

Pasifika Parents' Experiences of Neonatal Skin-to-skin: Insight into Culturally Responsive Care

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ABSTRACT

Infants who survive prematurity have greater risk of neurodevelopmental impairments. Skin-to-skin during the neonatal period can improve infant outcomes. Greater understanding of Pasifika parents needs in implementing skin-to-skin could inform better implementation of skin-to-skin. This study explores Pasifika parents' experiences of skin-to-skin with their preterm infants in New Zealand-based neonatal units to inform culturally responsive care and service delivery. Pasifika parents of preterm infants born less than 33 weeks gestation were eligible to take part in interviews. Recruitment and data collection occurred in neonatal units across Auckland. Interpretive Phenomenological analysis informed by Talanoa and Tui Kakala research methods informed the interview format and data analysis. Five themes were identified: "overcoming fear and anxiety", "connection", "words matter", "actively managing racial bias", and "spirituality and religious beliefs facilitate resilience". Skin-to-skin promoted connection and strengthened all four pou of the Fonofale model. Communication styles of individual clinicians greatly influenced the Vā (relational space) experienced by families, which subsequently affected their experience of skin-to-skin. Findings indicate the need for Pasifika cultural competence training in order to provide culturally safe care when supporting an intervention like skin-to-skin. Intentionally encouraging and facilitating Pasifika parents' spirituality within the neonatal intensive care unit could optimise skin-to-skin. Clinician communication has the potential to affect the initiation, uptake, and experience of skin-to-skin.

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INTRODUCTION

Prematurity, defined as birth before 37 weeks' gestation (World Health Organization, 2023), is currently the leading cause of death worldwide in children under five years of age. An estimated 15 million infants are born prematurely worldwide each year and, of these, 9,000 die before the age of five due to preterm birth complications (Chawanpaiboon et al., 2018; Liu et al., 2016). The majority of infant deaths in New Zealand are infants born < 28 weeks' gestation with a death rate of 2.1 per 1,000 live births (Ministry of Health, 2019). Within New Zealand, infant death rates vary by ethnicity with significantly higher rates for Māori (5.9%) and Pasifika (6.2%), compared to European (2.8%) and Asian (2.5%) ethnic groups, with Pasifika infants < 28 weeks experiencing the highest death rates (Ministry of Health, 2019). Within the Neonatal Intensive Care Unit (NICU) environment, 13% of mothers are Pasifika (Malatest International, 2019), compared with 8.1% in the total

population (Stats NZ, 2019), indicating compounded negative outcomes for Pasifika infants.

Preterm infants have a greater risk of neurodevelopmental impairment compared to full-term infants, including motor impairments, cognitive deficits, poor academic achievements, and behavioural disorders (Chawanpaiboon et al., 2018, Twilhaar et al., 2018). Parents of preterm infants are at higher risk of experiencing postpartum depression (PPD), post-traumatic stress disorder (PTSD), and anxiety disorders (Lefkowitz et al., 2010) due to separation from infants and medicalised postpartum experiences (Caporali et al., 2020). Pasifika parents are at greater risk of these sequelae, given their over-representation as parents of premature infants. Understanding the experience of Pasifika families during the inpatient post-partum period may inform more supportive care for Pasifika parents, thus improving parent and infant long-term outcomes.

Skin-to-skin (also known as Kangaroo care) is a non-invasive, parent-mediated intervention for preterm infants that significantly reduces infant mortality and morbidity including infection, sepsis, severe illness, and respiratory issues (Conde-Agudelo & Díaz-Rossello, 2016). Skin-to-skin is defined as “early continuous and prolonged skin-to-skin contact, exclusive breastfeeding and early discharge” (Conde-Agudelo & Díaz-Rossello, 2016) and involves placing an infant vertically on their mother or father’s chest wearing only a nappy. Skin-to-skin is associated with better infant self-regulation, cognitive outcomes (Akbari et al., 2018), lower pain responses and infection rates, positive parent–infant experiences, and higher rates of breastfeeding (Akbari et al., 2018; Boundy et al., 2016). Skin-to-skin appears to provide infants with a dose-dependent neuroprotective effect by promoting and protecting structural brain development (Casper et al., 2018, Charpak et al., 2022; Head, 2014; Schneider et al., 2012), and reduces stress in parents (Vittner et al., 2015).

Low rates of implementation of skin-to-skin in NICU in New Zealand mirror low international uptake (Chan, 2016), with many eligible infants receiving very low doses of skin-to-skin (Bear, 2019) or none at all (Taylor, 2023). Internationally, barriers to implementation expressed by parents include insufficient physical space or social support, limited time, medical concerns for the infant (Seidman et al., 2015; Smith et al., 2017), and negative perceptions of staff (Blomqvist et al., 2013; Seidman et al., 2015). Variable support by nursing staff to implement skin-to-skin has been reported internationally, with differences noted with non-white mothers reporting receiving less support than white mothers (Hendricks-Muñoz et al., 2013). The role of the specialist neonatal physiotherapist within the interdisciplinary team has become increasingly important, as survival rates of preterm infants have increased, shifting the focus on developmental care and supporting long-term neurodevelopmental outcomes (Sweeney et al., 2009). The role requires advanced training to meet the neurodevelopmental and musculoskeletal needs of physiologically unstable infants, as well as supporting parents emotionally and practically, and providing culturally safe care in a highly stressful environment (Doğan et al., 2022; Sweeney et al., 2009). With all the neuroprotective effects skin-to-skin has, neonatal physiotherapists therefore play a vital role in supporting the uptake, thus mitigating some of the downstream neurodevelopmental concerns.

