

Global Perspective on Developmental Care

New Zealand: A Nursing Reflection

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DOI: 10.14434/do.v16i1.35780

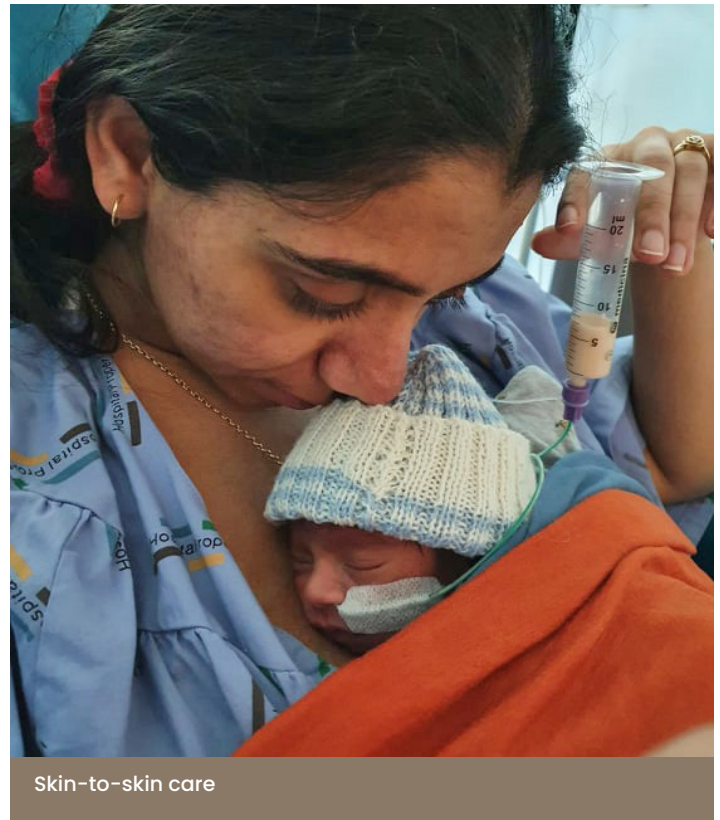
Kia Ora! (hello) from New Zealand

Look closely and you will find our small island country at the bottom of any world map, just below Australia in the southwestern Pacific Ocean. In size, New Zealand has slightly less area than the state of Colorado in the United States and a little more area than the United Kingdom. About two-thirds of the land is economically useful, while the remainder is mountainous. Because of its numerous harbours and fjords, the country has an extremely long coastline relative to its area.

New Zealand is populated by just over five million people. Our Indigenous people, Māori, make up 17% of the national population. Their culture is a big part of New Zealand's identity, so respecting, preserving, and promoting Māori culture is a vital cornerstone of our country's healthcare values. We consistently provide, as a team, quality holistic care with respect for family/whānau, encompassing the concepts of Te Whare Tapa Whā (The four cornerstones of health), Te Taha Wairua (Spiritual), Te Taha Tinana (Physical), Te Taha Whānau (Family), Te Taha Hinengaro (Emotional and psychological) in accordance with Te Tiriti o Waitangi (The Treaty of Waitangi). In tune with the goals of developmental care, promoting and fostering healthy interpersonal relationships between nga mātua/parents, family/whanau, and baby/pēpi is central to neonatal care delivery in New Zealand.

The New Zealand healthcare system is best classified as a variation on the Beveridge model (tax financed healthcare provided by the government) and tends to exhibit outcomes comparable with other developed democracies. This year healthcare delivery in New Zealand is undergoing major reform. The Local District Health Boards are being replaced by one national organisation called Te Whatu Ora Health NZ. A new Māori Health Authority has the power to commission health services and monitors the state of Māori health.

