Young Māori mothers and bed-sharing with their pēpi/baby

A case study focusing on the relevance and influence of three varying health promotion resources

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Dedication

It takes a village to raise a child- to all my whanau, I love you with all my heart, thank you for helping me become the woman I am today.

My partner Manu, who through thick and thin, has supported me in everything I do.

My son Materoa, you are my everything, and every day you are with me I am blessed and overjoyed. I would do anything for you and I know other mothers feel the same for their children. I do this for you on behalf of all the mothers and the love they have for their babies.

To the beautiful and never forgotten Mokopuna and Tamariki, your memory lives on, always.

Abstract

Māori Sudden Unexpected Death in Infancy (SUDI) rates are significantly higher than non-Māori. Bed-sharing is considered to be one of the major modifiable risk factors associated with SUDI rates (Mitchell et al., 1992), although there is strong opposition that suggests bed-sharing can act as a preventative measure against SUDI (McKenna & McDade, 2005). As a result of quantitative research and statistical data, many health promotion messages now focus on discouraging the practice of bed-sharing, whether it be through policy implementation throughout hospitals or through to health promotion guidelines. Although there is a high incidence of Māori SUDI rates, there has been little emphasis on Māori perspectives and insights into the practice. Of the few qualitative studies that focus on infant sleep practices, a significant finding is the high prevalence of Māori who bed-share regularly (Tipene-Leach et al., 2010). This paper will investigate the motivations and rationale of bed-sharing amongst young urban Māori mothers to gain a deeper understanding and appreciation into the lived realities of this group. The lack of consultation with a group that has been classed by New Zealand Government bodies, the Health Quality and Safety Commission and Child and Youth Mortality Review Committee Group, as ‘most at risk’ of experiencing a SUDI, maybe a contributing factor to the high Māori SUDI rates. This has brought about the question of whether current health resources are relevant and/or influence young Māori mothers. Using a Te Whare Tapa Wha framework within a Kaupapa Māori Research methodology, this paper provides a unique and much-needed perspective into the lives of young Māori mothers. The purpose of this research overall is: if health resources and messages are not relevant to a community and they have little or no influence over infant care practices, then do health professionals and researchers need to rethink current strategies and working models to ensure we focus on the real, lived needs of our community?

Acknowledgment

This research project could not have been completed without the love, support, guidance and patience of many.

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Without all of you this project would not have been accomplished,

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Chapter One: Introduction

The act of ‘bed-sharing’—or, as others may know the term, ‘co-sleeping’—is a practice that has divided many people in Aotearoa/New Zealand. Researchers and health professionals alike have either argued that bed-sharing is a necessary practise that has great benefits for mother and infant including increased rates of breastfeeding and a protective factor against Sudden Unexpected Death in Infancy (SUDI). On the other hand, opposing researchers and health professionals have disputed that bed-sharing is one of the main causes of SUDI, and strongly discourage the practice.

Moreover, extensive research into the effects of bed-sharing, both positive and negative, has caused division throughout the world. Differences in terminology have resulted in confusion and the mixed messages conveyed throughout the world and New Zealand have caused friction and left many frustrated. In New Zealand, for example, SUDI has become the new terminology to classify an infant death from the age of 28 days to 1 year (New Zealand Mortality Review Data Group, 2013). This change of name has left confusion amongst communities, as many know of SUDI as either ‘cot death’ or ‘SIDS’.

The continual cycle of changing terminology and frequency of changing messages has resulted in an environment of mistrust and irritation. For instance, the guidelines of which position to sleep baby has changed three times in the span of 5 decades. From the 1940’s, sleeping baby in the prone (face down) position is recommended (Gilbert, Salanti, Harden, & See, 2005); then, in the 1980’s, side sleeping was encouraged; in the early 1990’s, the supine (face up) position was, and still is, recommended as the safest position for infants to sleep (Ministry of Health, 2015; Mitchell, 2009; Mitchell & Blair, 2012). ‘Bed-sharing’ has also had the same response of confusion and misunderstanding because of 1) the change in terminology, use to be, and in many communities still is, referred to as ‘co-sleeping’; and 2) the polar opposite messages that are currently being researched, and subsequently promoted (Ball, 2003; Carpenter et al., 2013; McKenna & McDade, 2005; Mitchell, 2009; Mitchell et al., 1993; New Zealand Mortality

Review Data Group, 2013; Scragg et al., 1993; Tuohy, Smale, & Clements, 1998).

Again, these two key issues—1) varied messages and 2) confusion of terms—have created an environment of disorder. Families across New Zealand are being told inconsistent messages: either ‘bed-share with your baby’ or ‘avoid bed-sharing with your baby’. Much of the research coming out of New Zealand recently provides reasons to avoid bed-sharing primarily based on findings from babies who have died as a result of SUDI (Blair et al., 1999; Mitchell, 2009; Mitchell & Blair, 2012; Mitchell et al., 1992; Mitchell et al., 1997; Scragg et al., 1993). However, there is very little qualitative research focused on families and their infant sleep practices, and even less research centring on the rationale of these practices. Therefore the aim of this research centres on a discussion of the motives, and influences of bed-sharing.

Rationale for this research

When I first began work in the area of maternal and infant health, many times I felt disheartened. I remember sitting in a room with the awful task of reviewing infant mortality rates. The typical review process in these meetings involved how babies died, what were the contributing factor/s, and what recommendations need to be made so tragedies such as these never happen again. This seemed sensible in theory but it always left me wondering “are these recommendations having any impact?”

The area of infant health I worked in focused on SUDI. It goes without saying that the impact of this work is devastating, but being entrenched in the work meant at times it was easy to forget the value, or the cost, associated with this work. Being involved also meant it was quite common to hear that similar factors surrounding one incident were also present in another. ‘Bed-sharing’ was such a common occurrence and after hearing this factor was involved on a number of occasions, the group recommended that bed-sharing should be avoided. As well, after hearing case after case of SUDI, I understood how discouraging bed-sharing became a common recommendation.

After great media attention, the need to reduce the SUDI rates in New Zealand has become a major priority for all District Health Boards. “The Health Quality & Safety Commission has written to district health boards asking them to prioritise the prevention of Sudden Unexpected Death in Infancy (SUDI)” (Health Quality & Safety Commission, 2012, p.1). Clearly, the national bodies are concerned by the 'epidemic' of SUDI cases and call for local, regional, and national accountability.

As a result, pressure across New Zealand is being felt to promote the message “baby should have their own sleeping surface” (New Zealand Mortality Review Data Group, 2013, p. 29). Progress in this area influenced change with new initiatives such as New Zealand’s ‘First National Safe Sleep Day’ held on Friday 6th December 2013 promoting the message ‘place baby in a baby bed to sleep’ (Whakawhetu: National SUDI Prvention for Maori, 2014b).

It is important to note there is also strong opposition to this position but whether one agrees with bed-sharing or not, amongst all the hype, what was lacking was the voice of the people whom health professionals were trying to influence. Health care professionals have researched the area of SUDI, exploring causative factors in great depth, creating resources that reflected this research in areas that both encourages and discourages bed-sharing, and arguing at great length as to what is perceived as being the ‘correct’ way to implement infant sleep practices. But have health professionals engaged with communities about their infant sleep practices? What motivates parents and caregivers to bed-share with their pēpi (infant)? If health professionals want to improve the SUDI rates in New Zealand shouldn’t engagement with communities take precedent as opposed to providing a top down model of implementation? (Caccioppoli, Cullen, & Kotahitanga Community Trust, 2005)

Thesis Overview

This thesis will examine young Māori mothers and their bed-sharing practices. The following chapters will demonstrate a need to explore two research questions: 1) what is the relevance of each of the three varying health promotion resources provided to young urban Māori mothers? (these resources will be displayed in Chapter Four); and 2) how, if at all, have these resources influenced this specific group?

Chapter One introduces the issue of bed-sharing, the rationale for this research, and the thesis overview. With this chapter the research questions, the topic itself, my interest as a researcher, and the importance of this thesis are revealed.

