



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

Welcome to the third issue of the MSCC's Newsletter for 2014. Over the past three months we made a presentation at Waitakere Health Link's NGO forum about the need for a purpose-built maternity unit in West Auckland, and then attended a number of meetings on the planned upgrade of Waitakere hospital's current dump of a maternity unit, held our AGM, put in an Official Information Act request for the caesarean section rates at Waitakere and North Shore hospitals, and attended the NWH Annual Clinical Report day. We have also written several grant applications, responded to requests for information, and have mailed out thousands of our pamphlets.

Funding applications

The MSCC is very appreciative of the \$6,000 we received from the ASB Community Trust for some of our operational costs, and the \$950 we received from the Four Winds Foundation. We have also submitted grant applications to the Auckland region COGS committees, and Lottery Community.

MSCC's new administrator

Following Nicola's resignation as the MSCC's administrator, the MSCC has recently appointed Letticia Mincham to the position. However, we have not said goodbye to Nicola as she plans to remain on the MSCC Steering Group, continue being our representative on several committees, and will be staying involved in maternity issues. We wish her well in her new much better paid job! And thank her for all her hard work for the MSCC.

Letticia is not new to the MSCC as she was a member of the MSCC Steering Group about a decade or so ago. So it is actually a welcome back for Letticia.

What's in this issue of the newsletter

The September issue of the newsletter contains an article on the Perinatal and Maternity Mortality Review Committee's report for the 2012 year, notice of the upcoming screening of a new documentary *Microbirth*, a summary of information on how the overuse of antibiotics and caesarean sections are contributing to our modern plagues taken from a recently published book called *Missing Microbes*, some statistics on the rise in caesarean sections at Waitakere and North Shore hospitals, and much more.

Don't forget to check the dates for the MSCC's Steering Group meetings for the last few months of 2014.

Happy reading!

PERINATAL & MATERNAL MORTALITY IN 2012

The Perinatal and Maternal Mortality Review Committee (PMMRC) recently released its report on perinatal and maternal mortality in New Zealand for the year 2012. This is the committee's eighth PMMR report. This year the report includes data on babies who died in New Zealand between 2007 and 2012, and mothers who died from 2006 to 2012.

For the first time it includes a multivariate analysis using the national maternity dataset which investigates whether ethnicity, age, socioeconomic status, body mass index (BMI), parity and smoking are associated with stillbirth and neonatal death.

It also includes two special topic analyses on full term unexplained stillbirth and term intrapartum (during labour and birth) related perinatal death. Unexplained stillbirths were studied because they make up the largest proportion of perinatal deaths at term.

Maternal mortality in 2012

There were two direct maternal deaths, and eight indirect maternal deaths. A direct maternal death is one that is the result of obstetric complications during pregnancy, birth and up to 42 days postpartum, and from interventions, omissions or incorrect treatment. An indirect maternal death is one that is the result of a pre-existing disease or a disease that developed during pregnancy that was not due to obstetric causes, but was aggravated by the physiologic effects of pregnancy.

The causes of the two direct maternal deaths were sepsis and an amniotic fluid embolism. The eight indirect deaths included three suicides, four mothers with pre-existing medical conditions, and one mother who suffered an intracranial haemorrhage.

Seven years of data

The 77 direct and indirect maternal deaths from 2006-2012 included:

- 26 antepartum and 51 postpartum
- 49 occurred in hospital and 28 in the community
- 50 births, 26 undelivered babies and one unknown.
- 26 with potentially avoidable factors present, 47 with none and four were unknown.

Pre-existing medical disease and suicide were the most frequent causes of maternal mortality in New Zealand in 2006 – 2012.

Suicide

Of the 48 indirect maternal deaths during this seven-year period 19 were a result of suicide.



Potentially avoidable deaths

The report notes that in the seven years from 2006-2012 the MMR working group believed that 33.8% of maternal deaths were potentially avoidable. The problems that were identified as having contributed to these deaths were caused by either organisational/management failings, personnel failings, or barriers to access.