Whānau Ora envisions prosperity for all Pasifika families in New Zealand by supporting and building family capability (Ministry of Health, 2014). The umbrella term Pasifika has been used to describe all migrants from the Pacific Islands and their descendants now residing in New Zealand, while acknowledging there is substantial heterogeneity within this population (Winter-Smith et al., 2023). Increased uptake of skin-to-skin for premature Pasifika infants is a specific, low-cost, and evidenced-based strategy for improving infant mortality. Greater understanding of the experience of Pasifika parents with skin-to-skin is a key step in designing tailored health initiatives facilitating access to this intervention and thus improved health outcomes. The aim of this study was to explore Pasifika parents’ lived experience of skin-to-skin with their preterm infant while receiving care in a New Zealand neonatal unit.

METHODS

Methodology

This study employed an Interpretive Phenomenological Analysis (IPA) (Smith et al., 2009) method, informed by Talanoa and Tui Kakala methods (Thaman, 1997; Vaoieti, 2006). Through IPA, knowledge and values of caregivers’ experiences of skin-to-skin were explored. Data collection and analysis were guided by Talanoa principles of relationality and reciprocity, enabling cultural safety during interviews, and Tui Kakala methods ensured the cultural authenticity of analysis. Two Pasifika cultural advisors (GL, ABP) provided extensive guidance in adhering to Talanoa principles throughout the study. Ethics approval was obtained through the University of Otago Ethics Committee (reference H20/069). Locality approval was provided for each study site alongside Māori consultation.

Participant selection and recruitment

Inclusion criteria were Pasifika parents receiving neonatal care from one of the three study sites for a preterm infant born < 33 weeks’ gestation. Exclusion criteria were infants with health issues that would preclude the provision of skin-to-skin (e.g., unrepaired surgical conditions, major surgery, requiring ventilation or muscle relaxants). Participant recruitment occurred by consecutive purposive sampling between November 2020 and July 2021 with invitation to the study offered verbally by onsite nurses and neonatal physiotherapists working with families. Following consent, parents were contacted for interviews.

Data collection

Consistent with IPA and Talanoa methods, open and flexible interviewing structures were employed in which a semi-structured interview guide was used to prompt reflections, while focusing on a respectful and reciprocal discussion that ended when points already discussed were being revisited. Interviews were recorded using Zoom videoconferencing software version 5.4.3 on two password protected devices. Interviews were transcribed verbatim.

Analysis

Data analysis followed the six steps of IPA (Smith et al., 2009) while being informed by the Tui Kakala process described by Vaoieti (2006) and Thaman (1997). After reading and re-reading the raw data, initial noting took place, and then emergent themes were developed. Tui is the process where the knowledge gained through the rich Talanoa discussions are woven together, authentically arranging the data to ensure the relevance and usefulness of the research produced (Thaman, 1997; Vaoieti, 2006). When developing emergent themes and seeking connections across those themes, cultural and technical skill were of utmost importance to ensure the essence of participants’ experience was fully captured and support from cultural advisor ABP was enlisted to oversee each step of the data analysis.

RESULTS

Seven families (seven mothers, four fathers) were interviewed in person, with all but one still in a neonatal unit at the time. One interview took place over the phone within a week of discharge. Families represented a range of Pasifika ethnicities,

with parents aged between 20 and 40 years, and four families having other children at home (Table 1). Most infants were singleton, with one set of twins and one set of triplets (with one of the triplets deceased). Eight of the 10 infants were born extremely premature, less than 28 weeks' gestation. Data analysis produced five superordinate themes and 13 subordinate themes (Table 2).

Theme 1. Overcoming fear and anxiety

This theme reflects the emotional context in which families experienced skin-to-skin with their infant, and the impact fear and anxiety had on their experience. Fear related to concern about harming their vulnerable infant during handling for skin-to-skin. Anxiety was described as worry and unease regarding their infant's medical stability when first doing skin-to-skin.

It's a rollercoaster

Parents shared extreme variations of experiences through different stages of the NICU journey. These experiences were turbulent fluctuations between extreme highs and lows related to their infant's medical progress and the psychological adjustment of parenting an infant in a foreign environment, as Participant 5 describes:

They say that it's a roller coaster. There are lots of lows and you have a little bit of a high and then there'll be another setback. That's exactly the best way to describe the NICU experience actually. You never get over it.

Longing met with fear

This subtheme describes parents' experience of their first skin-to-skin contact with their infant. For all parents, their first

Table 1

Participants' Demographic Data

Participant	Role	Ethnicity	Age range (years)	Infant	Gestation (weeks)	Birth weight
1	Mum	Hawaiian	26–30	Singleton	28	VLBW
2	Dad	Rarotongan				
3	Mum	Samoaan/ NZ Māori	MD	Triplets	24	ELBW
4	Dad	NZ Māori				
5	Mum	Fijian Indian	36–40	Singleton	24	ELBW
6	Mum	Samoaan	21–25	Singleton	26	ELBW
7	Dad	Tongan				
8	Mum	Samoaan	26–30	Singleton	29	LBW
9	Dad	Tongan				
10	Mum	Tongan	36–40	Twins	25	ELBW
11	Mum	Tongan/ Rotuman	31–35	Singleton	26	VLBW

Note. ELBW = extremely low birth weight (< 1000 g); LBW = low birth weight (< 2500 g); MD = missing data; NZ = New Zealand; VLBW = very low birth weight (< 1500g).

Table 2

Overview of the Superordinate and Subordinate Themes Developed

Superordinate themes	Subordinate themes
1. Overcoming fear and anxiety	1.1. "It's a rollercoaster" 1.2. Longing met with fear 1.3. Moving from fear to confidence
2. Connection	2.1. Heart to heart 2.2. Touch in lieu of skin-to-skin 2.3. Becoming parents
3. Words matter	3.1. Reassurance and encouragement 3.2. Do not do that
4. Actively managing racial bias	4.1. Differences in care 4.2. Being an advocate for your infant 4.3. Culturally supportive care
5. Spirituality and religious beliefs facilitates resilience	5.1. Pillar of strength 5.2. Spiritual connection with your baby

skin-to-skin was one of anticipation and longing met with fear and hesitancy in an emotional context of anxiety. The longing to physically hold their infant was reported by all parents and was described as a significant part of parenthood in the Pasifika community by many, representing a gateway to nurturing their infant, both practically and emotionally. In contrast, the first experience of skin-to-skin was described by Participant 11 as “nice but nerve-wrecking”.