Chapter Two introduces a literature review which will provide a context of the subject matter and the need for research into this area, for the interests of individuals, whānau, and New Zealand as a whole. This chapter will also introduce Kaupapa Māori Research methodology and how the principles of this methodology underpin this research project. There will also be a review on a Māori health model, Te Whare Tapa Wha, which will provide a framework for analysing data contributed by participants.

Chapter Three will focus specifically on the practice of Kaupapa Māori Research, including how participants were recruited, selected, and invited to participate. The procedure is a critical component for this research project and will demonstrate how Kaupapa Māori Research principles are implemented and carried out within this project.

Chapter Four is the results gathered from a focus group session and follow up conversations from the research participants. This chapter provides a collection of findings that provide a rationale for bed-sharing practices.

The final chapter will be a discussion of these results. Data will be analysed using the Te Whare Tapa Wha Māori Health model (Durie, 1998) as a framework to comprehending the different components that contribute to infant sleep practices within Māori culture. This chapter will also be the catalyst for providing potential future directions for research and health interventions.

Chapter Two: Literature Review

Understanding factors that affect infant sleep practices is a necessary first step to addressing bed-sharing. Prior scoping of a health issue aims to ensure effective messages are relevant for a targeted community group, to ultimately influence behaviour change. It seems in New Zealand we have started with the latter, introduced health messages to change behaviours, and neglected the former, in-depth scoping of the health issue, at least in the case of bed-sharing where research and consultation with young Māori mothers is severely lacking. Many health promotion messages around bed-sharing have been created as a result of recent International and New Zealand research (Child and Youth Mortality Review Committee / Te Ropu Arotake Aua Mate o te Hunga Tamariki, 2013; Mitchell, 2009; Mitchell & Blair, 2012).

There are a number of research articles that, quite simply, centre on the question of whether bed-sharing is ‘safe or not’. This research project, unlike many, will investigate the factors that influence bed-sharing for young urban Māori mothers. When exploring the issue of SUDI this specific group has often at times been, undervalued, and underappreciated, mirrored by the lack of studies focusing on this group. This chapter will demonstrate how exploring this particular group is pivotal for reduction in SUDI rates.

The literature review is an integral part of this research project as Boote and Beile (2005) explain,

> …as the foundation of any research project, the literature review should accomplish several important objectives. It sets the broad context of the study, clearly demarcates what is and what is not within the scope of the investigation, and justifies those decisions (p. 4).

The literature review consists of five significant topics that guide this research project:

1. Sudden Unexpected Death in Infancy;
2. Bed-sharing;
3. Māori Health and Te Whare Tapa Wha;

4. Research;
5. Health Promotion Messages.

By focusing on these five topics this project will provide a scope to focus on young Māori mothers and bed-sharing with their pēpi.

Sudden Unexpected Death in Infancy (SUDI)

Definition

In New Zealand, Sudden Unexpected Death in Infancy (SUDI) is “the main cause of death in post-neonatal infants” (New Zealand Mortality Review Data Group, 2013, p. 3). However, as SUDI is a relatively new term, there is confusion amongst health professionals, and the community, as to what the definition is. Baker (2011) explains:

> SUDI is an umbrella term used to describe a heterogeneous group of infants under age one who die without warning signs or distress sufficient to alert parents or caregivers. The term SUDI therefore relates to the experience from the viewpoint of parents or caregivers and allows preventive measures to target all the conditions within the group. The term encompasses a spectrum of cases ranging from those that remain unexplained following full investigation (SIDS) to cases which are fully explained. Between the two ends of the spectrum are cases where a pathologist or coroner is unclear to what extent the deaths are explained, and which tend to be called ‘unascertained’. Unexpected deaths where significant external forces are applied—e.g. motor vehicle crashes or assault are not included within the term SUDI. (p. 9)

Prior to the introduction of the term SUDI, infant deaths in New Zealand that occurred between 28 days to one year were referred to as Sudden Infant Death Syndrome (SIDS) or Cot Death (Davidson-Rada, Caldis, & Tonkin, 1995). SIDS is an international term used by pathologists, paediatricians and coroners alike; however, as this has been a term used since 1965 when the International Classification of Diseases code was allocated (Mitchell, 2009), the eventual progression of an exact definition changes throughout the world. Following on from the SUDI definition above (Baker, 2011), this paper defines SIDS as “the sudden death of any infant or young child which is unexpected by history, and in which a thorough post-mortem examination fails to demonstrate an adequate cause of death" (Bajanowski et al., 2007, p. 130).

In the past, defining SIDS has created debate amongst a number of health professionals. The New Zealand Mortality Review Data Group (2013) provides this explanation as to one issue associated with defining SIDS, “possibly as the result of pathologists and coroners becoming increasingly reluctant to label a death as SIDS in the context of equivocal death scene findings” (p. 1). As a result New Zealand has led the way in developing a new classification system that takes into account SIDS incidences as well as two other categories: 1) accidental suffocation/strangulation in bed; and 2) ill-defined/other deaths (see Figure 1) (New Zealand Mortality Review Data Group, 2013; Simpson et al., 2014).

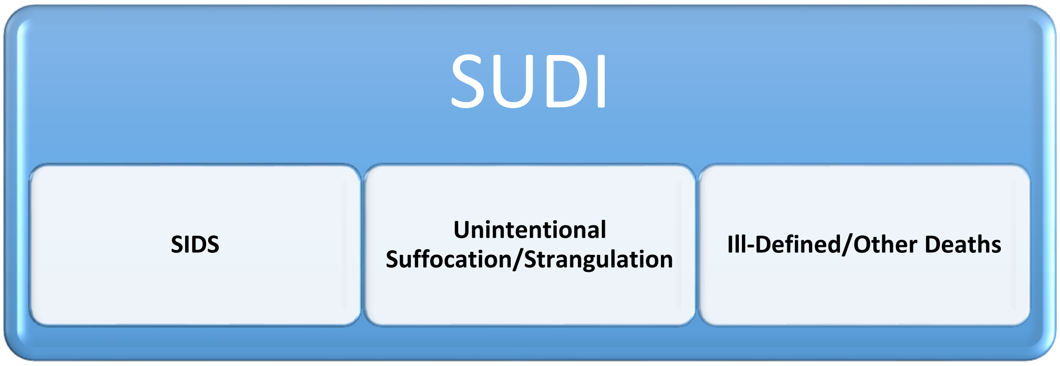

Figure 1- SUDI Umbrella Term, Three Components

The change in terminology has come about as a result of two new understandings: 1) not all deaths that occurred within this age range are unexplained; and 2) there are researchers contesting the idea that many of the SIDS incidences that have taken place, could have been prevented, and a strong possibility, with interventions, these can be prevented in the future (Mitchell, 2009). In other words, the main reason for creating the umbrella term SUDI, is the finding that not all previously classed SIDS cases in New Zealand were unexplained, and if there is such a cause, i.e. suffocation, theoretically this can be prevented in the future.

How does NZ compare with the rest of the world?

In relation to the rest of the industrialised world the SUDI rates in New Zealand are amongst the highest. Mitchell et al. (1992) reported that “post-neonatal mortality (the death of a live-born infant between the ages of 28 days and one year) in New Zealand is higher than in other comparable countries and has not improved over the last 30 years” (p.158). Davidson-Rada et al. (1995) explain the SIDS mortality rates during the 1980’s:

> New Zealand was one of the highest SIDS mortality rates in the Western world. The rate was 4.2 deaths per 1000 live births in 1987 (a typical year). The 1987 SIDS rate for Māori infants (12% of all births-8.2/1000) was, on average, twice that of non-Māori infants (3.6/1000). (p. 162)

Although there was acknowledgement that SIDS was identified as a high priority in New Zealand, the rates have still remained the highest in the world. “Among the industrialised nations, Japan has the lowest reported SIDS rate (0.09 case per 1000 infants), New Zealand has the highest rate (0.80 per 1000), and the United States has an intermediate rate (0.57 per 1000)” (Kinney & Thach, 2009, p. 796).