Organisational problems

The major factors involved in the potentially avoidable deaths included 17 cases relating to lack of policies, protocols or guidelines, 12 relating to inadequate systems/ process for sharing of clinical information between services, 10 relating to inadequate education and training, five relating to poor organisational arrangements of staff, four relating to a failure or delay in the emergency response, four relating to equipment or building and design functionality, two relating to poor access to senior clinical staff, and two to a delay in procedure, eg caesarean section.

Barriers to access

The barriers to access included seven women with maternal mental illness, ten with no or infrequent antenatal care, three with language or cultural barriers, and one who was not eligible for publicly funded maternity care. Substance abuse featured in seven potentially avoidable maternal deaths, family violence in four, and a lack of recognition of the complexity or seriousness of the condition in 11 cases.

Deprivation

Maori and Pacific mothers are three times more likely to die of direct and indirect causes in pregnancy or in the 42 days following the end of pregnancy. The report states that “there is increasing risk of maternal mortality with increasing socio-economic deprivation.”

Over the years 2006-2012 approximately 25% of mothers who died were having their first baby, while a further 25% had had more than four prior births. Fifty-eight percent of the mothers were overweight or obese. The report also notes that “the rate of smoking among mothers who died (36%) is high compared to previous estimates of smoking among mothers in New Zealand.”

Perinatal mortality

In 2012 there was a total of 669 perinatal related deaths – perinatal mortality being foetal and neonatal deaths of babies born from 20 weeks gestation who die in utero, or within the first 27 days of life of any cause. Excluding the 225 perinatal related deaths caused by lethal and terminated foetal abnormalities brings the total of deaths down to 444.

The report notes that the total perinatal related mortality rate has overall been stable over the years 2007 – 2012 using the New Zealand definition above.



The most common cause of perinatal death in NZ is congenital abnormality which accounts for 30% of deaths. The second most common cause is spontaneous preterm birth which accounts for 15% of all perinatal deaths and is the cause of a third of neonatal deaths.

Stillbirth

There has been a reduction in stillbirth from 2007 to 2012 which is independent of demographic changes. The reduction is significant for deaths at 41 weeks gestation and over. There has also been a significant reduction in the proportion of births in NZ at 41 or more weeks gestation which the report says may be due to higher rates of induction of labour in pregnancies at 41 or more weeks gestation.

Stillbirth is most often unexplained and this year's report contains an analysis of the separate effects of the known predictors of stillbirth and neonatal death. Excluding deaths from congenital abnormalities, the significant predictors were:

- women of Indian ethnicity
- smoking in pregnancy
- BMI greater than 25, with an increase in risk with increasing BMI
- women having their first baby.

Recommendations

This year's report includes two recommendations relating to maternal mortality which are similar to those made in last year's report. They are:

- Women who are unstable clinically unwell should be cared for in the most appropriate place within each unit in order for close observation to occur. When observations are abnormal, clear documentation, early review by a senior clinician and development of a detailed management plan are required.
- Women with serious pre-existing medical conditions require a multi-disciplinary management plan for the pregnancy, birth and postpartum period. This plan must be communicated to all relevant caregivers.

The recommendations relating to perinatal mortality concern the risks posed by smoking during pregnancy, a high BMI, and the impact of socio-economic deprivation on perinatal death. The last recommendation says:

- The PMMRC recommends that Northland, Tairāwhiti and South Canterbury DHBs review all cases of intrapartum related death at term in their area to identify opportunities for improvement.

The PMMRC report can be found at:

<http://www.hqsc.govt.nz/publications-and-resources/publication/1576/>



"WE ARE IN THE MIDST OF THE LARGEST EXPERIMENT IN HUMAN HISTORY."

