December 2021 Newsletter

Neonatal Nurses College of Aotearoa (NNCA)

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Neonatal Nurses College of Aotearoa - NNCA



Neonatal Nurses College (nzno.org.nz)





Chairperson's Report

Merophy Brown, NNCA Chair

Kia ora koutou katoa,

It's hard to believe that 2021 is almost over! We have continued to navigate COVID with level changes, and now the commencement of the traffic light system. In these trying times we continue to strive to do the best for our patients and their whanau.



I would like to thank you all for the hard work you all continue to do, improving the lives of our most vulnerable, and encouraging and supporting their whanau.

As a committee we have continued to meet via Zoom, make plans for 2022 and support college members to further their study goals. We have maintained our relationships with other neonatal networks and continue to provide COINN registration on behalf of our members. Our amazing treasurer Helen Barwick featured in the June Kaitiaki profiling Neonatal Nursing. Thanks Helen for sharing your story.

Unfortunately we had to postpone our Symposium in the Hawkes Bay planned for November, but we look forward to seeing some of you on the new date set for March 18th 2022. The weather will still be amazing and the wine too!!

One of the biggest highlights for me this year was being able to represent our college on the Breakfast Show on World Prematurity Day. It was an amazing opportunity to highlight the work we do and acknowledge the wonderful support that the Neonatal Trust provides to units around New Zealand.

As we enter into the 'silly season', I hope you all manage to have some time to enjoy the beautiful summer weather and spend time with family and friends doing things that make you happy.

Meri Kirihimete me ngā mihi o te tau hou – Merry Christmas and Happy New Year to you all!

Juliet Manning **Editorial**

During the past couple of months the Health Reform Transition Unit has held a number of roadshows around the country focused on the future of health in Aotearoa. One of the fundamental questions being addressed was "why reform the health system?" The aim of our health system has remained largely unchanged over time – that being good health for all New Zealanders. Its clear that our current health system no longer responds effectively to the complexity of health care delivery across the country, with multiple approaches to the same issues. Its time to stop tinkering around the edges and take the opportunity to align our health care delivery and create efficiency.

We have an overly complex health system for the size and population of New Zealand, with 20 District Health Boards (DHBs) and over 30 Primary Health Organisations (PHOs). Issues within our system have been clearly highlighted by Covid, with different responses, processes, operating systems and data collection across DHBs and healthcare providers. Covid doesn't respect DHB boundaries, and the health and safety of our communities rely on effective and consistent responses.

The presentation by the Transition Unit highlighted some sobering health inequities within our population: Maori

- 7 years lower life expectancy for Maori than non-Maori
- 60% more avoidable hospitalisations than non-Maori
- The avoidable mortality rate for Maori is twice that of non-Maori

Pacific

- 6 years lower life expectancy than non-Maori or non-Pacific
- 47% of pregnant women registered with LMC compared to 81% for non-Maori and non-Pacific
- 64% of Pacific children have tooth decay by age 5

Its clear that we are not making progress on closing gaps, and while there are multiple influences, one of the most significant influences is with engagement in healthcare.

So there is clear need for change, and the Transition Unit has identified 5 key system changes that need to be achieved:

- The health system will reinforce Te Tiriti o Waitangi principles and obligations
- All people will be able to access a comprehensive range of support in their local communities to help them stay well
- · Everyone will have equal access to high quality emergency and specialist care when they need it
- Digital services will provide more people the care they need in their homes and communities
- Health and care workers will be valued and well-trained for the future health system

Underpinning these key changes is the recognition that our health system currently does not meet the obligations of Te Tiriti o Waitangi; that DHBs tend to dominate health care planning and delivery with improvements needed in primary health; that differences in emergency and specialist care across DHBs has created a "postcode lottery"; that NZ has fallen behind the rest of the world in terms of quality and functionality of digital health services; and, that healthcare staff are feeling undervalued and unsupported with inadequate investment in our workforce.

