Mai te Whei ao ki te ao Mārama

Māori Module

CONECTUS
Working together for maternal, child and family health.

Te Marautanga o ngā Akoranga Hapūtanga me te Mātuatanga
The Pregnancy and Parenting Information and Education Curriculum

Wāhanga 1a

Mai te Whei ao ki te ao Mārama

Module 1a

Māori Pregnancy

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Hutia te rito

Hutia te rito o te harakeke
Kei hea te kōmako e kō?
Kī mai ki ahau
He aha te mea nui o te ao?
Māku e kī atu
He tangata! He tangata! He tangata, hī!

If the shoot of the flax bush is pulled out
Where will the bellbird sing?
If you say to me
What is the greatest thing in the world?
I will say
It is people! It is people! It is people!

.....

Ki te whei ao (To the glimmer of dawn)
Ki te ao mārama (To the bright light of day)
Tiheiwa mauri ora! (There is life!)

This whakataukī speaks of the hope and potential of the dawn as it forms into a new day.

As parents or whānau of a new baby, the glimmer of light is a metaphor for learning new knowledge. From this knowledge comes understanding, an acknowledgment of us moving from a place of unknowing or a glimmer of light, into the full light of day.

Knowledge and understanding shapes the values and ideals we embrace as we move into the world of parenting, breathing life into the new journey we embark on as parents to a new pēpi.

Te Whei Ao can also be likened to a growing child as she or he makes their way into the world from the safety and protection of the mothers womb. A child is born into Te Ao Mārama, the physical world where they take their first breath of life - tiheiwa mauri ora!

1. Tirohanga Whānui – Overview

This module provides information to further support the maternal and infant health workforce in engaging with Māori parents and their whānau. The module describes narratives of mothers' experiences and offers recommendations for when working with Māori whānau using Te Whare Tapa Whā as a framework. Demographic information about Māori pregnancies and births is presented, justifying the need for more effective approaches. The module concludes with a list of support services that will assist in work with Māori parents and whānau. It is important that this module is read together with the Mokopuna Ora Core Pregnancy and Parenting Education Curriculum.

Ngā Whāinga – Objectives

The objectives of this module are to:

- enable the facilitator, mothers and whānau to explore Te Whare Tangata and Te Ao Māori in relation to being hapū
- give wāhine Māori and their whānau the opportunity to be affirmed as Māori, which allows pregnancy and parenting to be an empowering process for a wahine, her partner and her whānau, and includes the collective approach to raising children
- reaffirm the special status of hapū wāhine within the whānau and acknowledge the contribution this has for the hapū as a whole.

Ngā Huanga Ako – Learning Outcomes

By the end of this module:

- participants will be able to celebrate being hapū
- participants will be able to feel empowered as wāhine hapū to make informed decisions regarding pregnancy
- participants will be able to acknowledge the importance of whakapapa and taking care of themselves to ensure holistic wellbeing for themselves and their pēpi
- participants will be able to understand the entitlements and support services for Māori mothers and whānau
- their partner and whānau will understand the concept of manaaki and their role in supporting te wahine hapū
- their tāne will be supported to understand their role in the process o te whakawhānau pēpi.

Whakawhanaungatanga – Establishing Relationships

1. Open the hui with a karakia* to reduce anxiety and clear spiritual pathways. The facilitator will then initiate the process of mihimihi. †Mihimihi is a process of structured communication that can be used to establish an understanding of roles. Acknowledge all that have taken the time to attend the hui. In this process, the facilitator will acknowledge the role of the wāhine hapū and acknowledge the uri yet to be born. It is also important to acknowledge the whānau as the key support system for these wahine and their pēpi.
2. In a group, the participants will be asked to introduce themselves with their name, a bit of background about themselves and a little story of how they got their name. This is the crux of whakawhanaungatanga and helps the group establish common ground and to understand each other's personal journeys.
3. The facilitator will acknowledge the sharing and use this as a beginning point to discuss whakapapa and how whakapapa is integral to the journey of childbirth and the transition into parenting. It is also what connects us to people, the environment and the universe as a whole.

**Refer to Appendix 2 for examples of karakia.*
†Refer to Appendix 1 for further definition.

Ngā Kaupapa Matua – Key Messages

PHILOSOPHY KEY MESSAGE

In traditional Māori culture hapū women were the centre of whānau activity. Wāhine hapū were supported and cared for; they were given a special status to ensure a successful birth and a healthy child. The main objective of this module is to create an awareness of ancestral philosophy and pregnancy, acknowledge the sanctity of women and te whare tangata, acknowledge whakapapa and, finally, reinstate the special status of hapū wāhine Māori. Tiakina te wahine hapū kia tupu ora ai te uri – Nurture the woman in pregnancy so that the next generation will flourish.

Kaiwhakahaere – Facilitator

The preferred relationship is with a culturally competent facilitator who has recognised cultural competencies, i.e. He Takarangi Cultural Competency framework.[1] Please refer to the Te Marautanga o ngā Akoranga Hapūtanga me te Mātuatanga – The Pregnancy and Parenting Information and Education Curriculum Introduction module, Section 7, which discusses qualities of educators and facilitators in detail.

For facilitators, providing access to and utilising resources such as Iho (video by Ariana Tikao), Oriori by Robyn Kahukiwa and Roma Potiki, and He Kura Pounamu by Leonie Pihama and others can provide an incredibly empowering way to articulate the birthing process and parenting philosophies in a uniquely and positively Māori way. Encouraging kaumātua and kuia to be a part of the kōrero is also important. Appendix 3 provides a list of further readings and resources that facilitators might find helpful to support their sessions with mothers and whānau.

He Tūāpapa – Background

Tangata whenua have a long history of maintaining the health of populations through concepts and practices such as tapu, noa and rāhui; not as restrictive practices, but as protective factors to ensure the longevity of hapū and iwi, in addition to protecting water supplies, food sources and safety of whānau.[2] Māori public health action is action that improves the health of the whole Māori population. It is driven by the Māori right to health as Indigenous peoples and Treaty partners, and takes account of the disproportionate health needs of Māori (created by colonialism).[3] Programmes designed to facilitate Māori participation have the potential to ensure whānau make the right choices that are necessary to regain and maintain their health.[4]

Māori service provision was conceived at a time of significant and continuous structural and policy change within the health sector of New Zealand. Those changes provided both opportunities and threats for Māori, who were keen to engage as providers of services to their own communities. Therefore, although Māori were cautious as to the effects of the 'health reforms' and the contestable environment that had been created, they embraced the chance to develop and deliver 'Kaupapa Māori' services. Despite a number of health sector structural and policy iterations since inception, we are still faced with the challenges of Māori engagement in health services, and specifically maternity services.

Te mahitahi ki te whānau Māori – Working with Māori and Their Whānau

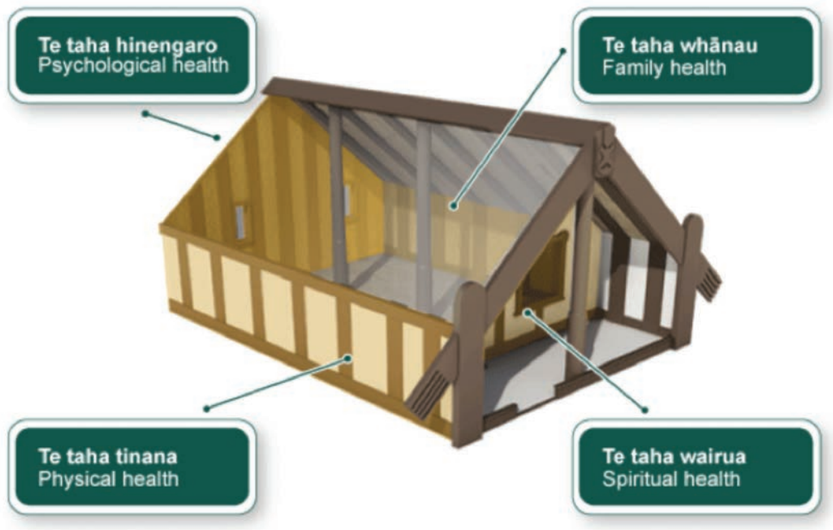
While there is a small growing body of research and literature surrounding the views, attitudes and behaviour of Māori mothers and whānau,[5] ensuring we increase health professionals' knowledge about the circumstances and range of needs of pregnant, birthing and parenting Māori women is necessary to avoid increasing health inequalities for an already disadvantaged population.[6] Interventions to reduce these health inequalities need to first include a comprehensive understanding of the lives of these women, the challenges they face, their aspirations and their current support networks.[7]

Māori as tangata whenua (people of the land) have rights, as reflected in the Treaty of Waitangi, that mean that actions should be taken for Māori to have at least the same standard of health and health care, as non-Māori.[8] For many Māori, modern health services lack recognition of taha wairua (the spiritual dimension). In a traditional Māori approach, the inclusion of the wairua, the role of the whānau (family) and the balance of the hinengaro (mind) are as important as the physical manifestations of illness and wellness. The four dimensions of Te Whare Tapa Whā are described below as a framework to understand the lives of Māori mothers and whānau during pregnancy and parenting.

Te Whare Tapa Whā

Developed by Dr Mason Durie in 1982, Te Whare Tapa Whā (Durie, 1998) is an Indigenous model of Māori health and is the overall model used to develop the curriculum and resources. To effectively engage with parents and caregivers, there should be an understanding of the principles: hinengaro (psychological), whānau (family health), wairua (spiritual health) and tinana (physical health). With its strong foundations and four equal sides, the symbol of the wharenui illustrates the four dimensions of Māori wellbeing. Should one of the four dimensions be missing or in some way damaged, a person, or a collective, may become 'unbalanced' and subsequently unwell.[9]

Figure 1. Te Whare Tapa Whā (Durie, 1988).



Taha Wairua (Spiritual Health)

> *The capacity for faith and wider communication – health is related to unseen and unspoken energies. Wairua explores relationships with the environment, people and heritage in the past, present and future.*[10]

In the traditional Māori society, women held different roles from those of men, but they were complementary. A woman's role as te whare tangata held mana and tapu that was recognised by the collective as a whole and acknowledged and respected.[11] The power of women is woven through many of the creation stories – Papatūānuku (the earth mother), Hineahuone (the first human formed from the earth – a female) and Hinenuitepō (the goddess of afterlife).[§ 12] The wairua or spiritual wellbeing is not only key to one's identity but also provides the link with one's whānau, thus connecting the individual with the larger community that provides sustenance, support and safety.