PROF. SUE CARTER
BIOLOGIST & BEHAVIOURAL NEUROBIOLOGIST



REVEALING THE MICROSCOPIC EVENTS DURING CHILDBIRTH
THAT COULD HOLD THE KEY TO THE FUTURE OF HUMANITY

Sunday, 21st September 2014 at 6pm

Berkeley Cinema, Takapuna

32-34 Anzac St, Takapuna

For bookings; <http://www.eventfinder.co.nz/2014/microbirth-screening/auckland/takapuna>

Or phone 0800 BUY TIX

"MICROBIRTH" AN ALTO FILMS PRODUCTION WITH ONE WORLD BIRTH
MUSIC COMPOSED BY KIM HALLIDAY PRODUCED & DIRECTED BY TONI HARMAN AND ALEX WAKEFORD
[MICROBIRTH.COM](http://microbirth.com)

NEW DOCUMENTARY "MICROBIRTH" REVEALS THE MICROSCOPIC IMPACTS OF CHILDBIRTH

The way we give birth has changed dramatically over the past 30 years. Some leading scientists are now warning that these changes could have serious repercussions for the lifelong health of our children.

Featuring prominent scientists from the UK and North America, **"Microbirth"** examines how modern birth practices could be interfering with critical biological processes potentially making our children more susceptible to disease later in life.

Recent population studies have shown babies born by Caesarean have approximately a 20% increased risk of developing asthma, 20% increased risk of developing type 1 diabetes, a similar risk with obesity and slightly smaller increases in gastro-intestinal conditions like Crohn's disease or celiac disease. All of these conditions are linked to the immune system.

"Microbirth" explores several possible explanations. If a baby is born by Caesarean Section, scientists hypothesise this could alter the "seeding" of the baby's microbiome, the critical transfer of good bacteria from mother to baby at birth. Scientists suggest this could lead to the baby's immune system not developing to its full potential. Another hypothesis is the actual process of vaginal birth, including the cocktail of hormones produced during labour, could profoundly affect the baby's immune regulation and metabolism.



HOW ANTIBIOTICS AND CAESAREANS ARE CONTRIBUTING TO OUR MODERN PLAGUES

Several months ago a book described as “a critically important call to arms about the harmful effects of some of our most revered modern medical practices” was published. “*Missing Microbes*” is a compelling account of the discovery of antibiotics, which ushered in a golden age of medicine, and how our subsequent overuse of these seeming wonder drugs has contributed to the loss of microbial diversity on and within our bodies which is now exacting a terrible price on our health. (1)

Author Dr Martin Blaser has spent more than 30 years studying the role of bacteria in human disease. In his book he explains how disturbing the natural balance of what he calls the human microbiome is affecting common conditions such as obesity and diabetes, long thought of as primarily nutrition and lifestyle related problems. He points the finger at two major medical practices – the overuse of antibiotics and the rising rates of caesarean sections – which are behind what he calls our modern plagues: obesity, childhood diabetes, asthma, hay fever, food allergies, oesophageal reflux and cancer, celiac disease, Crohn’s disease, ulcerative colitis, autism and eczema.

The studies undertaken by Dr Blaser and others have shown how antibiotic use during early childhood poses a huge risk to long-term health. He points out that American children receive on average 17 courses of antibiotics before they are 20 years old. At the same time, caesarean sections are depriving babies of important contact with their mother’s microbiomes which is resulting in life-long challenges to babies’ health.

In the first seven chapters of his book, Dr Blaser introduces the reader to the fascinating world of microbes, particularly those that are found in humans. He describes how the human body is an ecosystem which is composed of an estimated 30 trillion human cells, as well as being host to more than 100 trillion bacterial and fungal cells, the friendly microbes that have co-evolved with our species. This means that 70–90% of all cells in the human body are nonhuman. Collectively these bacteria weigh about 1.5 kilos and represent about 10,000 distinct species. They reside on every inch of the skin, in the mouth, nose and ears, in the oesophagus, stomach and especially in the gut. Women also have a rich assortment of bacteria in the vagina.

The microbes that make up each person’s unique microbiome are generally acquired early in life. By the age of three, the populations of microbes in children resemble those of adults. Together, they play a critical role in immunity as well as the ability to combat disease. It is each person’s microbiome that keeps them healthy. But now parts of it are disappearing.



Without these ancient bacteria we would not survive for very long because they carry out many metabolic and protective functions. In other words, they work for us in a myriad of mysterious and amazing ways that modern science has only just begun to understand. The development of the human microbiome begins at the moment of birth, and continues to develop in the first few years of life by acquiring ever more microbes from the people around the growing infant.