According to the Transition Unit website, there will be "many opportunities to contribute to the detailed design of our future health system" over the coming months, with announcements of details being made for those who may want to be involved. Information about the work and progress of the Transition Unit is available on their website Home/Kāinga|Future of health

The Transition Unit talks about health workforce issues such as the pressure our workforce is under, the need to strengthen not diminish our workforce, the need for less inefficiency and bureaucracy, and a commitment to ensure the wellbeing of staff and a safe work environment

There are promises that the health system reforms will help to alleviate the strain on our workforce, and ensure the health workforce is supported through any changes. Further roadshows are planned in early 2022. We need nurses to get involved at all levels of the changes – check out the Transition Unit website, send them your questions, and subscribe to the newsletters and updates. The NNCA Committee will be keeping a close eye on progress, as well as opportunities to contribute to consultation to continue to influence and shape healthcare in New Zealand.

ANZNN Update November/December 2021

The last few months have brought about many changes for neonatal units around the country. Units have been busy due to staffing issues and Covid lockdown or restrictions. Welcome to the new normal!

We wish Sharon Chow all the best while she is off on maternity leave. Just a reminder Sharon will not be accessing her emails while on leave. During this time, Prudence Creighton will be the acting ANZNN Operations Manager and can be contacted at anznn@unsw.edu.ac

Data collection can take much time searching for particular data, examples being the first and second lactate result of a baby on respiratory support, or mother's antenatal history. All staff are requested to use accurate documentation for a clear picture of the case e.g. "lactate was XX" not "within normal limits". Please encourage those who complete the discharge summaries that specific cares or treatments need to be identified e.g. "CPAP for 8 hours, stopped on day X and hour X", home on low flow oxygen, or breastfeeding on discharge.

To ease the workload of the Level 2 units' data collectors, it has been suggested that the Tertiary data managers contact the regional hospital's medical records department for copy of the baby's discharge summary. Thus, the need to have a detailed discharge summary ...use your influence!!

Some examples of research that ANZNN data is being used for:

- 1. Respiratory illness and length of time on respiratory support
- 2.2 4 year follow-up for babies born less than 28 weeks
- 3. Therapeutic hypothermia for neonatal encephalopathy with sepsis
- 4. Coconut oil trial to support extreme skin integrity for extremely premature infants
- 5. Level 2 to Level 3 transfers
- 6. Average length of stay per gestation

It was unfortunate that the ANZNN forum was cancelled along with the NNCA Symposium, but the good news is we will meet up again in March 17, 2022 in Hawke's Bay. If you have any topics you want explored, do share.

Thank you for your interest in and support of ANZNN. Your hard work and dedication are contributing to major research to support the most vulnerable neonates.

Barbara Hammond RN
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ANZNN rep for NNCA





MEDIA RELEASE

Media Office sydney.edu.au/news @SydneyUni_Media After hours 0402 972 137

Two-year follow up shows delaying umbilical cord clamping saves babies' lives

A minute's delay could make a lifetime of difference

An Australian-led study finds that aiming to wait just 60 seconds to clamp the umbilical cord of very premature babies at birth continues to have benefits two years on - decreasing the child's risk of death or major disability.

The new research, led by the University of Sydney, is a two-year follow up of the <u>Australian Placental Transfusion Study</u>, the award-winning and largest-ever clinical trial of delayed cord clamping of babies born before 30 weeks. It was conducted in 25 hospitals in seven countries. The new study compared outcomes for over 1500 babies from the initial study, 767 with caregivers aiming for 60 second delay in clamping and 764 with caregivers aiming for cord clamping before 10 seconds after delivery.

Researchers found delaying clamping reduces a child's relative risk of death or major disability in early childhood by 17 percent. This included a 30 percent fall in mortality before the age of two. Also, 15 percent fewer infants in the delayed-clamping group had blood transfusions after birth. The study is published in The Lancet Child and Adolescent Health today.