In Māori birth tradition, Hineteiwaiwa, along with Hinauri, Hina and Rona, Hine-kōtea, Hine-kōrito, Hine-mākehu and Hine-korako, are ancestral names in Māori cosmology, associated with the procreation of life and the rhythms of life. They are commonly linked to pregnancy and birth, as well as navigation, fishing practices, the cultivation of food, weaving and other traditional activities. All of these are guided by, and explained by, the phases of the moon, the configuration of the stars and seasonal weather patterns.

The original ancestors are Papatūānuku, the earth mother, and Ranginui, the sky father. Hineteiwaiwa is the most widely known atua (God) associated with pregnancy and childbirth. She is also linked to harvesting food and weaving. In the Māori worldview, all living things are related by whakapapa.

Ani Mikaere[13] describes whakapapa as:

> *Whakapapa embodies a comprehensive conceptual framework that enables us to make sense of our world. It allows us to explain where we have come from and to envisage where we are going. It provides us with guidance on how we should behave towards one another and it helps us to understand how we fit into the world around us. It shapes the way we think about ourselves and about the issues that confront us from one day to the next. (pp. 285–286).*

The personal experiences of wairua among the women who were interviewed describe the need to be connected with their body and wanting to progress with labour naturally, similarly to what their ancestors experienced. One mother explained the importance of this natural process, which for her was interrupted by medical intervention:

My experience... the medical side was just horrible. It ruined my whole experience and I wanted everything to be as natural as possible. Unfortunately it wasn't. Māori in general have those, those kind of values and beliefs and the whole spiritual side. That's what I wanted...someone to understand that it is a natural process... millions of other women before us have done it, especially our tūpuna and our ancestors. They didn't have all the medical stuff. It's a natural process of life and I would've liked to have experienced it as naturally as possible.

[§] *See Appendix 3 for a list of further readings.*

Once baby was born, many of the women interviewed had a strong connection with Te Ao Māori through te reo, tikanga and their experience with whānau. Their stories demonstrate that the spiritual is inextricable from the physical. Consistent themes included the importance of taking care of and burying the whenua on their own tūrangawaewae or somewhere of significance to their partner through guidance from an elder:

I just recently had a mirimiri from when I was carrying this girl…he said the whenua…it's gotta go straight into the ground. He just advised me but never told me it's got to. He said grab some soil, don't put it in plastic, but just put it straight into natural soil. If you can, grab a terracotta pot because that's earthly as well. I explained to him that I was trying to find a tree to plant it and where to plant it. He goes, it's not so much finding the right tree to plant it at, it's more about finding the tree that's been there for all your whānau all of their lives and it's always been there. He goes, because you can go and plant a tree, but what's to say it's gonna last past the year. So there is a big tree, a huge pine tree that has always been there at the homestead where my dad was raised and it's huge. So that's where I'll be taking it.

All our whenua went back, and so for our oldest child, that whenua is buried at our homestead, my mother's homestead. So it's gone back to the whenua. And the other three, their whenua has gone back to Whangaruru.

Of the various tikanga women practised, naming was a practice of cultural significance for mothers. Many of the names chosen ensured a link back to their whakapapa. Having the whāriki as a birthing mat was also culturally significant for one mother who travelled back to where she was from to ensure this could be done:

I liked the way tupuna names were done…it reflected either an event or something that happened at that time, or specific to that child and their birth or whatever.

I don't know whether it's just cos of where I was at that time of my life, but I guess I felt like doing everything as close to how I kind of imagined the tūpuna did as possible. I wove him a whāriki…I composed a song for him. All this stuff while I was weaving the whāriki, I had some out of it dreams and things and just things that all felt really special. I felt much attuned with him, so much so that I can remember being at Mum's and still, you know, getting stuff ready and all the things that I thought I needed.

Taha Tinana (Physical Health)

The capacity for physical growth and development as it relates to the body. The physical being supports one's essence and shelters individuals from the external environment. For Māori, the physical dimension is just one aspect of health and wellbeing and cannot be separated from the aspect of mind, spirit and family.

Māori are a young population and maternal and child ill health affects a significant proportion of this group. Keeping well and managing the physical changes during pregnancy were important for women:

Taking care of your body… everything that you eat goes into your body, and goes into your child…so you need to be mindful of whatever it is that you're putting into your body.

My first one was beautiful because I was with a partner that was very supportive. I felt like my body was quite good really in managing all the changes and things like that. Things just happened on cue…in terms of the things like colostrum coming in…it just happened. It was all new to me but it was kind of amazing how the body works in all sorts of ways. I've been fortunate that my body's been really good to manage everything in terms of pregnancy.

A few mothers described how they used mirimiri (or would have liked to use it) as a way of taking care of themselves during pregnancy:

My last mirimiri with her, a week before she was born, was actually a mirimiri, a proper mirimiri where we went in. He was explaining to me just simple things from the way we massage relating it to a lot of natural elements. Even just the direction of which they were massaging on the top of my tummy…and how you know when the water spirals in the southern hemisphere and the northern hemisphere a certain way down the drain…yeah, well he was explaining that, doing it, and that motion there, is why it sort of helps the baby come down.

Mirimiri… I think that would've been huge during my pregnancy… even if I could learn it myself, how to do it myself. I think for me, it would've been how to take better care of myself during pregnancy.

Labour was difficult for some women, as although they had expectations of birthing naturally, this was interrupted and often meant the stages of labour were not explained properly:

I want more children, I just want a better experience. I want to be in more control, like be in more control of the situation than I was then. Obviously nature was just against me that day.

The physical elements of pregnancy and experiences (positive and negative) closely intertwine with the emotional and psychological wellbeing of a parent. The significance of women and their role in reproduction is further described by Ani Mikaere:[16]

The significance of the whare tangata is rooted in the created of the world in the overriding tapu of whakapapa…the inherent tapu of each Māori person is sourced in their connection, through whakapapa, to the rest of humanity, to the gods and to the environment. The role of women, as the bearers of past, present and future generations is therefore of paramount importance.

Taha Hinegaro (Psychological Health)

The capacity to communicate, to think and to feel mind and body are inseparable. It is understood that the mind and body are inseparable, and that communication through emotions is important and more meaningful than the exchange of words.[17]

The demographics of Māori maternal health show that Māori women experience multiple maternal risk factors that may increase the risk for postnatal depression: young motherhood, living in poverty, sole parent, bearing compromised babies (low birthweight, prematurity) and poor access to health services (poor first trimester lead maternity carer [LMC] registration).[18,19] Other factors include unstable relationships, lack of support and being a sole parent.[20] One mother described how her hauora changed during pregnancy, which she related back to personal issues with her partner and her mother, who had passed:

Pregnancy challenged me emotionally, physically, mentally in every way. Your whole hauora changed, my whole hauora changed. Emotionally, I was having trouble with the dad. Physically my body was changing of course. On top of that came emotions and my whole spiritual side. My biggest challenge would have to have been not having my mum there.

Some of the women interviewed talked about emotional wellbeing and that they had found the strength to leave their partners because of dysfunctional relationships. There was a sense of taking ownership of themselves, their body and the life they were carrying as they didn't want the stress from relationships affecting their baby:

The environment you surround yourself with makes a huge difference, even though you know the child hasn't been born yet, it still impacts the wellbeing of that child.

Stress in relationships, like unhealthy relationships definitely has an effect on the baby. You know the relationship's not great but we try to do whatever we can so that they grow up in a happy environment. Growing up was pretty violent in terms of the relationship between my parents…I swore I'd never let my kids see that, it makes me not want them to grow like how I grew up.

Taking ownership was important, but it was still hard to not have a partner or father around for their children. Single mothers felt judged, especially when registering baby and seeking assistance from Work and Income NZ:

I was scared of raising a baby by myself, cos at the time I found out, I wasn't with his dad, so I was like scared as. So see how things are gonna go bringing him up by myself.

My first fear was a challenge. The main one was after I gave birth was registering my baby…you know a birth certificate. You know…how do I fill out the father side of things and how am I going to explain to Work and Income, especially when you know they just come and go. Those are the main and hardest things.

Being pregnant can be a blessing. But when you don't have that ongoing relationship with the other partner, the male side of things, then it can be pretty frustrating and pretty stressing.

For health professionals working with single mothers or mothers who are experiencing a number of risk factors, it is important to screen for issues that may impact on the social and emotional development during infancy. This could be offered during pregnancy through the lead maternity carers (LMCs) during antenatal clinics[21] and appropriate support should be recommended to the woman and her whānau.

Taha Whānau (Family Health)

The most fundamental unit of Māori society, this dimension is the capacity to belong, to care and to share where individuals are part of wider social systems. For Māori, whānau is about extended relationships rather than the western nuclear family concept. Maintaining family relationships is an important part of life and caring for young and old alike is paramount. Everyone has a place and a role to fulfil within their own whānau.[22]

Whānau, the group we are born into, join and/or are raised by and with, is the most immediate, supportive and important group in the life of any Māori,[23] especially pregnant Māori women. While Māori women may experience earlier pregnancy and poorer health outcomes, they benefit from the customary whānau family support. This includes providing advice and assistance on how, where and who they access for their pregnancy care and parenting advice.

In particular for Māori people, or for my whānau anyway, it's having your nannies around you, your mother, your aunties, your older cousins. Having your children around you, having as much support around you as you can, your best friends, especially friends that have had children makes a huge difference.

I struggled a lot but I always had my mum and my sister-in-laws…they always helped out.

One mother described how, while living in Australia, she ensured this whānau contact was available for her, so paid for a family member to travel to provide this support overseas:

Because we were still living in Melbourne and he wasn't ready to move back right away…I paid for a cousin to come over with her son and to be by me and bring that whānau contact over there…just to help me through it as a first time mum.

The mothers who were hapū at a younger age described feeling disappointed at having let their whānau down, especially as they were young. While telling their parents was difficult, they were recognised as being the most important part of their support network.