By breaking down the data further there is a strong theme that exists throughout the industrialised world. Many indigenous cultures that have experienced colonization seem to have much higher rates than their majority counter racial group:

> A striking discrepancy exists among racial and ethnic groups that have been studied, with SIDS rates that are two to seven times the national averages among Native Americans and blacks in the United States; among persons of mixed ancestry in Cape Town, South Africa; among M[ā]ori in New Zealand; and among aboriginal Australians. (Kinney & Thach, 2009, p. 796)

Knowing that other indigenous cultures are experiencing a higher ratio of SIDS incidences, it is valid to state that if interventions and approaches are needed, then they should be culturally appropriate, and if needed, take precedence over Western methodology.

SUDI rates in New Zealand

SUDI is the new terminology used to classify infant deaths in New Zealand between the ages of 28 days to 1 year, with the key factor being the death was unexpected. As explained previously SIDS is one component of SUDI. In New Zealand prior to 2014, infant deaths during this age range were classified as SIDS, whether evidence of suffocation or other explained causes were present or not. Although this distinction has been made recently, data and studies prior to 2014 still refer to these deaths as SIDS and therefore any reference to past research or statistics will be made in past tense using SIDS terminology.

Between 1985 and1994, the SIDS rate in New Zealand fell from 10.9 to 7.2 deaths per 1000 live births, with the SIDS rate almost halved (Ministry of Health, 1998). This is due largely to the New Zealand Cot Death Study, a major epidemiological project with the key objective to identify the major risk factors associated with SIDS/ Cot Death (Davidson-Rada et al., 1995; Mitchell, 2009; Mitchell et al., 1992), “with a particular emphasis on infant care practices” (Mitchell, 2009, p. 1713). The study began in February 1991 over a 3 year period and intended to “obtain data from an estimated 500 cot death cases with 1,800 controls and would target approximately 80% of the country’s live births” (Davidson-Rada et al., 1995, p. 163)

After year one of the study three key risk factors were identified that,

> …were potentially amenable to modification. These were 1) prone sleeping position of infant, 2) maternal smoking and 3) not breastfeeding. These three risk factors accounted for 79% of deaths from SIDS in New Zealand (Mitchell, 2009, p. 1713).

These findings created a platform for educational intervention between researchers, health professionals and community workers to help reduce the rate of SIDS in New Zealand. As a result, strategies involving community action, education of professionals and informing the public, were utilised to encourage whānau to adopt the solutions that had come out of the study (Davidson-Rada et al., 1995). The significance of these findings and interventions is that “if no infant was placed prone to sleep, no mother smoked in pregnancy or during the baby’s first year of life, and all infants were breastfed, the New Zealand SIDS mortality rate of 4 per 1000 live births could be reduced to less than 1 per 1000 live births” (Mitchell, 2009, p. 158).

The impact of the study was remarkably evident:

> Monitoring of the 1991 infant deaths showed a marked improvement in the SIDS figures. From 236 in 1989, they had fallen to 175 in 1990 when the results of the study began to be known, to 150 in 1990 when the campaign was well under way. (Davidson-Rada et al., 1995, p. 166)

Figure 2 shows a strong decline in the SIDS rates during this period and reflects the success the prevention programme had as this decline has continued well into 2000’s.

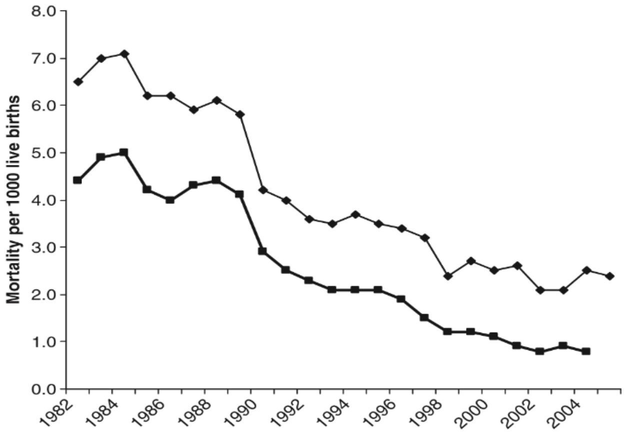

Figure 2- New Zealand post-neonatal (thin line) and SIDS (thick line) mortality (per 1000 live births), 1982–2005 (2005 is provisional data) (Mitchell, 2009, p.1714)

Although the SIDS rates amongst non-Māori dropped dramatically the rate for Māori did not decline as much during the period 1985–94 (Ministry of Health, 1998). In 1992–94, the Māori SIDS rate was still 4.5 times the non-Māori rate (Ministry of Health, 1998)

> By 1991 the total number of Māori (SIDS) deaths was 48, a reduction of only 10 since 1988 (16%), whereas the European deaths numbered 100, a reduction of 97 (50%).

> Birth numbers and racial ratios were stable over this period. (Davidson-Rada et al., 1995, p. 168)

What became very clear from the study was a tremendous difference of infant care practices amongst the two major ethnic groups of New Zealand, Māori and European. Although messages were targeting all New Zealanders, it seems, for a number of reasons, the messages were not having the same impact for different ethnic groups, particularly Māori.

One reason could be that there was a fourth risk factor identified at the conclusion of the study. As Davidson-Rada et al. (1995) explain, it is a "predominately Māori practice and not included in the original prevention programme" (p.169). Bed-sharing was identified as the fourth and final major modifiable risk factor. "A fourth risk factor, namely infants sharing a bed with another person, was added to the prevention programme in 1992" (Mitchell, 2009, p. 1714).

Over the last 20 years the SUDI rate in New Zealand has dramatically decreased compared with rates pre-1990 (refer back to Figure 2). The decline is promising however in the last decade the difference in ethnic SUDI rates is quite clear, that Māori SUDI rates are significantly higher than other ethnic rates (see Figure 3).

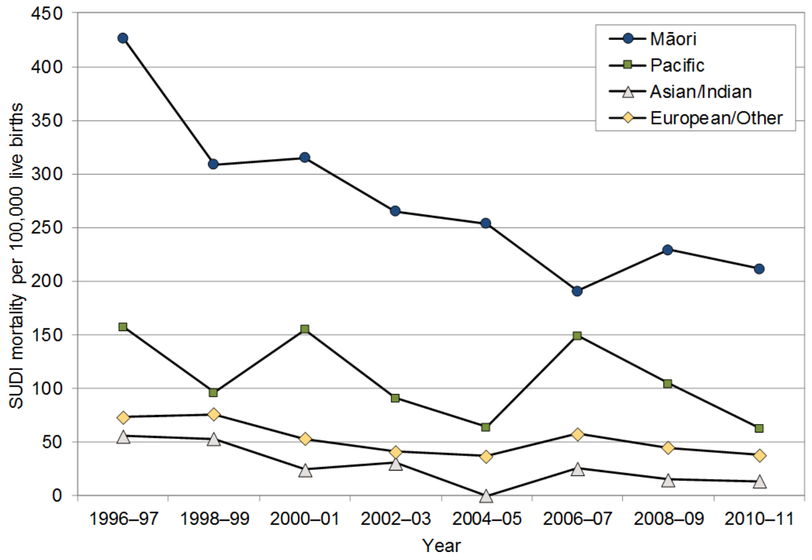

Figure 3- Sudden Unexpected Death in Infancy by ethnicity, New Zealand 1996–2011(New Zealand Child and Youth Epidemiology Service, 2014).

Focusing on the ‘modifiable’ risk factors, it is crucial to investigate the differences between Māori and non-Māori infant sleep practices, namely the topic bed-sharing. Although there are many avenues to explore and a number of reasons that attribute to the question of SUDI, from this point, I will be focusing on the motivations and rationale of bed-sharing for young Māori mothers.