The impact of caesarean sections

Chapter 8 of this fascinating story of the role of microbes is entitled “Mother and Child” and it is this chapter that reveals the huge impact that being born by a caesarean section has on the baby.

Throughout the animal kingdom, mothers transfer microbes to their young while giving birth. For millennia, mammalian babies have acquired founding populations of microbes by passing through their mother’s vagina. Dr Blaser explains how this important “microbial handoff” is a critical aspect of infant health in humans. “Today it is in peril,” he says.

Dr Blaser describes how microbes play a hidden role in the course of every pregnancy. As the baby grows, the mother’s breasts and uterus begin to enlarge. Simultaneously, and invisibly, the microbes in the mother’s intestinal tract begin to stir. During the first trimester, certain species of bacteria become over-represented while others become less common. By the third trimester, just before the baby is born, even greater shifts occur. These changes, involving scores of species, are not random. Experiments have revealed that many physiological and pathological features of pregnancy are controlled, at least in part, by the mother’s resident microbes which evolved to help her and themselves. When food is in short supply during pregnancy, as has often occurred in human history, the mother’s microbes will shift their net metabolism so that more calories flow from food to her body.

Dr Blaser believes that these shifts in microbial composition may be partially responsible for the extra pounds that women gain during pregnancy as well as for the increased sugar or glucose levels that commonly occur during pregnancy. “It makes sense; mothers store more energy to optimize the success of their newborns” he writes. One consequence of this process is that some women develop gestational diabetes. They can’t deal with the extra weight without stressing their systems. Most of the time, the problem is mild and resolves within weeks following the birth of the baby.

As microbes in the mother’s intestinal tract are storing up energy, another population of microbes – those in her vagina – begin to shift as well. They, too, are preparing for the baby’s birth.

Women of reproductive age carry bacteria, primarily lactobacilli, which make the vagina more acidic. This environment provides a hardy defence against



dangerous bacteria that are sensitive to acid. During pregnancy these lactobacilli flourish and predominate, crowding out other resident species and potential invaders, all the while gearing up for the main event – birth. Dr Blaser suspects that microbes also have a role to play in exactly when a mother goes into labour.

When the mother's waters break a rush of fluid pours into her vagina, sweeping up bacteria as it flows out of her body onto her thighs. The fluid that is now dominated by lactobacilli rapidly colonises the mother's skin. As labour progresses the germ-free baby gets ready to emerge, and as s/he comes down the vagina every surface of the baby's skin comes into contact with the lactobacilli and various other microbes.

Once the baby is born, it instinctively reaches for the mother's nipple and begins to suck. The birth process introduces lactobacilli to the first milk that goes into the baby. This interaction could not be more perfect. Lactobacilli and other lactic acid-producing bacteria break down lactose, the major sugar in milk, to make energy. The first form of breast milk, colostrum, also contains protective antibodies.

"The choreography of actions involving vagina, baby, mouth, nipple, and milk ensures that the founding bacteria in the newborn's intestinal tract include species that can digest milk for the baby. These species are also armed with their own antibiotics that inhibit competing and possibly more dangerous bacteria from colonising the newborn's gut. The lactobacilli, which bloom in the mother's vagina at the end of pregnancy, become the earliest organisms to dominate the infant's formerly sterile gastrointestinal tract: they are the foundations of the microbial populations that succeed them. The baby now has everything it needs to begin independent life," Dr Blaser writes.

When the baby is born by caesarean section there is no "microbial handoff" from mother to child. The baby is not colonised by its mother's lactobacilli, and those first microbial residents which provide signals that critically interact with cells in the rapidly developing baby's body are therefore very different.

Several decades ago *Scientific American* published a study that revealed that babies born by caesarean section were far more susceptible to respiratory infections and breathing difficulties during childhood, but why this was so remained a mystery until quite recently. A number of studies published over the past few years have now revealed that not only are caesarean-born babies at increased risk of childhood eczema and asthma, they are also more vulnerable to allergies and are more likely to have diarrhoea during their first year of life. (2) Their chances of being allergic to cow's milk are twice as high as babies born normally.