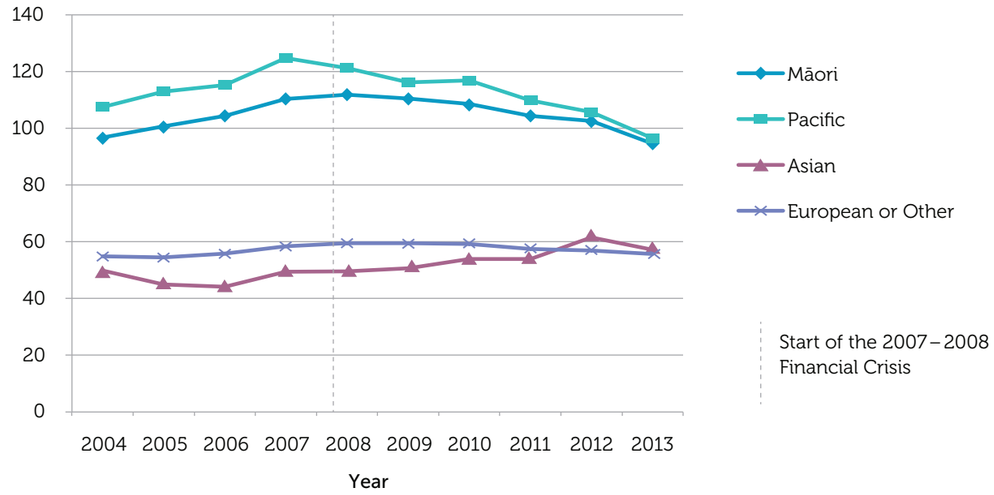
My fear was disappointing my parents…getting a growling from them or whatnot from my brothers, my uncles, my aunties…getting talked about from the family. My dad didn't talk to me. My mum was crying and that. But eventually they got over it and then they were supportive and then my baby came out. Everything changed, they love her.

These four dimensions of Te Whare Tapa Whā provide the context within which to develop trust and subsequently a relationship with the pregnant mother and her whānau, in order to share important messages and to encourage healthy, positive behaviour.[24] While there was a mix of positive and negative experiences, the influence of whānau members was important for providing the support needed during pregnancy and parenting. This was especially important for mothers who were solo parents.

Ngā Tatauranga – Demographics

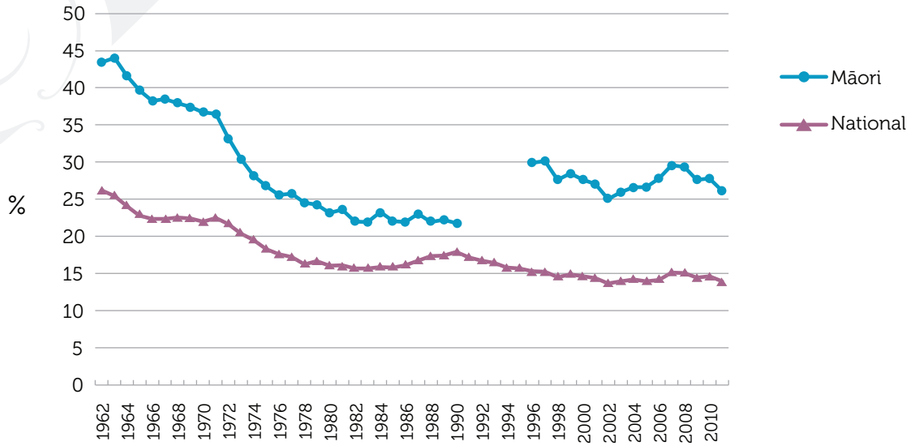
Māori, the Indigenous people of New Zealand, comprise approximately 15% (600,000 people) of the total population of 4.2 million.[25] The Māori birth rate has been declining slightly in the period from 2008 to 2013 (Figure 2)[26] as has the Pacific birth rate, which tracks almost in parallel with the Māori series. This is in contrast to the Asian birth rate, which has slightly increased, and the European/Others, which has remained relatively stable over the same period. One explanation for the decline in the Māori birth rate is the onset of the World Financial Crisis (dashed line in Figure 2). Whether this actually caused the declining birth rate is debatable as there are a number of competing hypotheses (e.g. Māori and Pacific migration to Australia and greater access to long-term contraception[27]) that could also explain this downward trend. Whatever the cause of this decline, it will have downstream ramifications for the Māori population, translating to a smaller proportion of the New Zealand population in years to come.

Figure 2. Birth rate (per 1,000 females of reproductive age), by ethnic group, 2004–2013.[28]



When examining the longer historic trends of birth and fertility rates, from 1962–2011, data from Statistics New Zealand shows the crude birth rate for Māori had a steep decline from 1962 to 1990 – much steeper than the New Zealand national decline over the same period. Data for Māori are missing for 1991–1995, and the reason for this is unclear.

Figure 3. Crude birth rate (per 1,000 people) by Māori and nationally (all of New Zealand including Māori), 1962–2011.



Maternal Age

Māori females have their babies on average at a younger age (26.5 years) than any other ethnic group in New Zealand (Table 1). However, because of the skewed nature (i.e. long tail) of the distribution of mothers' ages (Figure 4) the median of 25 years is probably a better typical measure of the distribution than the mean (or average). Because half of Māori women giving birth are below the median (i.e. younger than 25 years) and half are above it, Māori have the youngest cohort or group of mothers of any ethnicity in New Zealand. The youngest Māori female to give birth (in 2013) was 13 years old and the oldest was 56 years old. Interestingly, the Asian and European/Others have much higher median maternal ages, of around 30 and 31 years, respectively.

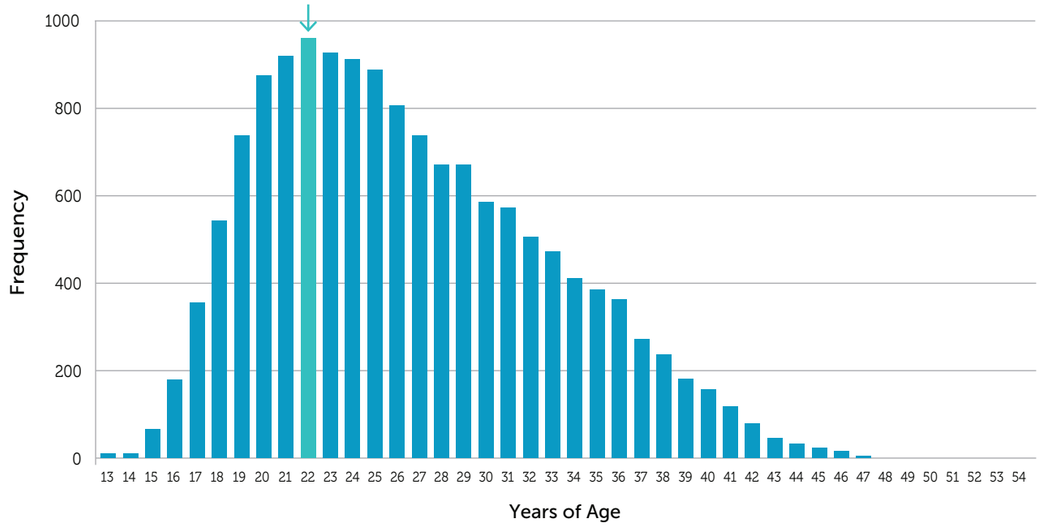
Table 1. Maternal age by ethnicity for 2013[29]

	n	Mean (years)	Median (years)	Mode (years)	Standard deviation (years)	Range (min to max)
Māori	14,619	26.5	25	22.0	6.32	13–56
Pacific	6,407	28.1	28	28.0	6.26	14–53
Asian	8,190	30.7	30.0	30.0	4.74	15–59
European/ Others	29,974	30.6	31.0	32.0	5.77	11–55
All (combined)	59,227*	29.3	29.0	31.0	6.12	11–59

**includes a small number of missing values for ethnicity (data not shown).*

An important statistic for maternal age is the mode (i.e. the most frequent or common age of childbirth), which for Māori was 22 years – far younger than it was for all of New Zealand (31 years). The mode can be useful for health professionals and District Health Boards (DHBs) as it helps them in the targeting and allocating of the resources needed to help pregnant women. When the mean, median and mode are all approximately equal within a specific distribution as in the Asian, Pacific and European/Others (but not Māori) cohorts, then the frequency distribution of ages is likely to be bell shaped (i.e. a normal curve in statistical terminology) (Figure 4). A bell-shaped curve allows for accurate predictions of age, numbers and proportions of females giving birth within a population.

Figure 4. Distribution of maternal age (in years) for Māori in 2013. The number of Māori mothers is shown on the vertical axis. The arrow shows that 22 years was the most common age of birth.



In 2013, Māori females aged <20 years were four times more likely to give birth than non-Māori, and in the 20–24 year group, they were 2.2 times more likely to do so than non-Māori (Figure 5). Figure 6 also shows that during the period of 2008–2012, Māori (16%) and Pacific (9%) women had higher overall fertility rates than European (4%) and Asian (1%).

Figure 5. Percentage of births by age of mother, Māori and Non-Māori for 2013[30]

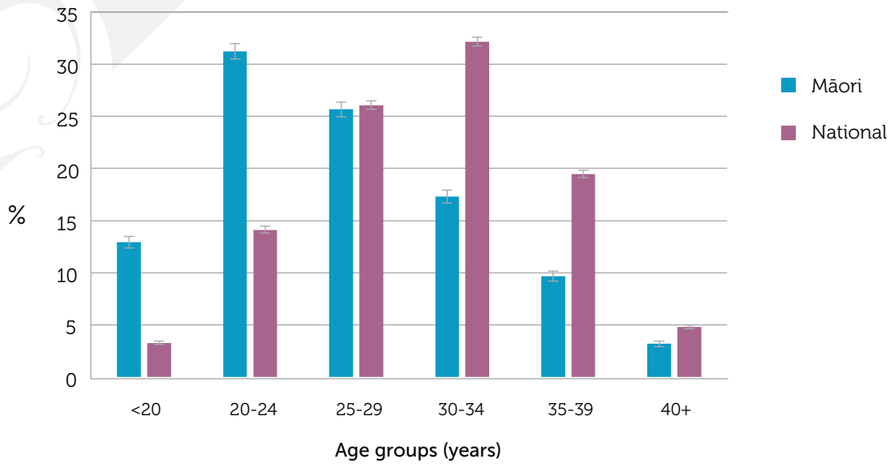
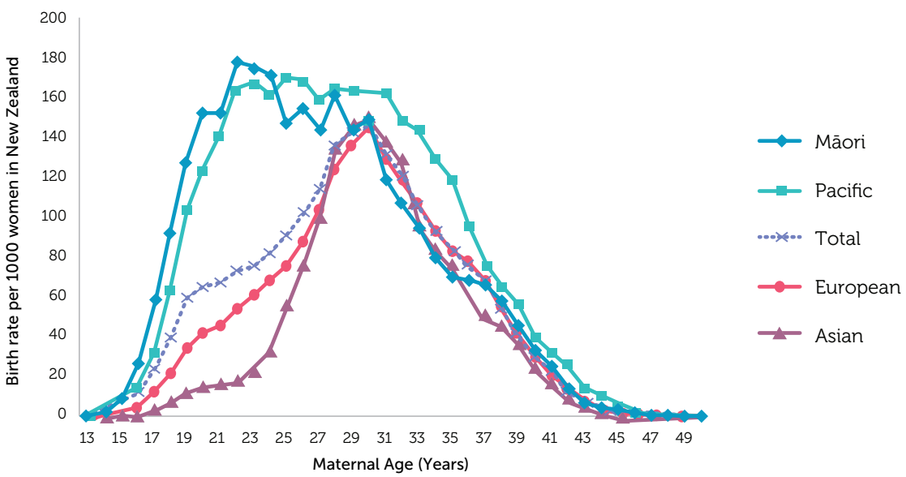