Yeah. Scary and just I did not move. I held her for two hours just like a statue because you just do not want to move around with her in case anything happens. I enjoyed it, but then I also was like yeah, how do I explain it. It was nice but it was nerve-wrecking at the same time.

Moving from fear to confidence

Families were reliant on the clinical team initially to be able to start having skin-to-skin with their infant and then the process by which they started to build comfort and confidence. Skin-to-skin was described as a new skill parents had to learn, and the provision of step-by-step support appeared to provide a bridge from fear to confidence. This learning support started with nurses transferring infants, showing parents how to do this, then supervising, and finally enabling parents to do it independently: “They would break it down to how you want it to be explained to you. That helped me and my partner a lot because we learnt a lot of things” (Participant 9). Parents described a gradual reduction in the support provided and the feeling of pride and accomplishment as they implemented skin-to-skin, with several parents describing this as moving into their parenting roles.

Theme 2. Connection

Heart to heart

Skin-to-skin was perceived by parents to facilitate and encourage connection with their infant. Several parents used the term heart to heart in reference to skin-to-skin. Parents’ descriptions of ‘heart to heart’ not only included the physical component of their infant being placed on their chest, thereby aligning their hearts, but also included a description of deep emotional connection. The physical components of connection experienced by parents included improved breathing and sleep, as well as the emotional component of bonding.

Bonding. Feeling comfortable with each other ... There are a lot of communication [sic] between skin-to-skin between baby and mum that cannot be interpreted. For me and my baby, it was her breathing. Because she had difficulty breathing, putting her on me helped regulate her breathing. So, the calmer she was on me, the better her breathing would be. The benefit of that is they sleep deeper, and they heal. (Participant 11)

Touch in lieu of skin-to-skin

Touch became a valuable source of connection when parents could not implement skin-to-skin and provided a way for parents to move from feeling disconnected to connected with their infants. Parents of extremely preterm infants, less than 28 weeks’ gestation, particularly described feeling disconnected from their infants and were more often unable to implement skin-to-skin due to their infant’s unstable condition. These parents described the connective impact of simply touching their

infants as they lay in their incubator. One of the participants described the impact of touch from a cultural perspective.

In my culture and my religion, it is very important to hold the baby so that was something that I was very passionate about. Holding, talking and any form of interaction. There was [sic] a lot of times that I could not because of the way he was. (Participant 5)

Becoming parents

Skin-to-skin allowed parents to take up their parental roles in the NICU environment, thus enabling deeper connections to develop. It provided an opportunity for relationship building and a way to get to know the unique attributes and preferences of their infant. Skin-to-skin was described by parents as a way to protect, nurture, and comfort their infants. Participant 4 describes:

But yeah, I don’t really think it comes down to a cultural thing it’s just more being a parent ... you do what you have to do to look after them, protect them. Yeah, parenting because I don’t think any parent would just come in and cuddle with anybody’s baby.

Theme 3. Words matter

Communication styles used by staff had a significant impact on the parent’s comfort and confidence when doing skin-to-skin with their infants. Individual staff members appeared to have more impact on the parents’ experiences of skin-to-skin than the experience of being in a particular neonatal unit.

Reassurance and encouragement

Parents described how much they valued reassurance and encouragement from staff, which played a pivotal role in the process of moving parents from fear to confidence during skin-to-skin and was even more critical after a negative experience of skin-to-skin. As Participant 8 shared, words had the ability to provide comfort, even when their infants were not progressing:

And you know even though, like your baby’s not progressing and stuff like that they make it into a positive thing ... Again, never make you feel like, sad like you just know that their words are comforting and stuff ... that’s how I feel when they tell us information.

When having an infant on the NICU, what came across is the vulnerable position parents are in and how much they rely on their medical team for support. Participants therefore shared how vital a trusting relationship was with their medical team and when reassuring and encouraging language was used, this helped to build trust.

Don’t do that

In contrast to the first subtheme, when parents experienced a more direct and judgemental communication style, they shared not feeling comfortable requesting support, which then impacted on their ability to do skin-to-skin with their infants, as Participant 6 relayed:

I go off energy so if the energy doesn’t feel right, I feel uncomfortable even doing anything to baby. I think there are sometimes where there are nurses that were kind of demanding, where they like do not do this. This will make him de-sat or what not.

Theme 4. Actively managing racial bias

Differences in care

Several parents expressed experiences of being treated differently to other families while on the NICU or witnessing lower levels of support to other Māori or Pasifika families. Parents attributed these differences in care by some nurses to racial bias, whether intentional or not. Participant 10 explains this was a familiar experience as a Pasifika woman:

I know from experience and just growing up as a Tongan in the [New Zealand] community that there definitely are stereotypes of how people talk and communicate. You get treated like that [dismissively] whether people realise they are doing it or not.

Specific examples where differences in care were experienced were relayed by parents, including inconsistent visitation guidelines. For example, Participant 5 shared her experience where they received different instructions:

Oh, they're allowed. Just to see that [proactive support from nurses for some (white) families regarding having extended family visit on the unit] and then you suddenly just get rejected [in your request to have family visit]. It makes you question, is this racial?

Differences in care the parents described included culturally insensitive care (e.g., making inappropriate jokes about their infants), and an experience of being unsupported when they had culturally related needs or observed these in other parents (such as language barriers). Participant 11 described an example that highlighted the importance of having a cultural understanding of how a Pasifika person might respond agreeably when unsure and in need of support: "Yeah, language, and how to communicate with them because they may say yes, yes, yes, but really, they do not know, or they do not feel worthy to ask for help because they are uncomfortable to open up."