Bed-Sharing

Definition

Bed-sharing is a term that is interchangeably used with co-sleeping, however recent studies from Mitchell (2009); Mitchell and Blair (2012) have defined that the former is a sub-category of the latter, meaning bed-sharing is a type of co-sleeping:

> Co-sleeping refers to the diverse ways in which infants sleep in close social and/or physical contact with a caregiver…this operational definition includes infant sleeping alongside a parent on a different piece of furniture/object as well as clearly unsafe practices such as sharing a sofa or recliner. (Academy of Breastfeeding Medicine Protocol Committee, 2008, p. 38)

Bed sharing is defined by Mitchell (2013) as “the parent sleeping with the infant on the same sleeping surface (usually a mattress). A key feature is that the parent is asleep” (p. 20). The differentiation between co-sleeping and bed-sharing is very important as it separates the perceived ‘safe’ and ‘unsafe’ practices of sleeping with an infant. The below example does not make this distinction:

> The U.S. Consumer Product Safety Commission (USCPS), using data from studies (that allegedly contain unverified information) has made recommendations against the use of all types and forms of co-sleeping and advised parents against sleeping with their infants under any circumstances. (Academy of Breastfeeding Medicine Protocol Committee, 2008, p. 39)

The Academy of Breastfeeding Medicine Protocol Committee (2008) has expressed concerns associated with using ‘co-sleeping’ terminology incorrectly. One of these concerns is that using co-sleeping as a general blanket cover is politically incorrect. In the above scenario, for example, using the term ‘co-sleeping’ essentially has taken away the right for a parent to choose whether or not to bed-share, even though in different circumstances bed-sharing can be done safely (Unicef UK Baby Friendly Initiative, 2015, p. 5).

In New Zealand the Health and Disability Commissioner Te Toihau Hauora Hauatanga (2014) states “you have the right to be given information you need to know about your health or disability” (p. 1). Families have a right to know the health risks associated with bed-sharing but in the same respect they have the right to know safe ways to practice this. Informing the public against all types and forms of co-sleeping is misleading and a judgement should not be that all infants are the same, especially if some families have minimal risk associated with this practise.

Although this paper is not focused on the debate of ‘pro bed-sharing’ verse ‘no bed-sharing’, it is critical to scope the two divides. Exploring these two sides will provide a rationale for the different types of health resources being promoted, by different people and organisations. For example, many researchers who discourage bed-sharing are researchers who have studied the SUDI rates and causes of death, namely bed-sharing, whilst those who are pro-bed-sharing have a deep insight into the benefits of bed-sharing. These two views will present an awareness of motivates for encouraging and discouraging bed-sharing.

Positives of Bed-sharing

Bed-sharing has a number of positive associations. For example, the health benefits of breastfeeding for infant and mother have been well researched and is now being heavily promoted throughout the world (Unichef, 2013). Bed-sharing is an enabler of breastfeeding and as a result bed-sharing is considered a positive act. Still, breastfeeding is only one positive aspect associated with bed-sharing. Ball (2002) study on *reasons to bed-share: why parents sleep with their infants,* comprised of more than 250 participants, and demonstrated that a majority of parents and infants bed-share regularly. The study identified three primary reasons why bed-sharing occurred: these were “breastfeeding, settling, and illness” (p. 216).

Breastfeeding

Bed-sharing has a direct relationship with breastfeeding, by being able to assist with increased uptake and duration of breastfeeding. Many studies have shown that mothers who choose to breastfeed have at some stage adopted the practice of bed-sharing to assist with carrying out breastfeeding (Ball, 2002, 2003; McKenna & McDade, 2005). McKenna and McDade (2005) explain how bed-sharing is a natural response when breastfeeding is established: “mother–infant co-sleeping represents the most biologically appropriate sleeping arrangement for humans and is both ancient and ubiquitous simply because breast feeding is not possible, nor as easily managed, without it” (p. 134). The most frequently-stated reason for bed-sharing while breastfeeding was due to its “ease and convenience” (p. 212).

Again bed-sharing is used to support breastfeeding, which has a number of advantages for babies: not just short term outcomes but long term also. The composition of breastmilk includes ingredients such as “antibodies, hormones, anti-virus, anti-allergies, anti-parasites, growth factors, and enzymes” (California Department of Health Services, n.d., p. 1) which are not found in formula. The benefits associated with breastfeeding have been well studied and documented with Allen and Hector (2005) explaining:

> . . . there are many health benefits and advantages of breastfeeding at all stages of life. Breastfeeding has been consistently shown to be protective against a large range of immediate and longer term health outcomes that are a significant burden on individuals, the health system and society” (p. 42).

There is strong evidence to support that breastfeeding has economical and health benefits for babies and mothers, and to many health professionals and researchers these benefits negate the potential risk bed-sharing has.

Settling

Settling an infant when they are unwell or distressed, has been identified as a positive reason associated with bed-sharing. During Ball (2002) study, a number of mothers identified the reasons for bed-sharing was to help their infant to settle for sleep during the night. For example, Ball (2002) quoted a mother: "[my baby] continually twisted and turned in her sleep. Resolution: cuddled in bed with mum… quite grizzly—ok when he came in bed with us—so we let him stay in bed with us" (p.214). Similarly, McKenna and McDade (2005) support the notion that settling baby is easier in a bed-sharing situation as they identified physical, behavioural and physiological benefits as a result of bed-sharing: "Mothers report less infant crying, more maternal and infant sleep" (McKenna & McDade, 2005, p. 135).

Illness

During Ball (2002) study, "illness of baby" was a factor that influenced bed-sharing. "He slept well but his cough kept waking him up a little bit so Granma brought him in her bed to keep an eye on him" (p. 214). From Ball (2002) study mothers identified when an infant was unwell they were able to care for the infant better if the infant was in the adult bed as opposed to the cot. This is supported by the McKenna and McDade (2005) study that shows the relationship between infant and mother's respective arousal rate and response. The findings show that maternal arousal occurred frequently as a response to infant arousal and that the "heightened sensitivity might increase the chances that mothers could more quickly detect and intervene against a life threatening event that night-time separation from the baby precludes" (McKenna & McDade, 2005, p. 135)

These examples of positive outcomes of bed-sharing are only an identified few. These, and other research studies, have shown a direct relationship between bed-sharing and positive outcomes. Many researchers whom support bed-sharing argue that bed-sharing alone is not the sole cause of SUDI (Ball, 2002; Ball, Hooker, & Kelly, 1999; Blair & Ball, 2004; Carpenter et al., 2013; McKenna, Ball, & Gettler, 2007; Mitchell et al., 1993; Tipene-Leach et al., 2010).

The following section of this chapter focuses on the possible negatives of bed-sharing. Again however, some studies find that bed-sharing is not the main cause of SUDI. Instead there have been other factors that have eventually contributed to the death of the infant, these will be discussed shortly. As Ball (2002) points out:

> One potential explanation for some unexplained bed-sharing deaths…might be that a vulnerable baby facing a physiological challenge that has not yet manifested clinically may be taken into the parents' bed due to behavioural irritability, where it may succumb to the physiological insult. (p. 216)

In other words, many researchers in support of bed-sharing recommend that findings be more thorough and that critics of bed-sharing should not be so quick to find the cause of a SUDI as bed-sharing when other factors were more than likely involved, and could in fact be the reason why the infant died in that situation.

Negatives of Bed-sharing

To assess the negatives of bed-sharing it is important to analyse the different categories of SUDI in relation to the New Zealand SUDI rates, and the association bed-sharing has with each of these three areas. As stated previously, SUDI is comprised of three sub categories: SIDS, unintentional suffocation/strangulation, and other ill-defined deaths (New Zealand Mortality Review Data Group, 2013). Figure 3 shows a breakdown of the total number of SUDI deaths between 2008-2012 (n = 246), as well as the percentage of deaths for each of the three categories. 47% were classed as a SIDS death, 40% were due to accidental suffocation/strangulation, and 13% were classified as other ill-defined and unspecified causes (New Zealand Mortality Review Data Group, 2013). Each of the three areas are expanded on below.