It is coordinated by the University of Sydney's <u>NHMRC Clinical Trials Centre</u> in collaboration with the IMPACT Clinical Trials Network of the Perinatal Society of Australia and New Zealand and the Australian and New Zealand Neonatal Network.

Study lead, Professor William Tarnow-Mordi, Head of Neonatal and Perinatal Trials at the Clinical Trials Centre and Professor of Neonatal Medicine in the Faculty of Medicine and Health said the simple process of aiming to wait a minute before clamping will have significant impact worldwide. "It's very rare to find an intervention with this sort of impact that is free and requires nothing more sophisticated than a clock. This could significantly contribute to the UN's Sustainable
Development goal to end preventable deaths in newborns and children under five - a goal which has really suffered during the pandemic," he said.

"Applied consistently worldwide, aiming to wait a minute before cord clamping in very preterm babies who do not require immediate resuscitation could ensure that an extra 50,000 survive without major disability in the next decade," said biostatistician Dr Kristy Robledo from the University of Sydney who led the two-year follow-up analysis.

"In other words, for every 20 very preterm babies who get delayed instead of immediate clamping, one more will survive without major disability."

Why wait?

Delayed umbilical cord clamping is routine in full term babies to allow the newborn time to adapt to life outside the womb, however, until recently, clinicians generally cut the cord of preterm babies immediately so urgent medical care could be given.

"Ten years ago, umbilical cords were routinely clamped quickly after a very preterm birth and the baby was passed to a paediatrician in case the child needed urgent help with breathing," said Professor Tarnow-Mordi.

"But we now know that almost all very preterm babies will start breathing by themselves in the first minute, if they are given time."

"We think that, after delaying cord clamping, babies get extra time for the lungs to start exchanging gases and extra red and white blood cells and stem cells from the placenta, helping to achieve healthy oxygen levels, control infection and repair injured tissue,"

What does this mean for babies born today?

The childhood follow-up to the <u>Australian Placental Transfusion Study</u> is the largest world-wide two-year follow up of pre-term cord clamping providing the best evidence to date on positive outcomes at two years of age.

Co-author and founder of Miracle Babies Foundation, Melinda Cruz, herself a parent of three preterm babies, said she hoped the results would give parents confidence to discuss their options with their birthing professionals.

"I hope that prospective parents around the world will read about this trial for themselves and discuss it with their midwives and obstetricians," she said.

From research to practice

Earlier evidence from this group indicating that delayed umbilical cord clamping might benefit preterm infants and their mothers came in 2017 from a systematic review of randomised trials in nearly 3,000 preterm babies, published in the <u>American Journal of Obstetrics and Gynecology.</u>

The <u>Australian Placental Transfusion Study</u> led by Professor Tarnow-Mordi was the largest of these trials and went to be named winner of the 'Trial of the Year' by Federal Health Minister, Greg Hunt MP and the Australian Clinical Trials Alliance in 2018.

While the World Health Organization recommends that newborns, including preterm babies who do not require positive pressure ventilation should not have their cord clamped earlier than one minute after birth, this has not always been consistently applied.

Next steps

"Moving forward it's vital that perinatal professionals record the time of first breath and cord clamping to the second during births to allow for robust, large-scale data to further our work in this area," said co-author <u>Professor Jonathan Morris</u>, Professor of Obstetrics and Gynaecology at the University of Sydney and Director Clinical and Population Perinatal Health Research at the Kolling Institute.

"Intensive staff training in the new protocols will be vital as feels daunting to delay treatment in very preterm babies, but the evidence suggests this results in the best outcomes for these children," added Professor Kei Lui, Chair of the Australian and New Zealand Neonatal Network.

The <u>ALPHA Collaboration</u> (for Advancing Large collectively Prioritised trials for Health outcomes Assessment) will work with the IMPACT Clinical Trials Network of the Perinatal Society of Australia and New Zealand, the Australian and New Zealand Neonatal Network and other organisations worldwide to focus globally collaborative efforts so that randomized studies like APTS that aim to reduce mortality and improve major disability in survivors can run at least ten times larger and faster, at one-tenth the cost, in a new era of increased international collaboration.