Being an advocate for your baby

Parents described the impact of racially biased care from nurses on their experience of skin-to-skin with their infant. Parents described feeling less comfortable asking for help and some mothers shared examples where they had to strongly advocate to be involved in their infant's care in the absence of support from nurses. Parents varied in taking a subtle or more assertive approach to actively ensuring their needs and those of their infant were met. Participant 10 shared her experience where she had to actively advocate for an additional chair to be able to have skin-to-skin as a family with their twins. Her husband, who is Palagi, had commented to her at the time that she was being treated differently compared to himself. She described the use of an assertive approach as a lifelong strategy she had learned for responding to racial bias in all spheres of life but recognised that it was needed while on the NICU to optimise the care she received, including facilitating skin-to-skin:

There are little babies that you are having to help right now. If you're not confident for them then who will be? Until they have their own voices you have to be that person. Especially as a brown person because I feel there are [sic] always going to be unconscious bias. (Participant 10)

Culturally supportive care

This subtheme reflects contrasting experiences of care that were supportive of their culture, in which parents felt respected and encouraged to engage in skin-to-skin. Culturally supportive care included support to pray, the importance of including and accommodating the wider family system, and being able to express their values and beliefs at their infant's bedside. Being able to express their culture within the NICU was referred to as "necessary for survival" when navigating the NICU journey, as Participant 5 shared:

You have to understand; people have to survive there so you have to make sure that their values are incorporated otherwise that family system will not survive. It will be hard for people to cope if the health system starts changing the family's ways.

Theme 5: Spirituality and religious beliefs facilitate resilience

Pillar of strength

This subtheme describes the firm foundation faith provided the parents in the unpredictable NICU environment. Parents' spirituality and religious beliefs, both Christian and Muslim, ultimately assisted families to overcome their anxieties and provided hope to manage a journey where their infant's health was fluctuating and encouraged parents to persist with skin-to-skin. Parents also shared how they relied on their faith particularly when things weren't going well: "Um, you know, sometimes she side-tracks, and we're just like come on baby like [sic], we just pray upon her and just, yeah, just keep her going" (Participant 8). Two key components of parental spiritual beliefs were their personal relationship with God/Allah, as well as a community of faith in which family and friends were also praying for their infant. While experiencing the turbulence of the emotional rollercoaster, their faith and spirituality provided peace and assurance amid the turbulence.

Spiritual connection

Parents would engage in prayer while having skin-to-skin with their infant. They described how this deepened their connection with their infant: "For me when I was doing skin-to-skin, I was totally connected with him. I would pray. Those are the things that was particularly very important for me" (Participant 5).

DISCUSSION

This study explored Pasifika parents lived experience of skin-to-skin with their preterm infant while receiving care in a New Zealand-based neonatal unit. Parents reported they "overcame fear and anxiety" to implement skin-to-skin. While not unique to Pasifika people (Forcada-Guex et al., 2011; Galea et al., 2021; Hall et al., 2016; Provenzi et al., 2016), the experiences of fear and anxiety for these Pasifika parents were compounded by needs related to their language and cultural beliefs and practices that often went unmet by staff. Collectively, these experiences amplified parents' experience of a loss of choice and control over the care and connection with their infants. Despite longing to touch their infant (including implementing skin-to-skin), a fear of harming their infant and being reprimanded by staff inhibited parents from doing so.

Like most parents of infants in NICU, Pasifika parents needed support to initiate skin-to-skin, and to reconcile their expectations as new parents, with the lived experience of having a preterm infant in the NICU (Maastrup et al., 2018; Vazquez & Cong, 2014). Skin-to-skin offers an important opportunity for this reconciliation process, enabling touch and connection to occur in a way that was experienced as safe for both parent and infant. Once initiated, skin-to-skin facilitated “connection” and relationship building with their infant and increased confidence in their parenting role within the NICU context. Parents’ references to connection included bonding and attachment. Some described how engaging in skin-to-skin helped them to move from a place of disconnection with their infant to one of connection, consistent with previous research (Gooding et al., 2011).

Culture greatly affects how stressful or traumatic events (such as NICU admission) are perceived and managed (McCubbin et al., 1998); therefore, culturally safe care (Adcock et al., 2023) that upholds parents’ mental wellbeing in the NICU setting is a critical element of optimising parent and infant outcomes. A multilayered approach to culturally safe care has been suggested with specific interventions focused on supporting both maternal and paternal mental wellbeing (Treyvaud et al., 2019). The Fonofale model is a Pacific model of health developed by Fuimaono Karl Pulotu-Endemann in 1984 (Pulotu-Endemann, 2001), where Samoans, Cook Islanders, Tongans, Niueans, Tokelauns, and Fijians were able to share their values and beliefs as part of workshops held. Although not a part of the data analysis process, the Fonofale model provided a powerful illustration of how skin-to-skin contact synergised many components of health for infants and parents, as described by parents in this study, to create a cascade of positive health effects. In this model the concept of family is foundational and represented by the floor. Culture is depicted as the roof that provides shelter or protection. The four pou or poles represent spirituality (traditional or any other religion), physical (biological wellbeing), mental (emotions, thoughts, feelings), and other (personal factors such as age, sex, sexual orientation). These pou connect and support the relationship between culture and community, including a continuous interaction with one another (Pulotu-Endemann, 2001). Pasifika parents articulated perceptions that skin-to-skin enriched infant’s physical pou by improving their breathing and sleep; infant and parent mental pou through the calming effect of skin-to-skin; and infant and parent spiritual pou through the opportunity for spiritual connection during skin-to-skin.

Skin-to-skin created an experience of being together as a family unit as parents stepped into the role of parenting. Given family is the foundation of the Fonofale model, skin-to-skin became a substantial vehicle for shaping early family relationships and the foundations of health for the infant and family. Distinctively, Pasifika parents shared how their spirituality and religious beliefs facilitated their initiation of skin-to-skin by replacing thoughts of fear with thoughts of hope and trust in a higher being. Without practical support from staff, or a sense that to pray with their infant was acceptable, some parents felt uncomfortable attempting skin-to-skin. In these instances, parents and infants missed opportunities for higher dose skin-to-skin, but also missed the opportunities for deeper spiritual connection with their infant.