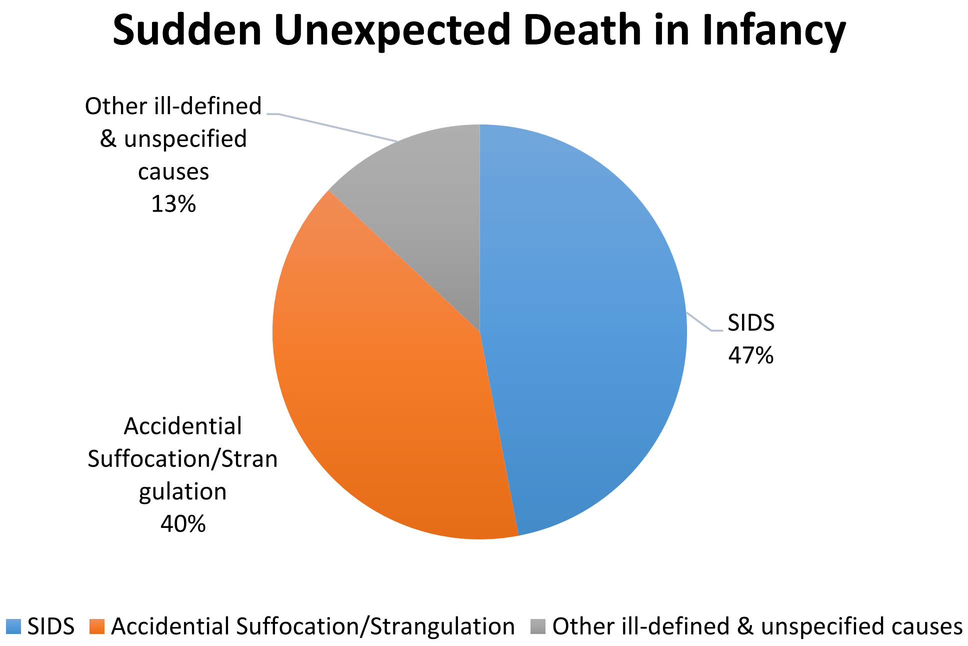

Figure 4- SUDI deaths by classification (New Zealand Mortality Review Data Group, 2013)

SIDS

By definition, SIDS accounts for approximately just under half of all SUDI deaths in New Zealand (New Zealand Mortality Review Data Group, 2013). Although classification of a SIDS means that a thorough investigation has been carried out and no absolute conclusion as to cause has been identified, there have been recurring factors that are present in a number of SIDS cases. The presence of smoking (by at least one parent or caregiver) and bed-sharing have been identified in a majority of SIDS cases.

> Bed sharing was again identified as a risk factor for SIDS. There are now 10 studies that have examined the association between bed sharing and SIDS… Mothers of infants should be advised that bed sharing substantially increases the risk of SIDS *if she smokes*. (Mitchell & Tuohy, 1997, p.839)

Figure 5 is data taken from Mitchell (2014) comparing different scenarios of risk factors that contribute to either an increased or decreased risk of a SIDS event, with an emphasis on bed-sharing vs room-sharing. The results shown in this figure conclude that certain factors increase the risk of an infant dying from SIDS. For example, scenario one if parents decide to bed-share, there is little risk of their infant experiencing a SIDS if mother is breastfeeding and/or not smoking. Scenario two If the parents do smoke, baby is bottle-fed and alcohol is present, the data shows that room-sharing, not bed-sharing, with their baby is still a low risk with an estimated value of 1.77 per 1000 live births resulting in a SIDS death. However scenario three which has the same factors as scenario two present, parents smoke, baby is bottle-fed, there is alcohol present, but the parents choose to bed-share, the risk leaps from 1.77 per 1000 live births to 27.5 per 1000 live births of resulting in a SIDS death. What these findings mean is that the presence of smoking or alcohol does increase the risk of SIDS, however if bed-sharing is then added to the equation, the risk increases exponentially, making bed-sharing a dangerous practice in this scenario.

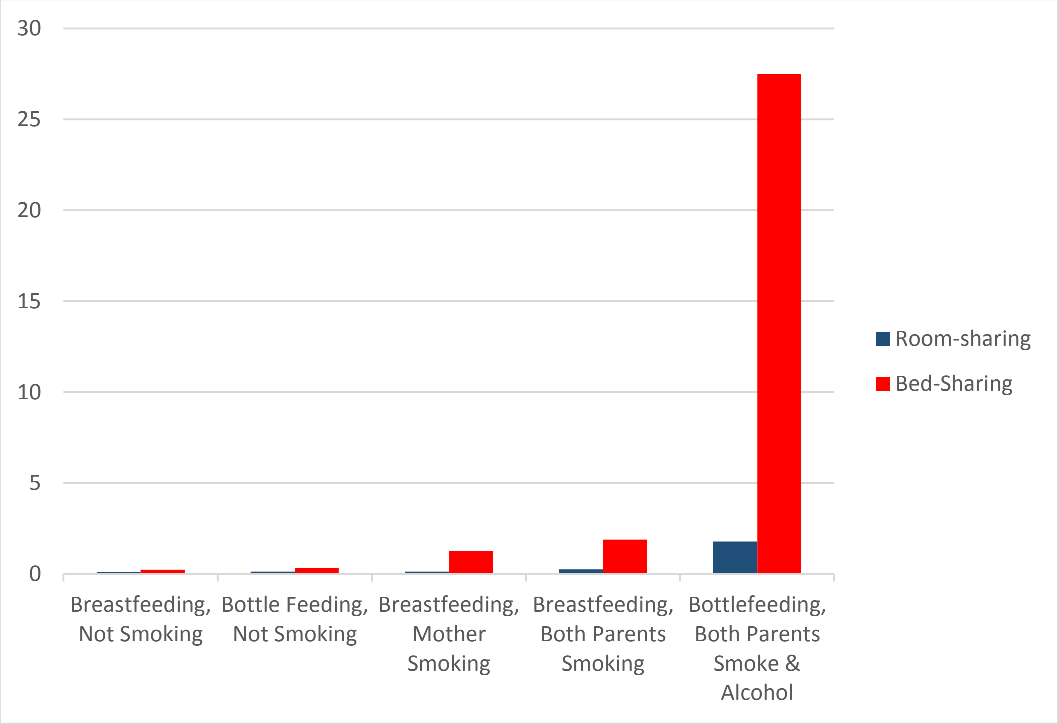

Figure 5- Estimated SIDS rate per 1000 live births for selected groups (mother 26-30yrs, 2nd child, birthweight 2500-3499g; SIDS rate=0.5/1000) (Mitchell, 2013).

Results from Figure 5 are estimated on factors for the following selected group, “mother 26-30yrs, 2nd child, birthweight 2500-3499g” (Mitchell, 2013). Mitchell (2013) explains that if the following factors were included into the equation “birthweight of 2.25.kg, mother aged 18 years, maternal smoker, partner smokes, 2+ units of alcohol, bottle feeding and bed sharing…the risk >100/1000, i.e. 10%” (p.30). In other words, if an infant is subjected to the above factors and is then put in a bed-sharing situation, the chances of that infant experiencing a SIDS is 1 in 10. This data illustrates that bed-sharing is still a high risk for SIDS when other risk factors are present. Mitchell et al. (1997) explains that “for mothers who do not smoke the evidence is inconclusive; however, there is no evidence that bed sharing in any group is protective” (p. 839).

Accidental Suffocation/Strangulation

Child and Youth Mortality Review Committee / Te Ropu Arotake Aua Mate o te Hunga Tamariki (2013) released a special report centring on *unintentional suffocation, foreign body inhalation and strangulation.* The report was released as a result of the high volume of related deaths. Between 2002-2009, “96% of children who died in place of sleep with suffocation were infants under 12 months” (p. 13). The main cause of suffocation was due to overlay, “the situation where a co-sleeping partner has caused suffocation” (p. 15) either by a parent or sibling in a co-sleeping environment (Child and Youth Mortality Review Committee / Te Ropu Arotake Aua Mate o te Hunga Tamariki, 2013). Examining the data further has revealed that many of the infants who died had varying sleeping environments. “Deaths occurred in what could be considered the infant’s sleeping routine” (p. 12). Essentially this means that the regular sleeping routine for that infant was to bed-share. Other environments included make-shift bedding away from home and a “break in routine due to breastfeeding or bottle-feeding, to help them settle, because of a party or social gathering, home renovations, household overcrowding or low environment temperature” (Child and Youth Mortality Review Committee / Te Ropu Arotake Aua Mate o te Hunga Tamariki, 2013, p. 12). Bed-sharing is considered a high-risk factor due to the high number of accidental suffocation/strangulation deaths that occurred while in a bed-sharing situation. One possible reason could be because “during bed-sharing an infant may spend a proportion of their sleep with their face covered” (Child and Youth Mortality Review Committee / Te Ropu Arotake Aua Mate o te Hunga Tamariki, 2013, p. 15)

Other Ill-Defined/Unspecified Deaths

Deaths that occur in this group are considered a SUDI as the event was unexpected and cause of death was only determined once an autopsy had been completed. Bed-sharing has been a factor in both SIDS and the unintentional suffocation/strangulation classifications; however, there is no data directly related to bed-sharing and to the third group, other ill-defined/unspecified deaths.