Figure 6. Birth rate by maternal ethnicity in NZ, 2008–2012



Source: Numerator-Birth Registration Dataset: Denominator-Census: Ethnicity is Level 1 Prioritised

Geographic Distribution for Auckland

Within the Greater Auckland area in 2013, most Māori women gave birth in Counties Manukau (1,970) followed by Waitemata and, lastly, Auckland DHB (Table 2). For total number of births, Māori have the lowest absolute number of 3,795, followed by Pacific, Asian and European/Other.

Table 2. Number of women giving birth and birth rate per 1,000 females of reproductive age (in brackets) by Auckland DHB of residence and ethnicity for 2013

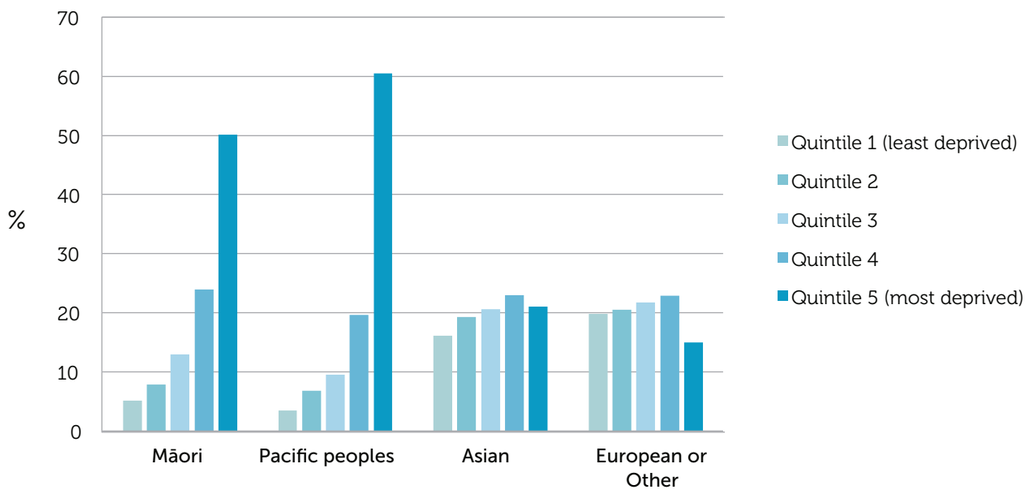
	Māori	Pacific	Asian	European or Other
Waitemata	1,081 (85.8)	839 (93.1)	1,804 (66.6)	3,935 (57.9)
Auckland	744 (77.6)	1,153 (92.3)	1,848 (49.6)	2,496 (47.1)
Counties Manukau	1,970 (106.0)	2,618 (104.2)	1,557 (56.0)	2,015 (56.4)
Total	3,795 (93.1)	4,610 (98.9)	5,209 (56.5)	8,446 (53.9)

Note: DHB = District Health Board

Maternal Deprivation

Almost half of all Māori women giving birth live in the most deprived areas (i.e. quintile 5), compared with just 15% of Europeans/Other (Figure 7). It is noticeable that the Māori and Pacific patterns of deprivation are very similar to each other, as are the Asian and European/Other. The earlier age of parenthood among Māori is likely to be one of the factors that contribute to the higher rate of socioeconomic disadvantage experienced by Māori, which is linked to many negative health and economic outcomes.[32]

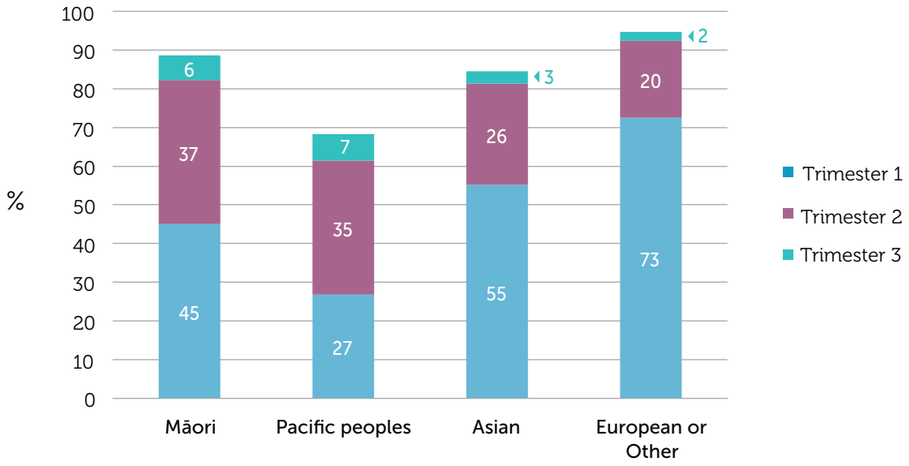
Figure 7. Percentage of women giving birth, by deprivation quintile of residence and ethnic group for 2013



Registered with a Lead Maternity Carer (LMC)

In 2013, approximately 88% of Māori pregnant women were registered with an LMC prior to giving birth, compared with 95% of European/Other (Figure 8). Forty-three per cent of Māori pregnant women do not register with an LMC until the second or third trimester of the pregnancy, compared with 22% of European/Others.

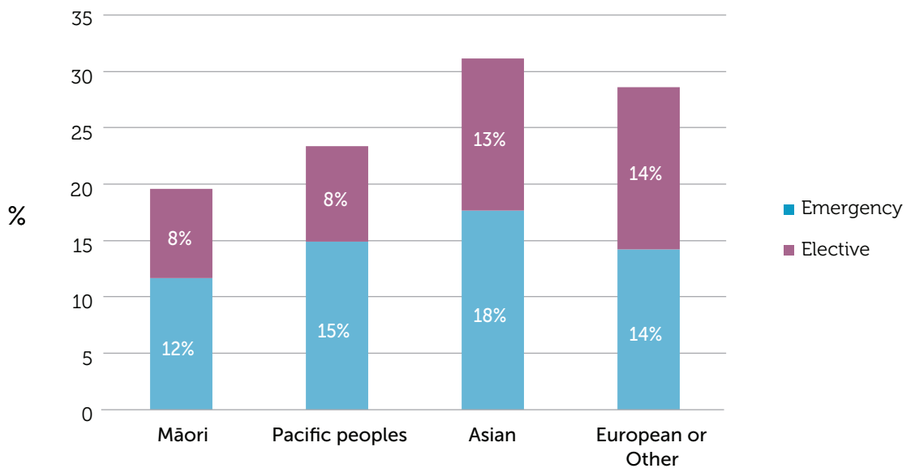
Figure 8. Percentage of women registered with an LMC, by trimester of registration and ethnic group for 2013.



Type of Birth

Māori women have the lowest total percentage of caesarean sections (20%) and lowest percentage of emergency caesarean sections (12%) compared with non-Māori ethnic groups (Figure 9).

Figure 9. Percentage of caesarean sections, by type of caesarean section, ethnic group for 2013.



Interventions at Birth

About a quarter of all New Zealand women giving birth have an induction, their labour augmented or an epidural each year. A smaller proportion have an episiotomy. Of the four interventions, an epidural was most common in 2013 (27% of women giving birth), followed by augmentation (27%), induction (24%) and episiotomy (13%).

Figure 10. Percentage of obstetric interventions, by type of intervention and ethnic group for 2013

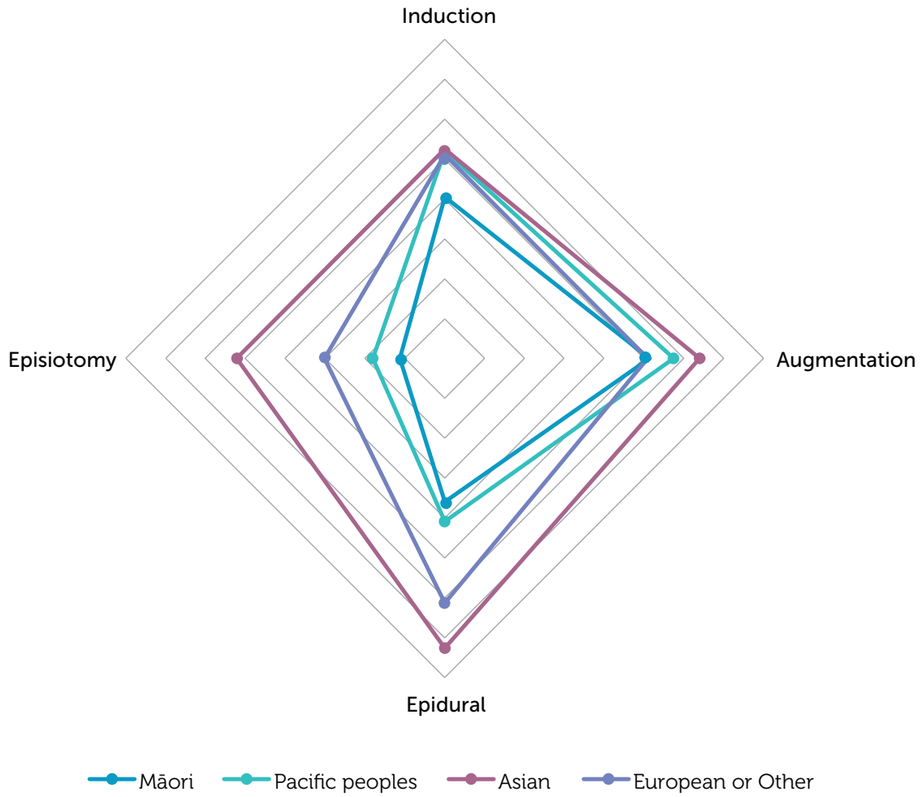


Figure 10 shows a radar chart (also called a spider chart) of obstetric interventions at birth plotted by ethnic group. It is apparent that Māori fit within the concentric areas of all the ethnic groups. In other words, they have the smallest percentages for every intervention. Asian have the highest percentage of interventions as their four 'fences' encompass all the others. For Māori, this may mean that they either don't need so many interventions during birth or are not offered the interventions as much as the other ethnic groups (especially compared with Asian and European/Other). For completeness, we have included the table of numbers and percentages that the radar chart was based on (Table 3).