The first stage of skin-to-skin for many parents is characterised by overcoming conflicting emotions through professional support and experience (Maastrup et al., 2018). As reported by Pasifika parents in this study, initiation and sustained uptake of skin-to-skin was significantly influenced by nurses, as facilitators of the process (Vazquez & Cong, 2014). Conversely, the absence of nurse support, when this occurred, was also keenly felt. The Pasifika cultural concept of Vā, a positive relational climate (Anae, 2016; Ioane & Tudor, 2017), explains the impact of nurses’ words and actions during parent attempts at skin-to-skin, and provides direction in improving the support provided to improve implementation of skin-to-skin among Pasifika families. Vā has been described as a space that can be fruitful or, conversely, dangerous and unsafe if not well supported (Ioane & Tudor, 2017). Parents experienced a wide range of communication styles from clinicians, varying from warm and encouraging to critical and judgemental. While trust and supportive relationships are fundamental to family-centred care (Gooding et al., 2011), maintaining the Vā was particularly significant for Pasifika parents who, culturally, view individual identity (such as their identity as a parent) through the relationships with others (Anae, 2016). Parents in this study experienced both extremes of Vā, which directly impacted on their participation in skin-to-skin. Although other studies report nurses’ intention to provide the best care to infants and families, staff shortages and sustained high workloads may have impact on the quality of their care, including their communication with parents (Malatest International, 2019). Authentic relational communication by health professionals is difficult to imagine in a setting operating at or near crisis levels for sustained periods. In order to facilitate a culturally safe and clinically positive relational space (Vā), nursing burnout and compassion fatigue may need to be explored and addressed (Tabakakis, 2019).

Given Pasifika culture has hierarchical relational structures that affect engagement with health professionals (Medical Council of New Zealand, 2010), ways of involving Pasifika parents in decision making within the NICU may need to be tailored for Pasifika parents. A communication framework for NICU proposed by Wreesmann et al. (2021) may provide a starting point for culturally safe communication training and service development that will support the uptake of skin-to-skin. This framework proposes structured regular updates to parents about their infant’s medical status as a strategy to decrease parental anxiety and improve their relationship with medical staff (Vazquez & Cong, 2014). Similarly, support from nurses that was instrumental in the uptake of skin-to-skin described by the parents in this study included the provision of clear information, being shown the skin-to-skin process step by step, and gradually transitioning from hands-on modelling from nurses to verbal coaching and encouragement. Although nurses spend more time at the bedside, with neonatal physiotherapy often only present on a part-time basis, the communication approach and information provided needs to be consistent. Any communication training would therefore have to include the wider interdisciplinary team. A co-design pilot of structured strategies to enhance bilateral communication with Pasifika parent partners could clarify if these kinds of communication structures enhance the uptake of skin-to-skin for Pasifika parents.

Findings indicate that racially differential care is a barrier to skin-to-skin and a priority for service improvement to achieve more equitable outcomes for Pasifika preterm infants. Self-reported experiences of racism, including by health professionals, are higher for Māori and Pasifika peoples compared to other ethnicities, suggesting this phenomenon is not limited to NICU settings or this study (Health and Disability System Review, 2020). The differences in care expressed by participants in this study may have impacted Pasifika parents' help seeking on the NICU, such as requesting support to initiate regular skin-to-skin. Pasifika people accessing NICU services in New Zealand experience a "summative disadvantage" (Graham et al., 2022), of negative social determinants of health and inequitable or absent culturally safe care despite cultural safety training having been embedded into nursing curricula for decades (DeSouza, 2008; Jones et al., 2020). Investment into mitigating social determinants that result in Pasifika infants needing NICU care as well as those that impact on Pasifika parents' ability to be present on the NICU, and therefore have skin-to-skin with their infants, should be part of any solution for improving outcomes for Pasifika families.

To address the health inequalities and poor health outcomes experienced by Pasifika peoples, a culturally safe and competent health service in which cultural practices, concepts, and diverse world views are integrated into high-quality, evidence-informed health services is essential (Betancourt et al., 2003; Ministry of Health, 2020). Pacific health models like the Fonofale model may be helpful in informing such health services that enable Pasifika parents to fully experience all the benefits of skin-to-skin with their infants.

Strengths and limitations

Confidence to participate in interviews in English rather than participants' first languages excluded parents whose experience is impacted by language barriers with nursing staff. Inclusion of non-English-speaking Pasifika parents in the study may have provided greater nuance in the knowledge gained about traditional cultural practices, as families may be more deeply embedded in Pasifika cultural beliefs and practices than those born and raised in New Zealand. Further investigations would require culturally safe and sensitive practices acknowledging that Pasifika parents are more likely to have had a heightened experience of fear and anxiety. Research of Pasifika communities should involve Pasifika researchers in the first instance and, where possible, in the research process (Health Research Council of New Zealand, 2014). Future research done by Pasifika researchers including ethnic-specific research within the Pacific populations may add depth and clarity to the experiences of Pasifika parents of NICU. Recruitment predominantly relied on in-person contact so parents who could not be present on the NICU for various reasons are not represented in this study, thereby not fully capturing Pasifika parents who may be more exposed to important social circumstances that contribute to health disadvantages. Future studies that specifically aim to recruit parents who have difficulty attending NICU are an important next step in understanding and addressing the uptake of skin-to-skin with Pasifika families.

In relation to the strengths of this study, the qualitative design provided rich description and insights into the experiences of attempting skin-to-skin on NICU settings in New Zealand. The rich descriptions achieved relied heavily on the valuable contributions from the cultural advisors who participated in this research throughout all phases. Their guidance informed the ways interviews occurred, including, for example, taking time to connect and provide a safe relational space before starting the interviews and data analysis informed by Pasifika perspectives, although led by a Palagi researcher. Strong links with Pasifika NICU staff enabled recruitment of the planned sample size and the documentation of a diverse range of experiences including parents who had experienced different infant birth and health journeys. Four fathers participated in interviews, both individually and in interviews of couples, providing rare insights into the experiences of Pasifika fathers. A future study focusing centrally on the needs and experiences of Pasifika fathers is warranted.