It is clear bed-sharing has had a direct relationship to SUDI. “Sixty-four percent of SUDIs in Auckland from 2000-2009 were associated with bed sharing” (Hutchison, Thompson, & Mitchell, 2015, p. 15). Research that discourages bed-sharing is strongly supported by the statistical findings of previous SUDI deaths. However, many of these statistics negate the importance of the social, environmental, and family dynamics that contribute to infant sleep practices. Although sleeping an infant next to the parental bed is claimed to be the most risk-free sleep environment for an infant (Mitchell & Blair, 2012, p. 4), the SUDI rates reflect that this belief is not supported by many New Zealand families.

Māori and Bed-sharing

Bed-sharing is considered a traditional practice in many indigenous cultures. Within “most non-Western cultures mother-infant contact sleeping is the norm” (Ball, 2002, p. 208). Māori have a high rate of bed-sharing and this has been highlighted in a number of studies (Blair et al., 1999; Davidson-Rada et al., 1995; Mitchell, 2009; Mitchell & Blair, 2012; Mitchell et al., 1992; Scragg, Stewart, Mitchell, Ford, & Thompson, 1995; Tipene-Leach et al., 2010). In Scragg et al. (1995) “the proportion of control infants who usually bed shared in the last 2 weeks was 65.7% in Māori…and 35.5% in Europeans” (p.218). Recent work by Tipene-Leach et al. (2010) in Auckland showed that “53% of pregnant Māori women smoke and 70% of Māori infants have a period of bed-sharing greater than two hours a night. The non-Māori comparison is 8% for smoking in pregnancy and 20% for bed-sharing” (p. 137). These findings show a distinct difference between Māori and European infant sleep practices.

There is little literature on traditional Māori practices as knowledge passed down from generation to generation, pre-colonization, was transmitted and embedded in stories and through oral communication. As the next section will highlight, traditional Māori ways of transferring knowledge was—and in some instances through academic mediums still is—not a legitimate way of knowledge gathering. However Holmes (2008) argues that the use of narratives is a way of expressing, not just personal selves, but also social and cultural identities. Although searching for literature on the topic of traditional bed-sharing practices has merit, a chance interaction with a Kaumatua has provided greater insight, and in turn, greater appreciation for narrative inquiry. The informal conversation was an incredible journey that explored a number of different topics that interconnected. One of the past traditions related to infant practices he witnessed and recalled as a child was:

> *I remember the old Kuia gardening and carrying their pēpi in a ‘Poro’. The Kuia would carry baby all day whilst tending to the kumara and when it was sleep time the pēpi would go into the Poro to sleep* (N. Haereroa, personal communication, September 2013).

The knowledge from this conversation was extremely enlightening and provided a valuable insight into the sacredness of mother and infant closeness. The ‘Poro’ was described as a weaved flax basket that baby could be carried in, and sleep in, whilst parents tended to work and/or other duties. It was not directly discussed whether the Poro was used in place of sleep alongside family members, but the significance of the conversation demonstrated that bed-sharing has an embedded meaning for many Māori families that cannot simply be dismissed as a practice that one either does or does not do.

There are more factors to consider regarding bed-sharing. Jenkins (2011) explains how pre-colonization practises of closeness with an infant were more than a physical act. Although the following quote does not refer directly to bed-sharing, because the parent or caregiver is not asleep while the infant is sleeping, it provides a great insight into the value of being close with baby.

> The mode of carrying the children, if not the most graceful, is certainly not the most inconvenient. The child is placed astride on the shoulder of the nurse, who secures it in this posture by one of its arms; the other being left at liberty, it employs it in playing with the ornaments on the head of its mother; and as these are sometimes numerous, consisting of feathers, shells, buttons, and sharks teeth, the child is provided with an ample source of amusement. It is taught to twine its arms round its father's neck; asleep or awake, it remains the whole day thus suspended, protected from the weather by the same mat which covers its parent; and in his longest journeys as well as his most laborious occupations, it is his constant companion. (Jenkins, 2011, p.11)

Jenkins (2011) has shown that Māori valued the learnings, protection and closeness of their infant, and coupled with accounts from different Kaumatua, it is fair to consider that these beliefs were carried on through sleeping arrangements. Tipene-Leach (2007) has also noted that:

> . . . in pre-European days there was a bassinet like structure called a porokaraka – it was a flax cradle that was slung from a tree or from the rafters of the whare puni or wherever the mother went. And the kuia involved in this [Wahakura] project spoke of babies in more recent years, being laid in kete kumara to sleep while the parents tended their gardens" (p. 6).

Again the Poro, Porokaraka, Kete Kumara, are all forms of an infant sleeping and/or transportation device used by older generations of Māori. It is unclear whether these were used during the night when parents were sleeping also, but what is clear is that closeness with infants has been, and still is in many Māori families, the norm.

The work conducted by Tipene-Leach et al. (2010) has highlighted that SUDI rates in New Zealand are primarily a Māori issue because of the high smoking in pregnancy rates and high bed-sharing incidences. Tipene-Leach argues that Māori 'problems' should be approached with Māori solutions but as the chapters unravel it becomes clear that Māori concerns have not been the priority in a New Zealand health system dominated by Western thinking.

Māori Health in Aotearoa/New Zealand

Pre-Twenty First Century

Nowadays, it is common to see a number of health messages targeting Māori communities to improve their health (e.g. quit smoking campaigns specifically targeting Māori families or an infamous Māori rugby player targeting Māori males to get their heart checked (Health Promotion Agency, 2015; Quitline Me Mutu, 2015). However, this was not always the case. “At no stage before 1900 did the government see a need for official action against low standards of Māori health” (Lange, 1972, p. 82). In fact, “. . . in the 1960’s Māori were blamed for high rates of illness against imported infection due to their ‘lack of attention to sanitation’ and ‘absurd methods of cure’” (Dow, 1999, p. 215).

The decades following colonization were extremely difficult for Māori peoples not only because of the devastating consequences of introduced diseases and illnesses that had a damning impact on the Māori population, but also because of the new way of life that came with colonization. “The rapid expansion of European settlements after 1840 brought new healthcare practices, but also introduced new problems that decimated the indigenous population” (Bamford-Wade, Nicholls, Tane, & Mitchell, 2009, p. 78). Although there are a number of research projects and programmes that specifically target Māori now, there is a large period of postcolonial New Zealand history that is either undocumented or distorted, and as Dow (1999) explains, shows that Māori health was not taken seriously. “The first academic historian to tackle Māori health was Raeburn Lange in a path-breaking MA thesis in 1972” (p. 216). Research into Māori health continued to be overlooked well into the late-twentieth century. Dow (1999) explains:

> …problems relating to Māori health have exercised politicians and government officials, since the first years of European administration in New Zealand, yet until recent years the history of health care for Māori was a largely neglected topic (p. 214).

When research was carried out on Māori it was conducted by Western academics using Western research processes. “Māori health research was largely left to academic medical researchers, few of whom were Māori or able to speak from a Māori view” (Durie, 1996, p. 1). The result of research conducted from this particular viewpoint using Western methods meant “research which impacted on Māori health was sporadic, generally illness orientated and more often than not focused on comparisons with non-Māori” (Durie, 1996, p. 1).

Today’s climate

In Aotearoa/New Zealand “Māori, the indigenous population…have the poorest health of any New Zealand group…with a higher mortality rate than non-Māori, as well as higher rates of illness” (St George, 2013, p. 54). In relation to SUDI, “Māori infants die more frequently… and have lower birth weight and higher rates of illness” (St George, 2013, p. 54) than non-Māori infants. What is more concerning is that these statistics only account for 15% of New Zealand’s population. This means, although Māori peoples make up only a small percentage of the overall population, Māori by far have the poorest health outcomes. The New Zealand Public Health and Disability Act 2000 *requires* District Heath Boards to improve the health outcomes for Māori (St George, 2013); however many current health promotion practices are not appropriate—or efficacious—for Māori people. According to Davidson-Rada et al. (1995), “traditional health promotion programmes have been effective for non-Māori, but have had relatively little impact upon Māori and Pacific population” (p. 298). The following headings within this section of the chapter will focus specifically on the relationship of Māori health and current health practices in New Zealand. By examining this relationship it will become clear that there is a great need to prioritise and implement relevant and appropriate approaches.