In his chapter on "Solutions" Dr Blaser states that health providers are slowly starting to wake up to the need for change, and predicts that doctors will become more cautious about advocating for caesarean sections as the evidence



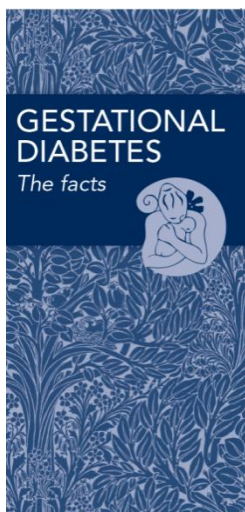
continues to emerge about the life-long consequences of obesity, asthma, allergies, juvenile diabetes and even autism that can be attributed to being born by an elective caesarean section.

“Our ancient resident microbes are there for a reason; that’s how we evolved. Everything that changes them has a potential cost to us. We have changed them plenty. The costs are already here, but we are only just beginning to recognize them. They will escalate,” Dr Blaser warns. The rising rates of caesarean section and the overuse of antibiotics, especially in children, are two key practices at the core of modern health care. Both need to be urgently curtailed as their unintended consequences are endangering our children.

“*Missing Microbes*” is a book that every obstetrician, paediatrician and GP should read. As the world rapidly heads towards what Dr Blaser calls an antibiotic winter, this book is a much needed wake-up call.

References

1. Martin J Blaser. “*Missing Microbes*.” Published by Henry Hold & Co. 2014.
2. <http://www.henryford.com/body.cfm?id=46335&action=detail&ref=1829>



The MSCC has produced a sixth leaflet in its “*The Facts*” series.

The Gestational Diabetes leaflet describes what GDM is, the process of screening for GDM, the disadvantages of having a single test, treating GDM, and outlines the differing opinions on gestational diabetes, the risk of overdiagnosis, and how to minimise the risks.

There is a charge for all the leaflets in “*The Facts*” series, but one free copy is available upon request.

There is also more articles and information about gestational diabetes on the MSCC’s website: www.maternity.org.nz



HUGE INCREASE IN CAESAREAN SECTION RATES AT NORTH SHORE AND WAITAKERE HOSPITALS

In June the MSCC put in a belated Official Information Act request for the elective and emergency caesarean section rates in 2011 – 2013 for each of Waitemata DHB's two maternity hospitals. It had been on the MSCC's to-do list since we reported on Waitemata DHB's Maternity Quality and Safety Programme Report for 2012 in the MSCC's December 2013 newsletter. For some reason Waitemata DHB is often extremely reluctant to report on the percentages of caesarean sections at each hospital. This may now change following Waitemata DHB board member Sandra Coney's request for the caesarean section numbers to be included in the information papers for WDHB meetings.

Waitakere Hospital

The caesarean section rates have risen dramatically at Waitakere hospital over the past few years. In 2011 19.9% of women giving birth at Waitakere hospital had a caesarean section – 13.3% were emergency caesareans and 6.6% were elective caesareans. In 2012 the rate rose a whopping 4% to 23.8% (16.1% emergency and 7.7% elective) with a small drop to 23.2% (15.1% emergency and 8% elective) in 2013.

North Shore Hospital

The caesarean section rates have also risen at North Shore hospital over the past few years. In 2011 29.3% of women giving birth at North Shore hospital had a caesarean section – 17.4% were emergency caesareans and 11.9% were elective caesareans. In 2012 the rate rose almost 3% to 32.7% (20.2% emergency and 12.5% elective) with a further small rise to 33.3% (20.4% emergency and 12.9% elective) in 2013. In some months the MSCC is aware that the caesarean section rate rises as high as 40%.

A presentation by Sue Belgrave, the DHB's clinical director of obstetrics, to a Waitemata DHB Hospital Advisory Committee meeting last year did nothing to enlighten board members as to why the caesarean section rates had risen so dramatically over the past few years. Of course mothers are usually the ones the health authorities choose to blame – they are either too old, too posh to push, too fat or are demanding a caesarean.

It's time to start publishing and comparing the caesarean section rates for individual obstetricians who work at each hospital, and educating them about the risks attached to a caesarean section. They are obviously not taking on board what increasing numbers of research studies are revealing about the negative impact that a caesarean section has on the future health of a newborn baby.