CONCLUSION

Pasifika families highly valued skin-to-skin with their preterm infants and, from a Pasifika perspective, it was found to synergise many cultural components of health, as represented in the Fonofale model. As such, skin-to-skin was a catalyst for a cascade of positive health effects for Pasifika infants and parents and when spirituality and religious beliefs were supported by medical staff, this further enhanced their implementation of skin-to-skin. Vā, the Pasifika concept of the relational space, illuminates the relationship between experiencing cultural safety, clinician communication, and the uptake of skin-to-skin.

KEY POINTS

1. Pasifika parents valued skin-to-skin with their preterm infants and described its impacts on all components of the Fonofale model, thus facilitating a cascade of health benefits.
2. Spirituality and religious beliefs enabled Pasifika parents to overcome their fear and anxiety and experience spiritual connection with their infants during skin-to-skin when this was supported by the nursing staff.
3. Vā (relational space) impacted on parents' comfort and ability to undertake skin-to-skin, thereby highlighting the importance of cultural safety training for health professionals and their use of empowering communication styles.
4. The Fonofale model is a helpful guide to developing culturally safe NICU environments that enhance early engagement of Pasifika parents in skin-to-skin and other infant interactions.

DISCLOSURES

There are no conflicts of interest that may be perceived to interfere with or bias this study. The research was partially funded by Health New Zealand.

PERMISSIONS

This research was approved by the University of Otago Ethics Committee (H20/069).

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CONTRIBUTIONS OF AUTHORS

Design conceptualisation, methodology, and validation, CT, FG, DE, and ABP; formal analysis, CT, FG, DE, and ABP; investigation, CT; resources, CT, FG, DE, and ABP; data curation, CT; writing – original draft preparation, CT; writing – review and editing, CT, FG, DE, and ABP.