Table 3. Number (%) of obstetric interventions, by type of intervention and ethnic group for 2013[33]

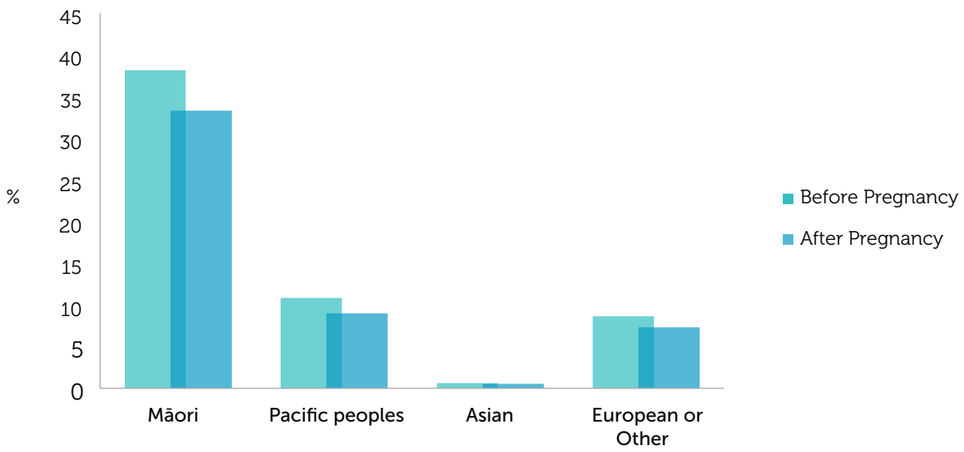
Women undergoing intervention					Women giving birth, excluding elective caesarean sections	Women giving birth, excluding caesarean sections
	Induction	Augmentation	Epidural	Episiotomy		
Māori	2,665 (20.3)	3,370 (25.7)	2,358 (18.0)	645 (5.6)	3,129	11,466
Pacific peoples	1,495 (26.0)	1,648 (28.7)	1,173 (20.4)	432 (9.0)	5,740	4,805
Asian	1,838 (26.3)	2,235 (32.0)	2,538 (36.3)	1,449 (26.1)	6,991	5,562
European or Other	6,463 (25.6)	6,439 (25.5)	7,750 (30.6)	3,178 (15.1)	25,290	21,084

Notes: There were eight persons with unknown ethnicity who have not been included.

Tobacco Smoking

Māori women had the highest percentage of tobacco smokers (38.1%) at the time of registration with an LMC of all ethnic groups (Figure 11). However, at two weeks after birth, the proportion of Māori smokers dropped by 4.8 percentage points to 33.3%, indicating that 629 Māori women had given up smoking during their pregnancy out of a total of 13,063.[34]

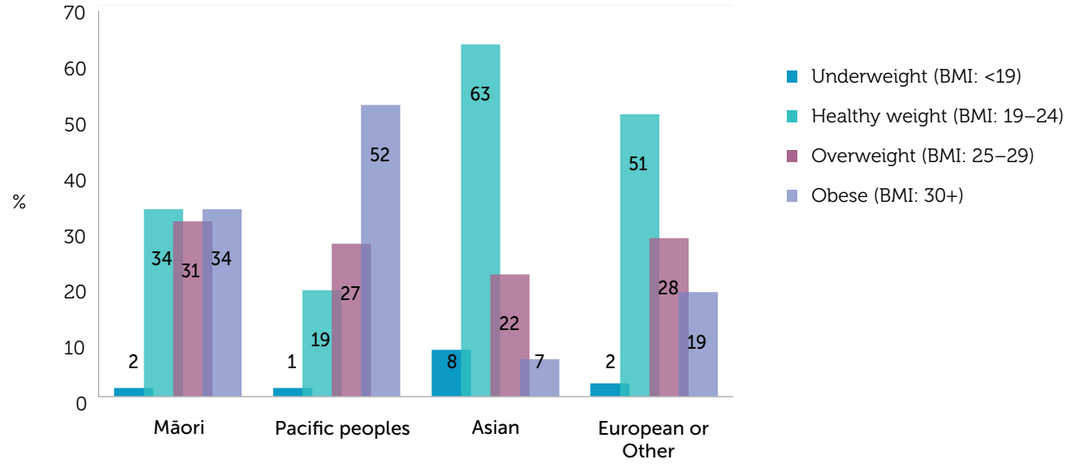
Figure 11. Percentage of women identified as smokers at time of registration with an LMC and two weeks after the baby was born by ethnic group for 2013.



Body Mass Index

The proportion of Māori women giving birth who were obese or overweight was 65%, compared with 47% of European/Other (Figure 12). Thirty-four per cent of Māori women giving birth had a healthy weight, compared with 63% of Asian, 51% of European/Other and 19% of Pacific peoples.

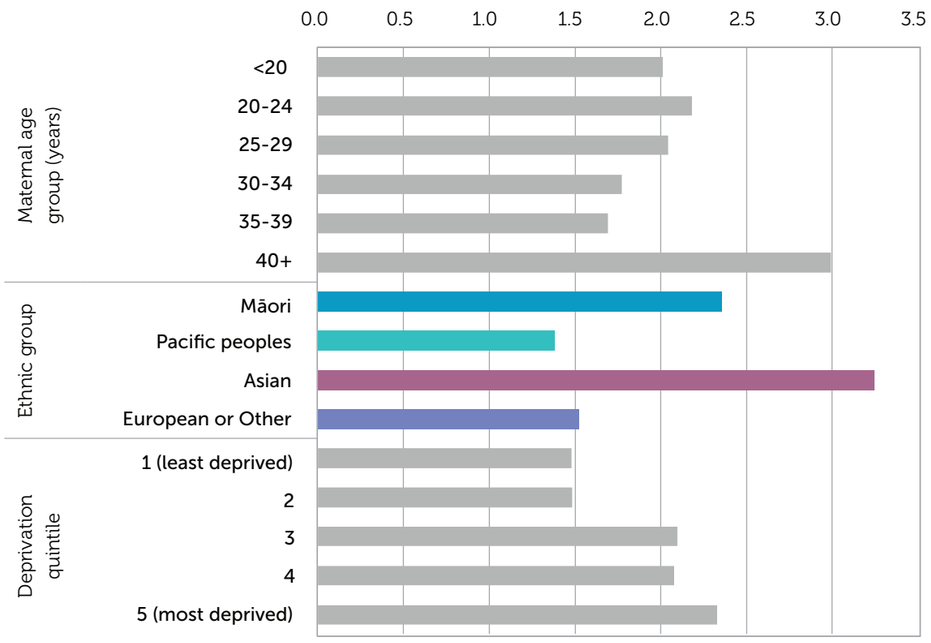
Figure 12. Percentage of women giving birth, by body mass index (BMI) in (kg/m2) categories at time of registration with a lead maternity carer (LMC) by ethnic group for 2013



Low Birthweight

For Māori, there were 320 babies born with a low birthweight out of 13,596 babies at term for 2013 (Figure 12). This equates to a proportion of 2.4% and 95% confidence intervals (CIs) of (2.1% to 2.6%). For European/Other, the proportion was 1.5% with 95% CIs: (1.4% to 1.7%). Because the CIs do not overlap between Māori and European/Other, it can be inferred that Māori have significantly more babies that are born with a low birthweight than European/Other. In general, older mothers (i.e. 40+ years) and those more deprived (quintiles 3, 4 and 5) tend to have low birthweight babies (Figure 13).

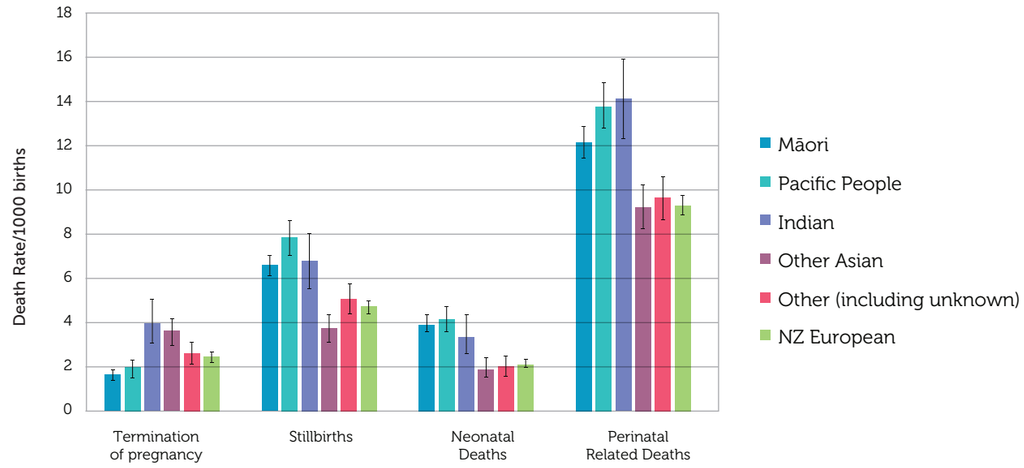
Figure 13. Percentage of term babies born with low birthweight for 2013