In the last 20 years the concept, not all health promotion messages are relevant for everyone, has been applied in many health initiatives (Raeburn & Rootman, 1998). There is a need for health messages to specifically target intended groups as opposed to targeting mass groups. Myers (2009) explains “message tailoring is a well-established health communication approach shown to increase persuasiveness of message effects in the promotion of health behaviours. Message framing is an effective message tailoring strategy” (p. 500). Unfortunately in relation to SUDI, during the dissemination of findings from the New Zealand SIDS campaign during the early 1990’s, the messages where not tailored specifically to Māori and as a result—at least partially—Māori SUDI rates are still significantly higher than non-Māori rates, at a rate of 211.3 deaths per 100,000 live births for Māori vs 44.9 deaths per 100, 000 live births for European/Other between 2007-2011 (New Zealand Child and Youth Epidemiology Service, 2014).

Approaches on how to improve Māori health have not been taken seriously in the past, and in some cases current practices in New Zealand are still reflective of this mind-set. For instance, there is still an idea that some practices or holistic approaches are absurd or have no place in health practices because they incorporate cultural values (Caccioppoli et al., 2005). It is only recently that the benefit of culture on health has been acknowledged. Neil, et al. (2010) explain that “cultural understandings and awareness have a significant impact on health and well-being” (p. 95). Coupe (2005); Te Puni Kokiri (1993) also support this statement by identifying that there is a direct correlation between cultural identity and health. Despite recent findings from Dew and Davis (2005) that “it is apparent that culturally inappropriate health services can have significant health consequences for minority or marginalised groups in society” (p. 85), culture still remains a vital element with either little or no regard in the New Zealand health system.

The role of whānau has also been severely overlooked by past—and many current—health initiatives. Western ideology has a very individualistic approach to health. For example, Phibbs, Murray, and Nicholls (2010) make quite clear the idea that health is the express responsibility of the individual, stating “[it is] obvious that we should all look after our own health and remain free from illness and disability” (p. 207). This ideal is in fact not the case in Te Ao Māori/ the Māori world (Wiri, 2007), where the family is both responsible and blamed for the good or ill health of a whānau member (Durie, 1996). In relation to child health, “whānau, hapu and iwi are important support mechanisms for the protection and nurturing of tamariki” (Ministry of Health, 1996, p.13). However, personal responsibility for health is prioritised in mainstream New Zealand.

Sadly, many health promotion messages have not considered a number of factors that are integral to Māori health, such as how Māori peoples identify themselves, or, as stated above, the role culture may play on health. There have also been past discrepancies that affect how Māori view the current health system, for instance the inability for mainstream health professionals to approach, adapt and modify their practice to be culturally inclusive of Māori.

> *I recall attending the doctors with my Koro (grandfather) and the nurse yells out pine! My Koro and I walk into the doctors’ office and the doctor begins to explain some very important information relating to his heart and the medication he must now take. We walk back to the car and the first thing my Koro says is ‘did you hear what that silly woman called me? I’m not wood!’ I preceded to ask if he recollected anything else the doctor had said but he replied ‘no that woman got me too angry and I didn’t listen after that”* (N. Haereroa, personal communication, March 4th 2013).

A number of traditional Māori names have been passed down from tupuna (ancestors); therefore, pronouncing a Māori name incorrectly is a sign of disrespect, not only to said person, but also to the tupuna and whānau. “Learning how to pronounce Māori names correctly is perhaps the single greatest way to show respect to your Māori patients” (St George, 2013, pp. 14-15) Examples such as mispronunciation of one's name may be one reason some Māori choose not to engage with health services.

Another reason is the idea that Māori approaches to health improvements are considered the ‘alternative’ or ‘unconventional’ idea. The wahakura is a weaved flax basket designed for whānau to sleep their baby. It is a protective sleep space that can be used in an adult bed (Abel & Tipene-Leach, 2013). This device is a Māori solution to a Māori problem. However, the wahakura is not being heavily promoted by several District Health Boards or the Ministry of Health because it has not been ‘researched’ by Western standards of measurements. In other words, it has not been approved for endorsement by Western channels because it has not undergone Western testing. It is examples such as this—outright denial of everyday practices and traditional methods—that makes it difficult for some Māori to engage or work in partnership with others.

Sadly, these factors still stir up negative emotions and feelings, and in relation to SUDI the culture of blame adds to this division. A recent headline demonstrates this culture, stating “A three-month-old baby died after sleeping in the same bed with her mum” (Brown, 2015). In New Zealand parents are made to believe sharing a bed with their baby is likened to child abuse as the Morton (2013,) explains “a coroner has again found himself pleading with parents not to sleep with their babies beside them - a practice he earlier condemned as child abuse” (p. 1).

The current expectation placed on parents and caregivers in New Zealand by the New Zealand health system, is that bed-sharing is a simple act that a guardian either does or does not perform. What previous studies in New Zealand have determined is that a number of parents and caregivers do bed-share (Abel, Park, Tipene-Leach, Finau, & Lennan, 2001; Tipene-Leach & Haretuku, 2002; Tipene-Leach et al., 2010; Tuohy et al., 1998) however, there has been little understanding as to why bed-sharing takes place. The reasons why Māori incidences of bed-sharing are greater than non-Māori involve reasons such as positive health and wellbeing. Durie (2001) explains, “the government objective that Māori should have the same opportunity to enjoy good health and wellbeing that other population groups in New Zealand have should not imply that the same measuring rod be used for all people or that similar outcomes are desired" (Durie, p. 7). In short, ensuring the safety and well-being of infants is the goal of all New Zealanders, however in the New Zealand health system it is clear the manner in which infants are protected is not uniformly accepted.

Te Whare Tapa Wha

Te Whare Tapa Wha, representing four walls of a house, was one of the first models used in the New Zealand health system that provided a framework of how Māori view health. Te Whare Tapa Wha was, and still is, a ground-breaking model in New Zealand as it is a different way of viewing health compared with Western models. "The models' appeal was based on its holistic approach to health and the recognition of spirituality as a significant contributor to good health" (Durie, 2005, p.10). Māori health was viewed negatively and left people with a sense of disempowerment and lack of control over their own health. However "by reconfiguring health in terms that made sense to Māori, it was possible for Māori communities to experience a sense of ownership and to balance medical and professional dominance with community involvement" (Durie, 2005, p.10).

Te Wha Tapa Wha uses

> …the analogy of a wharenui (the meeting house) all aspects of wellbeing can be represented whilst reflecting fundamental tenets of Māori epistemology and remaining consistent with contemporary Māori thinking (Glover, 2002, p. 12).

There are four walls that represent Māori health, Te Taha Hinengaro (Mental health), Te Taha Wairua (Spiritual health), Te Taha Tinana (Physical Health), and Te Taha Whānau (Family health) (Ministry of Health, 2015). There is also the fifth component that some researchers and health professionals include in the model, Te Ao Turoa (the long standing world) (Glover, 2002). Wakefield, Stirling, and Kahu (2006) explain the connection one has with their environment: "there is a unifying life force energy [mauri] connecting every living thing with each other, between people and their environment" (p. 173). "The four sides of the whare represent the immediate effects on an individual… the balance is required to enjoy stability and poor health is regarded as a manifestation of a breakdown in harmony within the individual and between the individual and the wider environment” (Glover, 2002, p. 12). Te Whare Tapa Wha is highly valued and practiced by many Māori, and provides a strong foundation for health communication and engagement with Māori.