A range of neonatal care is delivered in a total of 23 different localities across New Zealand. Six centres are dedicated Neonatal Intensive Care Units (NICU) where tertiary care for preterm babies born from 23 weeks gestation onward is provided. These NICUs are in the major cities of Auckland, Hamilton, Wellington, Christchurch, and Dunedin, from north to south. Auckland is New Zealand's largest and most populated city with over 1.7 million people and is considered the most cosmopolitan city in the country with ethnic groups



Skin-to-skin care

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from all around the world, including a high proportion of people from Pacific islands and Asian countries. Consequently, with the number of ethnic groups and an excellent climate to grow food, there exists the most amazing cuisine and cultural diversity.

NIDCAP in New Zealand

The concept of developmental care was first introduced in New Zealand by Dr. Heidelise Als. Doctors and nurses were impressed by the positive outcomes reported in early studies by Als, in particular the development of the Synactive theory in the mid-1980s and from this theory the implementation of the Newborn Individualised Developmental Care and Assessment Program (NIDCAP).^{1,2,3} Dr. Als was invited to visit an Auckland NICU in the mid 1990's where she presented her findings. Today, 20 years later, a wide range of developmental care interventions are now embedded as part of everyday care



Family support



Planning care



Swaddled bathing

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in every neonatal unit in New Zealand.

Much of the success of developmental care integration has been due to the passion and persistence of neonatal nurses leading the way in advocating for whanau and pēpi in their care. Neonatal teams, in particular nurses, began to question their contribution to the outcomes of pēpi and whānau in their care. How did the care delivered complement the medical and technical advances in neonatal care? Nurses, partnering with parents, were uniquely placed to establish cultural change within units. This partnership was integral to family-centred care becoming the success it is today.

Developmental care had a natural affinity with the nursing concept of caring making it a philosophy that should have been easily embraced by the nursing team.⁴ In the early days, however, practicing developmental care seemed outside the NICU medical model and was considered by some as an ‘add-on’ to care once the technical and medical tasks had been addressed.⁵

As developmental care initiatives began to be introduced, these initiatives received little acknowledgment from the wider team as contributing to pēpi or whanau outcomes. The science was relatively new about how the growing brain could be so influenced by the way neonatal care was delivered. Additionally, the inability of nurses to articulate their contribution to long-term outcomes suggested a similar conclusion.⁶ NICU environments were changing, with lower lights and less noise being advocated for by staff. Care was also being modified, changing from regimented two and four-hour nursing care handling times to ‘cue based’ or ‘cluster cares’, depending largely on the cultural norms of the unit.

It was clear further education and knowledge were required to support the implementation of developmental care

strategies and to have stakeholder investment. As New Zealand was so far away from many of the research sites, experts, and NIDCAP training sites this proved to be a challenge. Fortunately, the Neonatal Nurses College - Aotearoa (NNCA), the professional body within the New Zealand Nurses Organisation (NZNO) which represents neonatal nurses, stepped up to become strong ambassadors of supporting developmental care practices by providing nursing education opportunities.

It is well recognised that understanding the ‘why’ behind developmental care practices is key to influencing and infiltrating evidence-based best practices in neonatal care delivery. Through funding, NNCA was able to support Dr. Joy Browne, NIDCAP Master Trainer, on several occasions to come to New Zealand to provide Developmental Care workshops. Dr. Browne returned to New Zealand recently as a keynote speaker along with Dr. Heidilise Als at the NNCA-hosted COINN conference in Auckland in 2019. Many nurses unable to attend the international conference were able to instead attend full-day programs provided by Dr. Browne in Christchurch, Hamilton, Auckland, and Whangarei.

In 2014, Inga Warren, Senior NIDCAP Trainer and Co-Director of FINE International presented the Family and Infant Neurodevelopmental Education (FINE) Level 1 at the Auckland Starship NICU. A group of five nurses and allied health team members went on to complete the FINE Level 2 course during the same visit. This program provided ‘stepping-stones’ towards implementing NIDCAP and has been instrumental in providing a road map for fully integrating developmental care practices.