Perinatal-Related Deaths

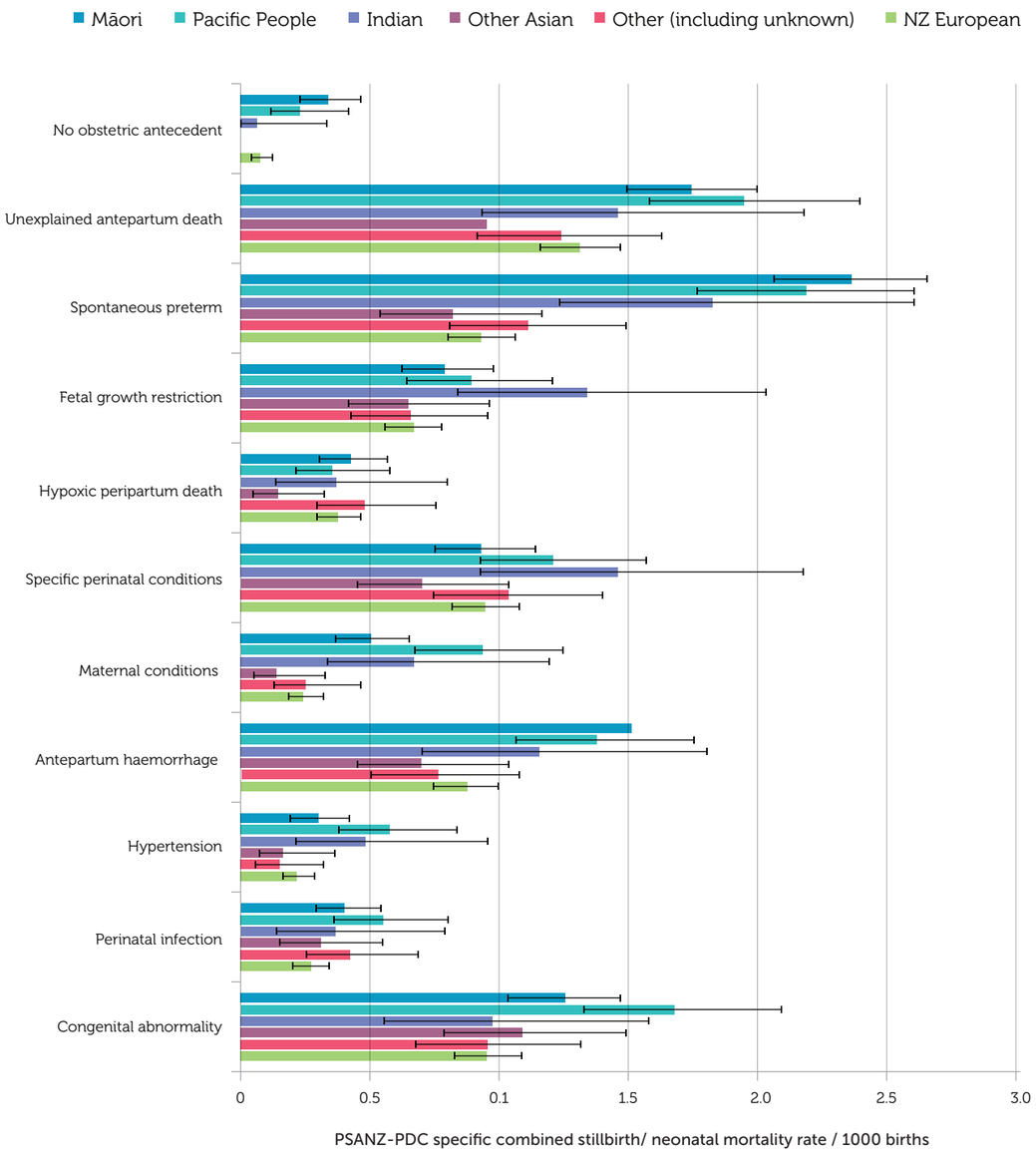
With respect to ethnicity, the overall perinatal-related death rate for Māori, Pacific and Indian mothers is statistically significantly higher than among Other Asian, Other and New Zealand European mothers (Figure 14). These associations are evident for stillbirth and neonatal deaths. Māori mothers have lower rates of late termination of pregnancy compared with Indian, Other Asian, Other and New Zealand European mothers.

Figure 14. Perinatal-related death rates (per 1,000 births) by maternal prioritised ethnicity (with 95% CIs) 2007–2013.



Māori women had significantly higher rates of perinatal death classified as unexplained antepartum death, spontaneous preterm and death associated with maternal conditions and antepartum haemorrhage than Other Asian and New Zealand European mothers (other than Pacific) (Figure 15).

Figure 15. Perinatal death classification (PSANZ-PDC) specific perinatal-related death rates (per 1,000 births) (excluding termination of pregnancy) by maternal prioritised ethnicity, 2007–2013.



SIDS (Sudden Infant Death Syndrome)

From 2000 to 2012, there was a marked decline in the number of Māori deaths from SIDS: from 43 deaths in 2000 to 6 in 2012 (Figure 16). However, when adjusting for the aggregated number of live births over this period, Māori had a rate ratio (RR) of SIDS 3.7 times that of European/Other (Table 4).

Figure 16. Number of infant deaths classified as sudden infant death syndrome (SIDS) by ethnic group, during 2000–2012

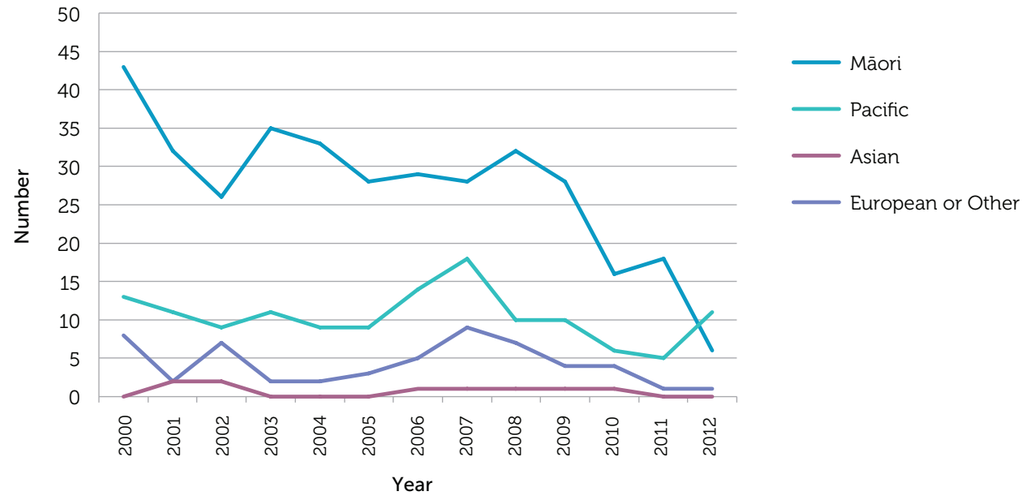


Table 4: Rate of SIDS deaths for the years 2008–2012

Aggregate (2008–2012)				
Ethnic group	**Deaths**	**Live births**	**Rate per 1,000 live births**	**RR**
Māori	100	92,797	1.1	3.7
Pacific peoples	17	35,702	0.5	1.7
Asian	3	36,901	0.1	0.3
European or Other	42	152,126	0.3	1.0

SUDI (Sudden Unexplained Death in Infancy)

SUDI is an umbrella term that includes SIDS as well as unintentional suffocation and other unexplained deaths of infants. For Māori, there was a marked decline in the number of SUDI cases from 2000 to 2012 (Figure 17). Māori had nearly five times the rate of SUDI cases (over the period 2008–2012) compared with European/Other (Table 5).

Figure 17. Number of infant deaths classified as SUDI (sudden unexplained death in infancy) by ethnic group, 2000–2012.

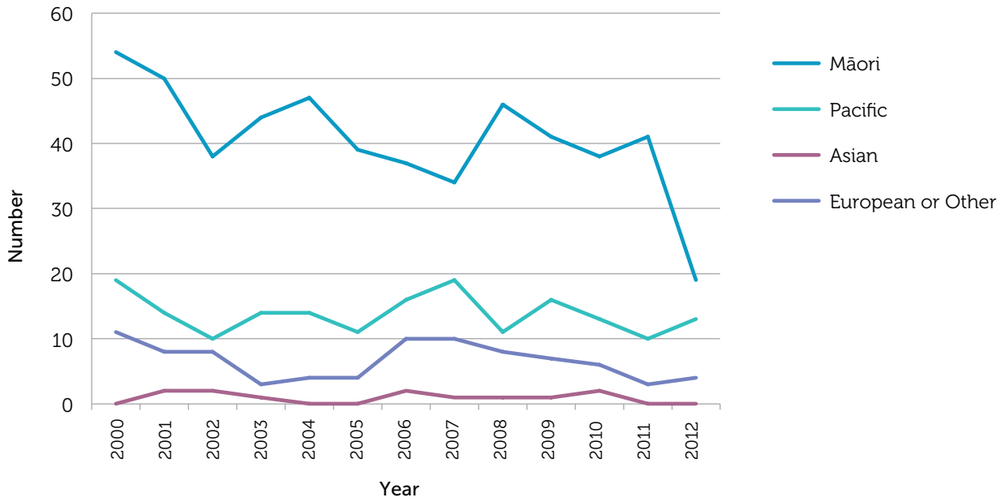


Table 5. Rate of SUDI deaths for the years 2008–2012.

Aggregate (2008–2012)				
Ethnic group	**Deaths**	**Live births**	**Rate per 1,000 live births**	**RR**
Māori	185	92,797	2.0	4.8
Pacific peoples	28	35,702	0.8	1.9
Asian	4	36,901	0.1	0.3
European or Other	63	152,126	0.4	1.0

Paternal Characteristics

For Māori fathers, young age was common: 36.5% of births were to fathers aged <20 years, and a further 35.5% were to fathers aged 20–24 years (Figure 18). Of the men who fathered the babies of teenage mothers, 39.4% were Māori, 14.3% Pacific, 23.7% European/Other and 1.9% Asian. Interestingly, in over a fifth (20.7%), the father's ethnicity was not stated.[39]

Figure 18. Characteristics of fathers in NZ, 2008–2012.