Information for parents:

Parents who want to know more are encouraged to visit the NHMRC Clinical Trials Centre website at http://www.ctc.usyd.edu.au or Miracle Babies Foundation at https://www.miraclebabies.org.au/ for frequently asked questions about the Australian Placental Transfusion Study.

Parents in Australia who need support can contact Miracle Babies Foundation 24-hour helpline at 1300 622 243.

Read the research paper in The Lancet Child and Adolescent Health

Declaration: This trial is registered with the Australian and New Zealand Clinical Trials Registry: <u>ACTRN12610000633088</u>. The authors declare no competing interests. The research is supported by grants from the National Health and Medical Research Council, Australia. (NHMRC GNT 571309, NHMRC GNT 1086865)

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The Little Eye Drop Study

Microdrop administration of phenylephrine and cyclopentolate in neonates

September 2021

Monthly Newsletter

by Lisa Kremer

We did it!

This week we completed the final recruitments for the Little Eye Drop Study. I want to extend a huge thank you to everyone involved, with a special acknowledgement to Cure Kids for funding this research. It was a massive effort by all, including negotiating data collection throughout the various alert level changes during the ongoing influence of COVID-19. Thank you for all you have done to contribute to the success of the Little Eye Drop Study.

What is going to happen next?

I am very excited to start analysing the results, which I will work on over the next few months. I am eager to share the results with you, so watch this space for me inviting myself (in person or zoom) to your research meetings – looking at you clinicians, nurses, and ophthalmologists!

And then there is the even bigger job to complete my thesis write up, so I can graduate with a PhD. I have just accepted a new role as a lecturer at He Rau Kawakawa (School of Pharmacy, University of Otago), so there is new surge of motivation to get it written.

I am also looking forward to being able to collaborate with you again on future research.



Research Team and Funding

Lead Investigator: Associate Professor David Reith. Study Coordinator: Lisa Kremer. Funding for this study is from CureKids, and Lisa's PhD is funded by the Health Research Council of New Zealand and the University of Otago.









Research in Aotearoa/New Zealand – from the ON TRACK Network update

On Track Network (perinatalsociety.org.nz)

The ON TRACK Network Trial Development Workshop planned for February 2022 has been postponed. COVID has had significant impact on all areas of our lives including planning for future clinical trials. The Network remains committed to working with investigators who submitted trial concepts and will deliver targeted workshops to meet their specific needs a little later in 2022 (likely to be April/May). Workshops are open to all those who are interested and may want contribute, as well as learn about trial development processes. The ON TRACK network are also aiming to host a forum to bring people together to plan how we can develop clinical trial ideas identified from the ON TRACK Network Research Prioritisation Project. More details to come in the New Year.

New Zealand Trials relevant to NICU

Currently recruiting

Protect Me - Antenatal melatonin supplementation in foetal growth restriction for foetal neuroprotection

C*STEROID - Corticosteroids before planned caesarean section from 35+0 to 39+6 weeks of pregnancy

DIAMOND - DIfferent Approaches to MOderate & later preterm Nutrition

NeoGluco - Neonatal Glucose Care Optimisation Study (I)

PLUSS - Preventing Chronic Lung Disease in Extremely Preterm Infants Using Surfactant + Steroid

PROTECT IV - pentoxiphylline as adjunct therapy to improve long-term disability in preterm infants

Recruitment Completed - follow up to primary outcome and/or data analysis ongoing

LATTE - The most effective and best tolerated dose of caffeine to reduce intermittent hypoxaemia

MAGENTA - Magnesium Sulphate at 30 to 34 weeks' gestational age: Neuroprotection Trial PROVIDE - Higher IV protein intake for extremely low birthweight babies in the first week after birth on survival free from neurodevelopmental disability at 2 years' corrected age

Childhood outcome studies

hPOD@2YR Follow-up Study - Hypoglycaemia Prevention in newborns with Oral Dextrose

The transport nurse in a NICU setting

Lynette Will Committee Member COASTN

When people think of transport or retrieval nurses they often are envious of the exciting concept of rushing off at a moment's notice to fly to the rescue. The pictures show us in our flight suits posing next to helicopters or planes and it seems like the best job in the world....and it is, but it isn't like the pictures or TV programs.

