.nz

MSCC Meeting Dates for 2012

Our MSCC Steering Group is growing and this can only mean great things for the women of New Zealand. Make sure your voice is heard - please make a note of the following dates for the coming year in your diary and come along to our monthly meetings. You can be assured of a warm welcome. The MSCC meets at 10am on Tuesday mornings – and the days have been fitted around school holidays.

The Steering Group meetings are currently being held at Birthcare in Parnell. The meeting dates for the first six months of 2012 are:

7 February, 6 March, 3 April, 1 May and 5 June.

So if you have an issue of concern or would like to share information about women's experiences of maternity care then do come along. Babies and toddlers welcome.



Not-For-Profit Conference 2012

23 & 24 February 2012

CQ Conference Centre, Wellington

We now all know the likely direction of government policy and many Not-for-Profit leaders will be looking closely at the implications that this will have on their organisations going forwards.

This year's conference to be held over 23 + 24 February 2012 at the CQ Conference Centre in Wellington will be a major event for the sector with leading New Zealand speakers Jenny Prince (CEO of Plunket), Bob Frame (futurist) Chris Clark (CEO World Vision) Viv Maidaborn, presenting ably supported by a host of New Zealand's leading NFP practitioners.

This conference will focus on providing practical management / leadership skills and learnings that can be applied in your own organisation, along with some sound thinking about the techniques required to run a sustainable NFP as resources get tighter while demand for services increase. A mix of exciting key note presentations and workshops will ensure that you can ask the tough questions and also absorb some of the collective wisdom from many of New Zealand's leading NFP practitioners who will be attending.

In addition, it is a great learning opportunity and way for you to connect with many others within the Not-For-Profit Sector, build your networks and celebrate our successes.

For further information go to <http://growevents.co.nz/nfp-conference/about/>



and