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REFERENCES

- Adcock, A., Cram, F., Edmonds, L., & Lawton, B. (2023). Culturally safe neonatal care: Talking with health practitioners identified as champions by Indigenous families. *Qualitative Health Research, 33*(6), 531–542. <https://doi.org/10.1177/10497323231164550>
- Akbari, E., Binnoon-Erez, N., Rodrigues, M., Ricci, A., Schneider, J., Madigan, S., & Jenkins, J. (2018). Kangaroo mother care and infant biopsychosocial outcomes in the first year: A meta-analysis. *Early Human Development, 122*, 22–31. <https://doi.org/10.1016/j.earlhumdev.2018.05.004>
- Anae, M. (2016). Teu le va: Samoan relational ethics. *Knowledge Cultures, 4*(3), 117–130. <https://www.addletonacademicpublishers.com/contents-kc/859-volume-4-3-2016/2835-teu-le-va-samoan-relational-ethics>
- Bear, R. (2019). *Kangaroo mother care: Participatory action research within a neonatal intensive care unit in Aotearoa New Zealand* [Doctoral dissertation, Te Herenga Waka–Victoria University of Wellington]. Te Herenga Waka–Victoria University of Wellington. <https://doi.org/10.26686/wgtn.17135888>
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports, 118*(4), 293–302
- Blomqvist, Y. T., Frölund, L., Rubertsson, C., & Nyqvist, K. H. (2013). Provision of kangaroo mother care: Supportive factors and barriers perceived by parents. *Scandinavian Journal of Caring Sciences, 27*(2), 345–353. <https://doi.org/10.1111/j.1471-6712.2012.01040.x>
- Boundy, E. O., Dastjerdi, R., Spiegelman, D., Fawzi, W. W., Missmer, S. A., Lieberman, E., Kajeepeta, S., Wall, S., & Chan, G. J. (2016). Kangaroo mother care and neonatal outcomes: A meta-analysis. *Pediatrics, 137*(1), Article e20152238. <https://doi.org/10.1542/peds.2015-2238>
- Caporali, C., Pisoni, C., Gasparini, L., Ballante, E., Zecca, M., Orcesi, S., & Provenzi, L. (2020). A global perspective on parental stress in the neonatal intensive care unit: A meta-analytic study. *Journal of Perinatology, 40*(12), 1739–1752. <https://doi.org/10.1038/s41372-020-00798-6>
- Casper, C., Sarapuk, I., & Pavlyshyn, H. (2018). Regular and prolonged skin-to-skin contact improves short-term outcomes for very preterm infants: A dose-dependent intervention. *Archives De Pédiatrie, 25*(8), 469–475. <https://doi.org/10.1016/j.arcped.2018.09.008>
- Chan, G. J., Valsangkar, B., Kajeepeta, S., Boundy, E. O., & Wall, S. (2016). What is kangaroo mother care? Systematic review of the literature. *Journal of Global Health, 6*(1), Article 010701. <https://doi.org/10.7189/jogh.06.010701>
- Charpak, N., Tessier, R., Ruiz, J. G., Uriza, F., Hernandez, J. T., Cortes, D., & Monteleone-Pomar, A. (2022). Kangaroo mother care had a protective effect on the volume of brain structures in young adults born preterm. *Acta Paediatrica, 111*(5), 1004–1014. <https://doi.org/10.1111/apa.16265>
- Chawanpaiboon, S., Vogel, J. P., Moller, A.-B., Lumbiganon, P., Petzold, M., Hogan, D., Landoulsi, S., Jampathong, N., Kongwattanakul, K., Laopaiboon, M., Lewis, C., Rattanakanokchai, S., Teng, D. N., Thinkhamrop, J., Watananirun, K., Zhang, J., Zhou, W., & Gülmezoglu, A. M. (2018). Global, regional, and national estimates of levels of preterm birth in 2014: A systematic review and modelling analysis. *The Lancet Global Health, 7*(1), e37–e46. [https://doi.org/10.1016/s2214-109x\(18\)30451-0](https://doi.org/10.1016/s2214-109x(18)30451-0)
- Conde-Agudelo, A., & Diaz-Rossello, J. L. (2016). Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD002771.pub4>
- DeSouza, R. (2008). Wellness for all: The possibilities of cultural safety and cultural competence in New Zealand. *Journal of Research in Nursing, 13*(2), 125–135. <https://doi.org/10.1177/1744987108088637>
- Doğan, İ. E., Balcı, N. Ç., & Gündüz, A. G. (2022). Physiotherapy and rehabilitation approaches to premature infants in neonatal intensive care units. *Journal of Physical Medicine Rehabilitation Studies & Reports, 4*(2), 1–5. [https://doi.org/10.47363/jpmrs/2022\(4\)150](https://doi.org/10.47363/jpmrs/2022(4)150)
- Forcada-Guex, M., Borghini, A., Pierrehumbert, B., Ansermet, F., & Muller-Nix, C. (2011). Prematurity, maternal posttraumatic stress and consequences on the mother–infant relationship. *Early Human Development, 87*(1), 21–26. <https://doi.org/10.1016/j.earlhumdev.2010.09.006>
- Galea, M., Park, T., & Hegadoren, K. (2021). Improving mental health outcomes of parents of infants treated in neonatal intensive care units: A scoping review. *Journal of Neonatal Nursing, 28*(5), 327–334. <https://doi.org/10.1016/j.jnn.2021.10.002>
- Gooding, J. S., Cooper, L. G., Blaine, A. I., Franck, L. S., Howse, J. L., & Berns, S. D. (2011). Family support and family-centered care in the neonatal intensive care unit: Origins, advances, impact. *Seminars in Perinatology, 35*(1), 20–28. <https://doi.org/10.1053/j.semperi.2010.10.004>
- Graham, F., Boland, P., Jones, B., Wallace, S., Taylor, W., Desha, L., Maggo, J., Mc Kerchar, C., & Grainger, R. (2022). Stakeholder perspectives of the sociotechnical requirements of a telehealth wheelchair assessment service in Aotearoa/New Zealand: A qualitative analysis. *Australian Occupational Therapy Journal, 69*(3), 279–289. <https://doi.org/10.1111/1440-1630.12790>
- Hall, S. L., Phillips, R., & Hynan, M. T. (2016). Transforming NICU care to provide comprehensive family support. *Newborn and Infant Nursing Reviews, 16*(2), 69–73. <https://doi.org/10.1053/j.nainr.2016.03.008>
- Head, L. M. (2014). The effect of kangaroo care on neurodevelopmental outcomes in preterm infants. *The Journal of Perinatal & Neonatal Nursing, 28*(4), 290–299. <https://doi.org/10.1097/jpn.0000000000000062>
- Health and Disability System Review. (2020, June 16). *Health and disability system review – Final report. Pūrongo Whakamutunga*. Ministry of Health. <https://www.health.govt.nz/publications/health-and-disability-system-review-final-report>
- Hendricks-Muñoz, K. D., Li, Y., Kim, Y. S., Prendergast, C. C., Mayers, R., & Louie, M. (2013). Maternal and neonatal nurse perceived value of kangaroo mother care and maternal care partnership in the neonatal intensive care unit. *American Journal of Perinatology, 30*(10), 875–880. <https://doi.org/10.1055/s-0033-1333675>
- Ioane, J., & Tudor, K. (2017). The fa'asamoa, person-centered theory and cross-cultural practice. *Person-Centered & Experiential Psychotherapies, 16*(4), 287–302. <https://doi.org/10.1080/14779757.2017.1361467>
- Jones, B., King, P. T., Baker, G., & Ingham, T. (2020). COVID-19, intersectionality, and health equity for Indigenous peoples with lived experience of disability. *American Indian Culture and Research Journal, 44*(2), 71–88. <https://doi.org/10.17953/aicrj.44.2.jones>
- Lefkowitz, D. S., Baxt, C., & Evans, J. R. (2010). Prevalence and correlates of posttraumatic stress and postpartum depression in parents of infants in the Neonatal Intensive Care Unit (NICU). *Journal of Clinical Psychology in Medical Settings, 17*(3), 230–237. <https://doi.org/10.1007/s10880-010-9202-7>