NATIONAL BIRTH STATISTICS FOR 2013

Statistics New Zealand has published some interesting statistical information on its website on the numbers of births in New Zealand in 2013.

There were 58,717 live births registered in New Zealand in 2013, down 2,461 from 2012. This is the lowest number of births since 2005 when there were 57,745 births.

The highest number of births ever recorded was 65,390 in 1961. At that time New Zealand's population was just 2.5 million, compared with 4.5 million in 2013.

Statistics NZ states:

“In part, annual fluctuations in births reflect changes in the size and age of the population, the age at which women have children, and the number of children they have. In turn, the number of births influences the future size and age of the population.”

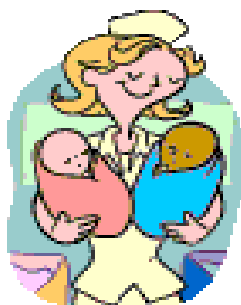
Almost all regions had fewer births in 2013. Compared with 2012 the largest decreases were in:

- Auckland region (down 1,010 births, or 4%)
- Wellington region (down 379 births, or 6%)
- Waikato region (down 305 births, or 5%)
- Northland region (down 186 births, or 8%)

There was a 5% decrease among Maori birth registrations, an 8% decrease among Pacific birth registrations and a 14% decrease in birth registrations to mothers under the age of 20 years.

The total fertility rate was 2.0 births per woman. The infant mortality rate was 4.4 deaths per 1,000 live births.

http://www.stats.govt.nz/browse_for_stats/population/births/BirthsAndDeaths_HO_TPYeDec13.aspx



DHB Maternity Quality and Safety Reports

The Ministry of Health's Maternity Quality and Safety Programme (MQSP) has been rolled out in all DHBs over the last three years to assist DHBs to focus on improving the quality and safety of maternity services in the community and in the maternity facilities. Consumers have been involved in this process and a forum was held in Wellington on 13 August to provide them with an opportunity "to consolidate their experiences and the consumer role."

All DHBs have recently submitted their annual Maternity Quality and Safety Programme reports to the Ministry of Health. Over the next month or so these reports will be posted on each DHB's website, so check out the website of your local DHB for their MQSP Report and contact them if it is not there.

The National Maternity Monitoring Group Annual Report 2013 was published at the end of last year. The report presents the activities and recommendations of the National Maternity Monitoring Group (NMMG) in their first year of operation (2012/13). The NMMG was established by the Director General of Health in 2012 to provide oversight of New Zealand's maternity system and specifically the implementation of the New Zealand Maternity Standards. The report is available on the MOH website – <http://www.health.govt.nz/publication/national-maternity-monitoring-group-annual-report-2013>



MSCC Meeting Dates for 2014

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 final three meeting dates for 2014 are: **7 October, 4 November, 2 December.**

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.



CONFERENCES/WORKSHOPS 2014

WOMEN'S HEALTH ACTION is holding its annual women's suffrage commemoration on **Friday 19 September 2014** at the Gus Fisher Gallery, 74 Shortland Street, Auckland. This year's special guest is Dame Margaret Sparrow.

TOPIC: "Ettie, the unforgettable heroine who was forgotten."

Dame Margaret will share the experience of Ettie Rout, a World War I sexual health campaigner whose activism saw her both decorated and shunned.

Tickets cost \$20 (plus booking fees) and includes a free glass of wine or non-alcoholic beverage and nibbles.

For further information contact Women's Health Action on phone (09)520-5295 or email: info@womens-health.org.nz



La Leche League NZ's 50th Anniversary Conference

LLL is celebrating 50 years in New Zealand with a 50th anniversary conference which will be held on Friday 3rd to Sunday 5th October 2014 at the Waipuna Hotel and Conference Centre, 58 Waipuna Road, Mt Wellington, Auckland.



International speakers include Diana West and Pinky MacKay.

Registration closes on 14 September 2014.

For further information is available on the LLLNZ website – <http://www.lalecheleague.org.nz/news-a-events/lllnz-conference-2014>