NICU transports nurses are highly trained and experienced nurses, with many completing training in aeromedical dynamics and flight safety. COASTN (College of Air and Surface Transport Nurses) offers a comprehensive list of requirements for transport nurses including physical fitness, experience, training and ongoing education, and while these are not mandatory, most NICUs follow these guidelines.

As Flight Nurses it is essential that we are aware of the effect of flight and altitude on our bodies and on the patients we transport, and how prolonged flights can cause fatigue, lower oxygen levels and gas build up which can effect both the Baby and ourselves.

In Southern DHB the NICU transport team is a small team who cover the largest geographical area in New Zealand. We travel mostly by helicopter for retrievals and fixed wing or ambulance for transfers. We can find ourselves in remote areas picking up babies from medical centres or on occasion private homes, or traveling to other hospitals where the baby has been stabilised and prepared for transfer.

When we are transferring a baby back to its home base we have time to organise and plan for the transport but with a retrieval we can be heading to the roof to get on the helicopter within 15 – 20 minutes of the first call. Most of that time is spent getting as much information as we can about the baby we are going to retrieve, arranging the flight and any ambulance transfers that may be involved, handing over our current patients, rechecking equipment, gathering extra medications, getting changed and chasing the doctor who is coming with us.

Once on the aircraft we have time to discuss what we might find when we arrive and what our provisional plan will be. Sometimes that plan changes as the information we received prior to leaving has changed by the time we arrive. Once we have a plan it is a good time to try and relax and hope for a smooth flight as the adrenaline that kicked in with the initial call is starting to wear off and we are very aware that we are on our own without the support we usually have in the unit from our colleagues, equipment and extra pairs of hands.

When we arrive we get a handover from the team who have been caring for the baby and assessments of the baby begin. We stabilise the baby and prepare for transport. We are acutely aware that it is difficult to assess babies in the air and if the airway and IV access is not secure it is almost impossible to replace in the small confines of a helicopter, so we check and double check.

As well as this we reassure parents and explain that they cannot accompany us in the helicopter as there is no space. This is a delicate conversation that creates additional stress for parents as understandably parents don't want to be separated from their newborn, and it can be difficult to trust people you only just meet with your critically unwell baby when it may take you four or five hours to travel by road.

Transport nurses don't just have to be clinically experienced; we need to know our equipment and be able to trouble shoot in mid-air if necessary. If trouble shooting does not fix the issue, we need to be able to think on our feet and improvise to get the best outcome for the baby. We monitor and treat the baby on the return flight often hoping for a tail wind and a quick trip back to base as we know that the NICU is the best and safest place for the baby to be.

Once we return we either hand over the baby or continue to care for the baby, depending on staffing in the unit, and clean and restock our equipment, fill out paper work and breathe a sigh of relief that we are safely back in our comfortable workplace with our colleagues' support.

Finally I acknowledge we do not fly to the rescue, the midwifes and nurses who provide the initial and ongoing care until we arrive are amazing, they have incredible skills and are the reason these babies are usually in the best condition possible when we arrive, and we are just part of a bigger team that contributes to the care of our patients.

10/10 best job in the world! I would recommend it to anyone considering joining a transport team, just know what you are signing up for!

College of Air & Surface Transport Nurses (nzno.org.nz)



Update from the Neonatal Trust



As always, I hope this newsletter finds you, your teams and whanau well and looking forward to some sunshine over the summer wherever you are in Aotearoa New Zealand. It's hard to believe that we're at the end of 2021. The year started off with so much hope and freedom for us in NZ, but come August we all know what happened, and since then the country has been in a state of flux and life has been disrupted for longer than we've ever known through lockdowns, levels and soon to be traffic lights.