- Liu, L., Oza, S., Hogan, D., Chu, Y., Perin, J., Zhu, J., Lawn, J. E., Cousens, S., Mathers, C., & Black, R. E. (2016). Global, regional, and national causes of under-5 mortality in 2000–15: An updated systematic analysis with implications for the Sustainable Development Goals. *The Lancet*, 388(10063), 3027–3035. [https://doi.org/10.1016/s0140-6736\(16\)31593-8](https://doi.org/10.1016/s0140-6736(16)31593-8)
- Maastrup, R., Weis, J., Engsig, A. B., Johannsen, K. L., & Zoffmann, V. (2018). 'Now she has become my daughter': Parents' early experiences of skin-to-skin contact with extremely preterm infants. *Scandinavian Journal of Caring Sciences*, 32(2), 545–553. <https://doi.org/10.1111/scs.12478>
- Malatest International. (2019). *Review of neonatal care in New Zealand*. Ministry of Health. <https://www.health.govt.nz/publications/review-of-neonatal-care-in-new-zealand>
- Medical Council of New Zealand (2010, May 1). *Best outcomes for Pacific peoples: Practice implications*. <https://uat.mcnz.org.nz/our-standards/current-standards/cultural-competence/>
- McCubbin, H. I., McCubbin, M. A., Thompson, A. I., & Thompson, E. A. (1998). Resiliency in ethnic families: A conceptual model for predicting family adjustment and adaptation. In H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Fromer (Eds.), *Resiliency in Native American and immigrant families* (pp. 3–48). Sage Publications Inc.
- Ministry of Health. (2014, June 26). *'Ala Mo'ui: Pathways to Pacific health and wellbeing 2014–2018*. <https://www.health.govt.nz/publications/ala-mou-i-pathways-to-pacific-health-and-wellbeing-2014-2018>
- Ministry of Health. (2019, November 20). *Fetal and infant deaths 2016*. <https://www.health.govt.nz/publications/fetal-and-infant-deaths-2016>
- Ministry of Health. (2020, June 13). *Ola Manuia: Pacific health and wellbeing action plan 2020–2025*. <https://www.health.govt.nz/publications/ola-manuia-pacific-health-and-wellbeing-action-plan-2020-2025>
- Health Research Council of New Zealand. (2014). *Pacific health research guidelines 2014*. <https://www.hrc.govt.nz/resources/pacific-health-research-guidelines-2014>
- Pulotu-Endemann, F. K. (2001, September). *Fonofale model of health*. <https://d3n8a8pro7vhmx.cloudfront.net/actionpoint/pages/437/attachments/original/1534408956/Fonofalemodel explanation.pdf?1534408956>
- Provenzi, L., Barello, S., Fumagalli, M., Graffigna, G., Sirgiovanni, I., Savarese, M., & Montiroso, R. (2016). A comparison of maternal and paternal experiences of becoming parents of a very preterm infant. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 45(4), 528–541. <https://doi.org/10.1016/j.jogn.2016.04.004>
- Schneider, C., Charpak, N., Ruiz-Peláez, J. G., & Tessier, R. (2012). Cerebral motor function in very premature-at-birth adolescents: A brain stimulation exploration of kangaroo mother care effects. *Acta Paediatrica*, 101(10), 1045–1053. <https://doi.org/10.1111/j.1651-2227.2012.02770.x>
- Seidman, G., Unnikrishnan, S., Kenny, E., Myslinski, S., Cairns-Smith, S., Mulligan, B., & Engmann, C. (2015). Barriers and enablers of kangaroo mother care practice: A systematic review. *PLoS One*, 10(5), Article e0125643. <https://doi.org/10.1371/journal.pone.0125643>
- Smith, E. R., Bergelson, I., Constantian, S., Valsangkar, B., & Chan, G. J. (2017). Barriers and enablers of health system adoption of kangaroo mother care: A systematic review of caregiver perspectives. *BMC Pediatrics*, 17, Article 35. <https://doi.org/10.1186/s12887-016-0769-5>
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretive phenomenological analysis: Theory, method and research*. SAGE Publications Ltd.
- Stats NZ. (2019, September 23). *New Zealand's population reflects growing diversity*. <https://www.stats.govt.nz/news/new-zealands-population-reflects-growing-diversity>
- Sweeney, J. K., Heriza, C. B., Blanchard, Y., & American Physical Therapy Association. (2009). Neonatal physical therapy. Part I: Clinical competencies and neonatal intensive care unit clinical training models. *Pediatric Physical Therapy*, 21(4), 296–307. <https://doi.org/10.1097/PEP.0b013e3181bf75ee>
- Tabakakis, C., McAllister, M., Bradshaw, J., & To, Q. G. (2019). Psychological resilience in New Zealand registered nurses: The role of workplace characteristics. *Journal of Nursing Management*, 27(7), 1351–1358. <https://doi.org/10.1111/jonm.12815>
- Taylor, C. (2023). *Kangaroo care Waitakere Hospital clinical audit (July 2019)*. [Data set]. Figshare. <https://doi.org/10.6084/m9.figshare.23272736>
- Thaman, K. H. (1997). Reclaiming a place: Towards a Pacific concept of education for cultural development. *Journal of the Polynesian Society*, 106(2), 119–130.
- Treyvaud, K., Spittle, A., Anderson, P. J., & O'Brien, K. (2019). A multilayered approach is needed in the NICU to support parents after the preterm birth of their infant. *Early Human Development*, 139, Article 104838. <https://doi.org/10.1016/j.earlhumdev.2019.104838>
- Twilhaar, E. S., Wade, R. M., de Kieviet, J. F., van Goudoever, J. B., van Elburg, R. M., & Oosterlaan, J. (2018). Cognitive outcomes of children born extremely or very preterm since the 1990s and associated risk factors: A meta-analysis and meta-regression. *JAMA Pediatrics*, 172(4), 361–367. <https://doi.org/10.1001/jamapediatrics.2017.5323>
- Vaiotei, T. M. (2006). Talanoa research methodology: A developing position on Pacific research. *Waikato Journal of Education*, 12(1), 21–34. <https://doi.org/10.15663/wje.v12i1.296>
- Vazquez, V., & Cong, X. (2014). Parenting the NICU infant: A meta-ethnographic synthesis. *International Journal of Nursing Sciences*, 1(3), 281–290. <https://doi.org/10.1016/j.ijnss.2014.06.001>
- Vittner, D., Casavant, S., & McGrath, J. M. (2015). A meta-ethnography: Skin-to-skin holding from a caregiver's perspective. *Advances in Neonatal Care*, 15(3), 191–200. <https://doi.org/10.1097/anc.0000000000000169>
- Winter-Smith, J., Grey, C., Paynter, J., Harwood, M., & Selak, V. (2023). Who are Pacific peoples in terms of ethnicity and country of birth? A cross sectional study of 2,238,039 adults in Aotearoa New Zealand's Integrated Data Infrastructure. *Dialogues in Health*, 3, Article 100152. <https://doi.org/10.1016/j.dialog.2023.100152>
- World Health Organization. (2023, May 10). *Preterm birth: Fact sheet*. <https://www.who.int/news-room/fact-sheets/detail/preterm-birth>
- Wreesmann, W. W., Lorié, E. S., van Veenendaal, N. R., van Kempen, A. A. M. W., Ket, J. C. F., & Labrie, N. H. M. (2021). The functions of adequate communication in the neonatal care unit: A systematic review and meta-synthesis of qualitative research. *Patient Education and Counseling*, 104(7), 1505–1517. <https://doi.org/10.1016/j.pec.2020.11.029>