New Zealand is now working closely with Australia, accessing FINE training through the Australasian NIDCAP

Training Centre, Grace Centre for Newborn Intensive Care, The Children's Hospital at Westmead in Sydney. From this Centre, NIDCAP Trainer Nadine Griffiths and NIDCAP Professional Associate Professor Kaye Spence have been integral in facilitating and conducting FINE training for the neonatal teams in New Zealand.

With some fortuitous funding and collaboration between three tertiary units, one in the north Island (Auckland, Starship) and two in the South Island (Christchurch and Dunedin), plans were made to host three FINE 1 Courses. This would be the first time a large cohort of more than 60 neonatal nurses would access FINE training which, in turn, would certainly strengthen best practices across the three sites. Unfortunately, this wasn't to be because in March 2020 a global pandemic took hold and diverted all plans as healthcare facilities shifted into emergency planning unlike any ever experienced before. After a delay of two years, in May 2022 three seminars for FINE 1 were provided online rather than face-to-face. Over 40 neonatal team members from four sites in metro Auckland and Northland attended two workshops while Dunedin hosted another program for local team members. Online training meant that geographical distance was no longer a barrier to excellent education, and opportunities increased.

Impact of Developmental Care Education and Training Across New Zealand

The NICU in Dunedin introduced Family Integrated Care (FiCare) as their care model in November 2018 following involvement as an intervention unit of an international study comparing FiCare with standard NICU care. Christchurch was to follow, and in 2021 Auckland Starship NICU adopted this program as well. While it must be recognised that FiCare is not a developmental care model, it does support the systems in a hospital setting that, in turn, support developmental care strategies ensuring the parent role is integral in the care of their baby.

In the Wellington NICU, developmental care is supported by an excellent suite of pamphlets that share information with parents about how they can respond to their babies' needs at different gestational ages.

The Waikato NICU has a developmental care team comprised of senior RNs and members of the multidisciplinary team who report significant changes in the past five years. Their initiatives include a "Positioning Series" poster for developmentally supportive positioning for staff education. Positioning aids are available, although they report many nurses still prefer to make their own 'deep nest' using rolled towels and linen. The Waikato nursing team has found even the simplest ideas work, such as using phototherapy devices which facilitate containment and allow Kangaroo Care, cuddles, and breastfeeding without interrupting the delivery of the phototherapy. They have introduced Quiet Time, every day at 1400

hours when lights are dimmed, and parents are encouraged to provide skin-to-skin holding.

Further north at both tertiary NICUs in Auckland, nursing and allied health teams introduced developmental care rounds. Teams involved report this activity as being an excellent way to engage and encourage nurses by sharing knowledge and mentoring good practice. Parents also benefit, as with the team's guidance they learn how to read the behaviour of their baby and articulate their observations back to the healthcare team on ward rounds.

The Auckland Starship NICU introduced the Infant and Family-Centered Developmental Care (IFCDC) Standards (<https://nicudesign.nd.edu/nicu-care-standards/>). While this is a work in progress, it is envisaged that each standard will be accompanied by a multimedia education segment and video to help translate the standards from theory to practice at this site. The team has also enjoyed the opportunity, and experienced collegiality and networking by attending the Annual Gravens Conference on the Environment of Care for High-Risk Newborns held each year in Florida. This is quite a journey from New Zealand, but certainly worth the effort as it maintains the enthusiasm of the passionate staff who continue to pursue what is best for babies in the NICU environment.

In summary, over the past 20 years developmental care strategies have been successfully introduced to all neonatal centres in New Zealand, although practice variation remains at different hospital sites. With ongoing support from organisations (e.g., NNCA), interest from consumer groups (e.g., The Little Miracles Trust NICU parent peer-to-peer support group), and training from FINE 1 and 2 and potentially NIDCAP easily accessible through the Australasian NIDCAP Training Centre, the road map to ensure developmental care is fully integrated into neonatal care nationally is well on its way to achieving the best outcomes for pēpi and whanau entrusted in our care.

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