	Total births 2008–2012	Rate per 1,000 population	Percentage of all teenage births		Total births 2008–2012	Rate per 1,000 population	Percentage of all teenage births
Paternal Age Group				**Paternal Prioritised Ethnicity**			
<20 years	8,263	9.3	36.5	Māori	8,670	5.6	39.4
20–24 years	8,090	3.1	35.5	Pacific	3,144	4.6	14.3
25–29 years	1,857	2.9	7.8	Asian	4,07	0.4	1.9
30–34 years	495	0.7	2.0	European	5,225	0.9	23.7
35–39 years	183	0.2	0.7	Details missing	4,562		20.7
40+ years	118	0.0	0.4				
Missing	4,172		17.2				

There is a notable gap in the literature regarding the role of Māori men in parenting.[40] Further research is needed to investigate fathers' experiences of maternity services to inform the development of health education materials to prepare partners for their role in supporting pregnancy, breastfeeding and parenting.[41]

The women who were interviewed described informing their partners about what to expect during pregnancy as a way of educating and getting them involved:

I was really informative with my partner, like I told him what was happening so he knew what was going on. So he'd like to do the washing.

During the pregnancy, the midwife would be telling me things and I thought it would be really important for him to know because you know, like I was freaking out and he was my, if anything happens to me sort it.

These quotations provide a reminder for health professionals to continually offer advice to fathers about pregnancy and parenting.

Ngā Ohu Tautoko i te Hapūtanga me te Mātuatanga
Pregnancy and Parenting Support Services

Community Pregnancy Support

Name	Description and Activities	Contact Details
B4Baby (Turuki Health Care) & Midwifery	Provides LMC midwifery care and breastfeeding education and support • Antenatal classes with a focus on tikanga birthing practices • Birthing choices • Antenatal and postnatal support and information • Parenting advice and support	0800 242 229
Find Your Midwife	Find a midwife anywhere in NZ	http://www.findyourmidwife.co.nz/
Health Line	A free 24-hour health service • Not teen specific but used by teens	0800 611 116
HELP	Support for survivors of sexual abuse	(09) 623 1700
Plunket Line	A free 24-hour health service • Help and advice with parenting, babies and children under five	0800 933 922
Pregnancy Counselling Services Inc.	A free 24-hour counselling service • Face-to-face counselling • Support in pregnancy • Recovery after abortion • Considering an adoption • Transport to appointments • Help to find accommodation	0800 633 328 (free) (09) 307 6745
Shine	For women and children experiencing violence in their home • Information and options • Secret safe houses	Free phone 0508 384 357 (0508 DV HELP)
Te Kaha o te Rangatahi Trust	A Māori community based youth provider delivering sexual health and teenage pregnancy services to young Māori and Pacific Island rangatahi (youth) & their whānau within the Counties Manukau (South Auckland), Central, North and West Auckland areas. Provides a safe and confidential service for rangatahi (youth) aged 9–19 years	Transport & Pregnancy Support 021 283 8374 www.tekaha.co.nz
Thrive Teen Parent Support Trust	Empowers young parents (teen to 24 years) to build thriving families and lead fulfilling lives • Parenting – antenatal education • Parenting education • Social workers for case work • Young mums support group • Young dads	773 New North Road Mt Albert 1025 & 34 Lincoln Rd Henderson Central Hub (09) 551 4367 West Hub (09) 213 9658 Referrals Line (09) 551 4368 admin@thrive.org.nz
U Choose	A free help and support service for women facing crisis pregnancies and/or difficult circumstances • Pregnancy support – going to appointments • A place to stay – either home-stay or a neighbouring flat (free of charge)	0800 U CHOOSE (0800 824 6673) (free) Text 021 293 6687
Youthline Pregnancy Centre (Preferred by PFC)	Individual and family counselling and support services • Three free counselling sessions by female counsellors for decision making, i.e. abortion, adoption or keeping baby	Free TXT 234 Free phone 0800 376633 FREE talk@youthline.co.nz Centres in Auckland and Aotearoa http://www.youthline.co.nz/about-us/find-us/
Orakei Health Mama and Pepi Service	Mama and Pepi is a maternity support service which assists expecting mums with free & easy access to the following services until their child is 2 years old: Lead maternity care, antenatal education, breastfeeding education and support, parenting programs, community and social services, and home visit support as required.	Sariah Witika (Community Health Worker) Mon-Fri: 8am – 4.30pm

Financial Assistance

Name	Description and Activities	Contact Details
Work and Income NZ	**Young Parent Payment** The Young Parent Payment is a weekly payment for 16- to 18-year-old parents who have a dependent child or children, and are in need of financial assistance and will not be supported by their parents. For more information visit http://www.youthservice.govt.nz/ways-we-can-help/financial-assistance/young-parent-payment.html **Guaranteed Childcare Assistance Payment** The Guaranteed Childcare Assistance Payment (GCAP) is used to help pay for childcare for children under five years old. It can only be used for the child care young people need while they are in education, training, work-based learning or doing part-time work, or when they are undertaking their youth activity obligation (e.g. a parenting or budgeting course). For more information visit http://www.youthservice.govt.nz/ways-we-can-help/financial-assistance/childcare-help.html	Appointments are made through the 0800 line 0800 559 009. For more information visit www.workandincome.govt.nz

Hei kōpaki 1 – Appendix 1: Māori Translations

Language is a valuable tool, and understanding of key Māori terms can be effective in your engagement with Māori people. Translations of key maternal and infant health terms is provided below. Consult a local Māori midwife or elder to assist you with pronunciations as there may be different dialects in your region.

Table 6: Māori translations of key health terms.

MĀORI	ENGLISH
Atua	Supernatural being, deity, immortal guardian for mankind
Hapū	Be pregnant, conceived in the womb (stative). Pregnant, expectant, with child (modifier). Section of a nation or large group of people (similar to a clan)
Hapūtanga	Pregnancy, gestation
Hauora	Healthy, health and physical wellbeing, spirit of health/ life/ vigour
Hina	The female element represented as the moon, personification of the moon. Sometimes this atua is referred to as Hine-te-iwaiwa.
Hinauri	Sister of Māui, wife of Irawaru who was turned into a dog by Māui. Hinauri in her grieving committed suicide by drowning herself.
Hinengaro	Mind, mentality, intellect, psychological
Hine-ahu-one	The first atua wahine and woman shaped from the red soil of Kurawaka by Tāne, son of Ranginui and Papatūānuku.
Hine-kōrako	Female atua of albino characteristics
Hine-kōrito	Female atua of blond, fair-haired characteristics
Hine-makehu	Another female atua of blond, fair-haired characteristics
Hine-nui-te-pō	After the shame of finding out her husband Tāne was in fact her father, Hinetītama fled to Rarohenga (the spirit world) to care for those who have passed on.
Hine-te-iwaiwa	The atua of childbirth and Te Whare Pora (weaving and female arts). She is sometimes referred to as Hina (see below). Hine-te-iwaiwa is also an atua regarded as the exemplary figure of a wife and mother. According to some narratives she married Tinirau and gave birth to Tūhuruhuru (Te Māhuri Textbook (Ed.2):27-28;)
Hine-tītama	The first (atua) child born to earth latter becoming Hine-nui-te-pō.
Hui	Gather/ gathering/ meeting
Ipu whenua	Clay pot created for storing the afterbirth (placenta) until it is buried in the ground
Iwi	Nation, people
Karakia	Incantation, prayer (noun), to pray (verb)

MĀORI	ENGLISH
Kaupapa Māori	Māori approach, Māori topic, Māori customary practice, Māori principles, Māori ideology – a philosophical doctrine, incorporating the knowledge, skills, attitudes and values of Māori society.
Kūmara	Sweet potato
Manaaki	To support, take care of, give hospitality to, protect, look out for - show respect, generosity and care for others (verb). Support, hospitality, caring for (noun). Show respect or kindness to, care for, favour, helpfulness, hospitable, treat with consideration, support.
Mātua	Parents
Mātuatanga	Parenthood
Mihimihi	Greet/ greeting, acknowledge/ acknowledgement
Mirimiri	Massage
Mokopuna	Grandchild (great-grandchild etc)
Noa	Unrestricted, free from tapu, ordinary, within ones power
Papatūānuku	The primeval and ancestral mother of all living things. The Earth Mother.
Pēpi	Baby, infant
Pēpi-pod	Plastic bassinet shaped like a box for baby to sleep in
Rāhui	Put in place a temporary restriction
Ranginui	Atua of the sky and husband of Papatūānuku, from which union originate all living things. The Sky Father.
Reo	Language
Rona	Woman captured by the moon for cursing at the moon. Hence the Māori proverb 'Kia mahara ki te hē o Rona' Remember the mistake of Rona. A reminder to people not to swear and put others down.
Tāne	Man, husband/ male partner
Tāne Māori	Māori man/ male
Taha hinengaro	Mental health and wellbeing (psychological) One of the four cornerstones for Te Whare Tapawhā
Taha tinana	Physical health and wellbeing One of the four cornerstones for Te Whare Tapawhā
Taha wairua	Spiritual health and wellbeing One of the four cornerstones for Te Whare Tapawhā

MĀORI	ENGLISH
Taha whānau	Family health and wellbeing One of the four cornerstones for Te Whare Tapawhā
Taiohi / Taitamariki	Young person/ teen
Tamariki	Children
Tangata whenua	People of the land (Māori)
Tapu	Restricted, sacred, special, confidential, private. A ceremonial restriction, quality or condition of being subject to such restriction.
Te ao Māori	The Māori world
Te ao mārama	The world of life and light, the natural world
Te reo	The Māori language
Te Whare Tapawhā	Mason Durie's Māori Model of Health
Tikanga	Māori custom or customary practice, control, authority, rule, reason, method, plan
Tinana	Body, self, person, physical
Tūrangawaewae	Domicile, standing, place where one has the right to stand - place where one has rights of residence and belonging through kinship and whakapapa.
Tūpuna	Ancestors, grandparents
Uri	Descendant, offspring
Wāhine	Women (two or more/ plural)
Wahakura	A woven bassinet or sleeping pod made of harakeke and designed for use in the same bed as the caregiver so that breastfeeding can continue and baby can sleep safely.
Wahine	Woman, wife/ female partner (one/ singular)
Wahine hapū	Pregnant woman
Wairua	Spirit, spiritual, spirituality, soul
Whānau	Family To be born, give birth (verb)
Whāriki	Floor mat – also sometimes used for birthing (noun) anything spread on the ground/ cover with mats, lay, lie out, spread out as a covering (verb)
Whakamamae	To be in labour (verb), 'feel pain'
Whakapapa	Genealogy

MĀORI	ENGLISH
Whakawhānau	To give birth (verb). Midwifery, giving birth, childbirth (modifier). Labour (birth), giving birth, childbirth (noun).
Whakawhānau pēpi	Give birth
Whakawhanaungatanga	Interrelationships (noun), to form relationships (verb)
Whare tangata	Uterus, womb
Whei ao	The glimmer of life and light (not yet emerged into 'te ao mārama')
Whenua	Placenta/ afterbirth Land, ground, earth, country