The Neonatal Trust has been significantly impacted, not only in the way we can deliver our service to families and units, but also financially - all up across the last two years we've lost close to quarter of a million dollars which has restricted the equipment we can buy for families to use in hospital as well as our plans to extend our support out into the regions.

But I don't want this sign off for the year to be dominated by COVID-19 but rather to highlight the amazing work that our team and those who we work alongside in the NICUs and SCBUs across the country have managed to achieve in spite of a nasty virus having other ideas for us!

I am honoured to work alongside some extremely passionate individuals who have moved mountains with the resources available to them to send out 3,500 care packs, 450 Mother's Day and Father's Day packs, that 31 NZ landmarks joined 'Light Up Purple', and 450 families and 23 units celebrated World Prematurity Day with morning tea for all, and they are now working to get 450 Christmas gifts out to your units.

And as your units are at the heart of what we do we've been able to supply a huge amount of resources for units across the country such as: 65 radio headsets for various units; four La-Z-Boy chairs in Wellington NICU and Lower Hutt SCBU; four Ergoline chairs for Christchurch NICU and another four for Dunedin NICU; five Symphony breast pumps and stands for Dunedin NICU; \$3,000 worth of taxis for families; frosted screening in Dunedin NICU; three Tiltaway beds for North Shore SCBU; refurbishment of the expressing room in North Shore SCBU; leather L-shaped couch for North Shore SCBU and Middlemore NICU; six baby capsules; five sofa beds (four in Chch NICU and one in Nelson SCBU); 12 Graduation Frames; one Cuddlecot for Waikato; Over \$5000 of supermarket gift cards for families in hardship; two iPads (Wellington NICU and Rotorua SCBU); four Unimom Forte pumps to be used as loan pumps.

Plus, lots of small things like fabric for sheeting and muslin wraps, changing mats; baby books and furnishing for parents rooms up and down the country!

We have got even bigger plans for 2022 where we're looking to rebrand the Trust to gain greater awareness and support throughout the country which will in turn mean doing more for more families. We want to focus on Dads to ensure they feel as supported as Mum and baby through their neonatal journey, and we want SCBUs to be a strong focus for the growth of our team to support all families.

I hope you all have a lovely summer and get some time off and are ready for a fabulous 2022!

Nga mihi

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World Prematurity Day around the Motu



















Hi Neonates members

NZBA has an opportunity for someone to join Te Rōpu Whakaruruhau (TRW). TRW is the Māori advisory group for New Zealand Breastfeeding Alliance (NZBA).

If you're passionate about breastfeeding and supporting pēpi, māmā and whānau to create loving and responsive relationships, we would welcome your expression of interest.

Details about TRW can be found on the baby friendly website, and Carmen Timu-Parata, Māori Advisor, is available to answer questions 027 773 2233.

If this is you, please send cheryl@nzba.co.nz a short CV and cover letter outlining how you think you can contribute.

Kind regards
The NNCA Committee







Neonatal Nurses College Aotearoa Symposium 2021

The NNCA Executive Committee regret to advise of the difficult decision to postpone the 2021 NNCA Symposium (12 November 2021) due to ongoing Covid-19 restrictions. While this development is disappointing, the committee has been working hard on securing new dates for the conference and is pleased to confirm the event as follows.

18 March 2022 War Memorial Event Centre Napier

In order to make the transition as easy as possible for all involved, your registration fee will be held in credit and carried over to the new date. Should a registered delegate no longer be able to attend the rescheduled event, the existing registration can be changed to a new delegate.

In that case and/or if the payer of the registration fee (your employer or yourself) needs to request a refund, please notify registration management at melanie@mtanz.org.nz or call Mel Pitto at 027 570 6728 to arrange the request.

We hope to see you in March 2022!