Hei kōpaki 2 – Appendix 2: Karakia

Ngā karakia mō te tīmatanga – Selection of karakia for opening a session

Tukua taku wairua kia rere ki ngā taumata **Hei ārahi i tāku mahi me taku whai i te oranga o ngā mokopuna.** **Kia mau, kia ita, kia kore ai e ngaro** **Kia pūpuri, kia whakamaua, kia tina** **TINA!** **Haumi e, hui e, tāiki e!**	Let my spirit ascend to the top most summits As a guide for all that I do and in my aspiration for wellness of our mokopuna. So that it can be retained forever more, never to be lost. So that it is preserved, maintained and secure.
Tūtawa mai i runga **Tūtawa mai i raro** **Tūtawa mai i roto** **Tūtawa mai i waho** **Kia tau ai te mauri tū, te mauri ora ki te katoa** **Haumi e, hui e, tāiki e!**	I summon from above, ...below ...within And the surrounding environment The universal vitality and energy to infuse and enrich all present.
Whiti ora ki te whei ao ki te ao mārama **Whiti ki runga** **Whiti ki raro** **E ngungu ki te pōhatu** **E ngungu ki te rākau** **Tītaha ki tēnei taha** **Tītaha ki tēra taha** **Tihei mauri ora!**	Cross over to life in the ever changing world, in the world of light and understanding. Cross upwards, cross downwards Turn to the rock Turn to the tree Leaning to this side Leaning to that side Ah, it is life!

Ngā karakia whakairi i te kōrero – Selection of karakia to close a session

Kia tau ngā manaakitanga a Te Mea Ngaro, ki runga ki tēnā, ki tēnā o tātou Kia māhea te hua mākihikihi Kia toi te kupu Kia toi te mana Kia toi te aroha Kia toi te reo Māori Kia tūturu, whakamaua, kia tina TINA! Haumi e, hui e, tāiki e!	Let the blessings of the unknown be bestowed upon each and every one of us. May all evil pass us by So that the permanence of the word, The authority The love And the Māori language remains So that it has certainty, is maintained and remains secure.
Unuhia, unuhia atu rā Te pūtake o ngā kōrero o te wānanga, Unuhia te hau tapu ariki, Whakairia e Rongo kia paetara a whare Ka whakamaua, kia tina TINA! Haumi e, hui e, tāiki e!	Release and let free The root of sacred lore The spiritual presence of the esteemed Let it rest upon the walls of the house This command is firm and strong Now cemented and unbreakable.
Kia tau ki a tātou katoa Te atawhai o tō tātou Ariki, a Ihu Karaiti. Ko te aroha o te Atua me te whiwhingatahitanga ki te Wairua Tapu. Ake, ake, ake, āmine.	May the grace of the Lord Jesus Christ and the love of God be with us all. With the fellowship of the Holy Spirit Forever and ever Amen.

Hei kōpaki 3 – Appendix 3: Further Readings

Readings

Kahukiwa, R. and Grace, P. 2000: *Wāhine Toa: Women of Māori myth,* Auckland: Penguin.

Kahukiwa, R. and Potiki, P. 1999: *Oriori: A Māori child is born – from conception to birth,* Auckland: Tandem Press.

Kenney, C. 2009: Me Aro ki te Hā o Hineahuone: Women, miscarriage stories, and midwifery: Towards a contextually relevant research methodology, Unpublished PhD thesis, Massey University.

Murphy, N. 2011: Te Awa Atua, Te Awa Tapu, Te Awa Wahine: An examination of stories, ceremonies and practices regarding menstruation in the pre-colonial Māori world. Unpublished MA thesis, University of Waikato.

Palmer, S. 2002: Hei Oranga Mo Ngā Wāhine Hapuā (o Hauraki) i roto i te whare ora, Unpublished PhD thesis, University of Waikato.

Pere, R. 1991: *Te Wheke: A celebration of infinite wisdom,* Gisborne: Ao Ako Global Learning New Zealand Ltd.

Pihama, L. et al. 2015: *Taku Kuru Pounamu.* Te Kotahi Research Institute.

Smith, R. 2015: Customary traditions and contemporary applications of Te Whare Tangata in the creation of wellbeing, Unpublished MA thesis, Massey University. Accessed http://mro.massey.ac.nz/bitstream/handle/10179/6797/02_whole.pdf?sequence=2&isAllowed=y

SHORE & Whariki Research Centre. 2013: Hapū Ora – Wellbeing in the early stages of life. Accessed http://www.massey.ac.nz/massey/fms/Colleges/College%20of%20Humanities%20and%20Social%20Sciences/Shore/reports/Hapu%20Ora%208%20Nov%202013.pdf?5A9AFFDACFECCCC2FA05619339139AEE

VIDEOS

Māori Oriori or Lullabies

Part 1 https://www.youtube.com/watch?v=ZE0iY_DOGNA

Part 2 https://www.youtube.com/watch?v=oKGsBr4kWfk

Rārangi Tohutoro – References

1 Matua Raki. (2016). *Takarangi Cultural Competency Framework workshop resources.* Retrieved from http://www.matuaraki.org.nz/resources/takarangi-competency-framework-workshop-resources/389

2 Ministry of Health. (2002). *Te pai me te oranga o nga iwi Maori: Health for all people – an overview of Public Health,* p. 3.

3 Ratima, K. & Ratima, M. (2003). *Māori public health action: A role for public health professionals.* Auckland University of Technology, p. 1.

4 Māuri Ora Associates. (2008). *Best health outcomes for Māori: Practice implications.* Retrieved from https://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Maori.pdf

5 National Institute of Demographic and Economic Analysis. (2013). *Current trends for teenage births in New Zealand.* University of Waikato.

6 Makowharemahihi, C., Lawton, B. A., Cram, F., Ngata, T., Brown, S. & Robson, B. (2014). Initiation of maternity care for young Māori women under 20 years of age. T*he New Zealand Medical Journal,* 127(1393). Retrieved from https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2014/vol-126-no-1393/article-makowharemahihi

7 Lawton, B., Cram, F., Makowharemahihi, C., Ngata, T., Robson, B., Brown, S. & Campbell, W. (2013). Developing a kaupapa Māori research project to help reduce health disparities experienced by young Māori women and their babies. *AlterNative: An International Journal of Indigenous Peoples,* 9(3), 246–261.

8 Ibid.

9 Ministry of Health. (2015). *Māori health models.* Retrieved from http://www.health.govt.nz/our-work/populations/maori-health/maori-health-models

10 Ibid.

11 Simmonds, N. (2016). Independent reviewer for Mokopuna Ora curriculum.

12 Ibid.

13 Mikaere, A. (2011). *Colonising myths – Māori realities: He rukuruku whakaarā.* Wellington: Huia Publishers and Te Wānanga o Raukawa.

14 Ministry of Health. (2015). *Maternity tables 2013.* Wellington: Ministry of Health. Retrieved from http://www.health.govt.nz/publication/maternity-tables-2013

15 Mikaere, A. (2011). *Colonising myths – Māori realities: He rukuruku whakaarā.* Wellington: Huia Publishers and Te Wānanga o Raukawa.

16 Mikaere, A. (2003). The Balance Destroyed: consequences for Māori women of the colonisation of tikanga Māori, Auckland: The International Research Institute for Māori and Indigenous Education.

17 Ministry of Health. (2015). *Māori health models.* Retrieved from http://www.health.govt.nz/our-work/populations/maori-health/maori-health-models

18 Tipene-Leach, D. (n.d.). A *decade of Maori SIDS deaths (1989–1999) – Undercounting in action.* Auckland: University of Auckland, cited in Ministry of Health. (2011). *Healthy beginnings: Developing perinatal and infant mental health services in New Zealand.* Wellington: Ministry of Health.

19 Ministry of Health. (2011). *Healthy beginnings: Developing perinatal and infant mental health services in New Zealand.* Wellington: Ministry of Health.

20 Ibid.

21 Ibid.

22 Ministry of Health. (2015). *Māori health models.* Retrieved from http://www.health.govt.nz/our-work/populations/maori-health/maori-health-models

23 Tipene-Leach, D. & Park, J. (2000). Maori infant care practices: Implications for health messages, infant care services and SIDS prevention in Maori communities. P*acific Health Dialog,* 7(1), 29–37.

24 Whakawhetu, online training module 1, 2015.

25 Statistics New Zealand. (2013). *2013 Census.* Retrieved from http://www.stats.govt.nz/Census/2013-census.aspx

26 Ministry of Health. (2015). *Maternity tables 2013.* Wellington: Ministry of Health. Retrieved from http://www.health.govt.nz/publication/maternity-tables-2013

27 Taufa, S. (2015). *A mother's hope: Teenage pregnancy in the South Pacific* (PhD thesis).

28 Ministry of Health. (2015). *Maternity tables 2013.* Wellington: Ministry of Health. http://www.health.govt.nz/publication/maternity-tables-2013.

29 Ibid.

30 Ibid.

31 Ibid.

32 Marie, D. & Fergusson, D. (2011). Cultural identity and pregnancy/parenthood by age 20: evidence from a New Zealand birth cohort. *Social Policy Journal of New Zealand, 37.*

33 Ministry of Health. (2015). *Maternity tables 2013.* Wellington: Ministry of Health http://www.health.govt.nz/publication/maternity-tables-2013.

34 Ibid.

35 Perinatal and Maternal Mortality Review Committee. (2015). *Ninth annual report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2013.* Wellington: Health Quality & Safety Commission.

36 Ibid.

37 Ibid.

38 Whakawhetū. (n.d.). What is SUDI? Retrieved from http://www.whakawhetu.co.nz/what-sudi

39 Ministry of Health. 2015. Maternity Tables 2013. Wellington: Ministry of Health. Retrieved from http://www.health.govt.nz/publication/maternity-tables-2013

40 Marie, D. & Fergusson, D. (2011). Cultural identity and pregnancy/parenthood by age 20: Evidence from a New Zealand birth cohort. *Social Policy Journal of New Zealand, 37.*

41 Glover, M., Manaena-Biddle, H. & Waldon, J. (2006). The role of whānau in Māori women's decision about breastfeeding. *AlterNative: An International Journal of Indigenous Peoples,* 3(1).

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