Te Taha Wairua

A belief held by many Kaumatua is that Wairau “is the starting point for health… and Taha Wairua is said to be the most essential requirement for health” (Durie, 1998, p. 69-70). Durie (1998) goes on to explain:

> [wairua] implies the capacity to have faith and to be able to understand the links between the human situation and the environment. Without a spiritual awareness and a mauri (spirit or vitality, sometimes called the life-force) an individual cannot be healthy and is more prone to illness or misfortune. (p. 70)

Taha Wairua “captures the notion of a special relationship with the environment, as well as a Māori cultural identity” (Durie, 2005, p.11). Wairua is a cultural aspect of health that is often overlooked. Yet the importance of Wairua in a Te Ao Māori world view, can give one strength to improve, maintain or enhance the health of themselves, and their whānau.

Te Taha Hinengaro

Feelings and emotions are an integral part of Māori health. “Māori do not separate mind and body or thoughts and feelings to the same extent as Western psychology, nor are words elevated above feelings” (Glover, 2002, p. 13). For example, a Kaumatua can walk into a room and without speaking put other people at ease because of the unseen energy they release that passes onto others. In many cases the energy impacts on others by giving people a sense of reassurance, safety, and security. This example shows how emotions and feelings cannot be separated in Te Ao Māori. When ones’ mental health is offset, this can impact on the other aspects of their health, such as their physical health. This is an important element for health professionals to understand, because many Māori rely on their feelings and emotions to help them make health decisions.

Te Taha Tinana

This is a more familiar dimension for health professionals as it relates to the different aspects of ones' physical self. "In the medical model, disease is seen as a physical entity affecting a physical body" (Dew & Kirkman, 2007, p. 237). The physical aspect indeed plays a significant role in health. In Māori culture different aspects of the body have a different level of sacredness. For example:

> …because cleaning the body and eating are polar opposites, separation of food from toileting functions is regarded as necessary to maintain good health, a condition severely tested in hospital wards where all functions are frequently conducted in the same confined space. (Durie, 1998, p.71).

However, as the analogy of the wharenui reflects, a house cannot stand with one wall. Meaning, the physical aspect only reflects a part of ones' health and well-being. Te Whare Tapa Wha is as "inter-grated [sic] balance system" (Metge, 1996, p. 99) where the four elements are working simultaneously, in harmony with one another. If health systems focus solely on the physical aspect they are essentially missing three other elements integral to Māori health.

Te Taha Whānau

The fourth side of Te Whare Tapa Wha represents whānau. The relevance of extended whānau to health is one dimension that Western health systems and services are very much lacking in, especially regarding bed-sharing messages. Whānau have the ability to contribute to individual health and play a vital role in attitude and behaviour habits. Whānau can provide a support system of care and nurture not just physically, but also culturally and emotionally (Durie, 1998). Whānau provide the "capacity to belong, to care and to share… and the ability to guide us with the strength to be who we are" (Ministry of Health, 2012, p. 4).

Te Whare Tapa Wha has achieved status as a paradigm as Kuhn (1962) defines a paradigm "the underlying assumptions and intellectual structure upon which research and development in a field of inquiry is based" (p. 3). One of the aims of this thesis is to explore the relevance and influence of health resources on young Māori mothers, I use this paradigm as a framework to explore various factors from a Māori perspective that shape bed-sharing practices.

Research

Impact of research on indigenous peoples

In the Western world, scientific research has been a practice that reflects power and privilege for researchers (Kuhn, 1962) but in many cases has meant pain, disempowerment and ultimate loss for those who have been or are being studied (Smith, 1999). According to Smith (1999),

> "The word itself, 'research', is probably one of the dirtiest words in the indigenous world's vocabulary. When mentioned in many indigenous contexts, it stirs up silence, it conjures up bad memories, it raises a smile that is knowing and distrustful" (p. 1).

Research on indigenous peoples around the world has had detrimental affects with little or no positive outcomes. Often research conducted has humiliated those being researched by misinterpreting what has been said, leaving out perceived 'irrelevant' information, or misconstruing information to fit the needs of the researcher rather than the needs of those being researched (Smith, 2006). Linda Smith, from Ngāti Awa and Ngāti Porou Iwi, states, "…research was talked about both in terms of its absolute worthlessness to us, the indigenous world, and its absolute usefulness to those who wielded it as an instrument" (Smith, 1999, p. 3).

In Aotearoa/ New Zealand, the impact of research was disastrous for Māori. Waetford (2006) explains, "in an effort to address inequalities, reducing health disparities…effective health information systems that capture quality

Māori health data are required” (p. 167). Western academia has held in high regard, scientific forms of conducting research as a valid form of research (Humphery, 2001; Smith, 1999) and typically has dismissed traditional Māori practices such as oral traditions as an invalid form of knowledge transmission. The impact of this means that “without access to oral tradition practices and the Māori language, intergenerational transmission of knowledge and history was hindered” (Forester M, 2006, p. 99). Forester (2006) goes on to explain how the oppression of knowledge transmission has now impacted on Māori:

> The opportunities to express Māori knowledge, ways of knowing and associated practices became limited to specific setting[s] (for example, the marae—focal meeting place of kinship groups), activities (for example, wananga) and occasions (for example, tangihanga—mourning rituals). In addition to this many Māori are marginalised from their own culture. (pp. 99-100)

As a result of past experiences many indigenous peoples—not only in Aotearoa/ New Zealand, but around the world—have found it hard to trust the researchers. This is not due to just the disrespectful methods research brings including inappropriate questions, but also the “cultural protocols broken, values negated, small tests failed and key people ignored” (Smith, 199, p.3) but also by what the research findings bring, such as policies created from research findings.

In relation to bed-sharing, SUDI is now a high priority of all DHB’s throughout New Zealand and many of the policies written are as a result of Western-dominant research conducted in this area. Much of the research these policies are based on are studies conducted that neglect the voice, values and opinions of Māori. Therefore, policies are being implemented targeting a specific population group—young Māori mothers—with little or no qualitative research that privileges Māori voice, values and opinions. It is not only necessary to conduct qualitative research about bed-sharing but use a methodology that will capture information that is central to the needs of the people this project is targeting.

Kaupapa Māori Research (KMR)

Qualitative research is a relatively new research methodology now accepted as valid within academia. “Qualitative research aims to address the questions concerned with developing an understanding of the meaning and experience dimensions of humans’ lives and social worlds” (Fossey, Harvey, McDermott, & Davidson, 2002, p. 717). Unlike scientific researchers, qualitative researchers explore the understandings of different practises. There is no argument that research is a necessary tool in determining policies and protocols. However, it is the *what*, and the *how*, that these tools are used that is debated (Durie, 1996).

As a direct result of colonial values that dictated previous research methodologies resulting in the belittlement of Māori knowledge and practice, an indigenous approach to research emerged with a resistance to the “hegemony of the dominant discourse”—Kaupapa Māori Research (Bishop, 1999, p. 2). Kaupapa Māori Research (KMR) is not a new development. It is a way of accessing, defining and protecting knowledge, a system that existed before colonization (Bishop, 1999). The principles that underpin KMR set it apart from traditional research practices. KMR, as Smith (1992) explains, is “the philosophy and practise of being and acting Māori” (p. 2). Pitama et al. (2011) expand on KMR by stating it is a “conceptual framework that places Māori values, beliefs and experiences at the centre of the research process and locates resultant data within that social context” (p.250). Smith (1999) elaborates on this by stating: “Kaupapa Māori is the development of ‘insider’ methodologies that incorporate a critique of research and ways for carrying out research for Māori, with Māori, by Māori” (p.1).

The process, purpose and intent of KMR is quite different to traditional research as KMR enhances the values and principles of being Māori. Issues such as initiation, benefits, representation, legitimation and accountability are approached under the umbrella of self-determination (Tino Rangatiratanga) (Bishop, 1999). This means, unlike with traditional research, these factors are oriented toward a collective, benefiting all research participants, rather than utilising an individualistic research approach. This research has KMR principles embedded throughout the research project, using the following formal process principles that underpin KMR.

Whakawhanaungatanga (creating a relationship of trust and understanding)

Whakawhanungatanga is one of the most significant, important, and most sacred practises to Māori. In everyday life, whakawhanaungatanga is carried out by Māori to build relationships with people by way of understanding who, and where they come from, to make a meaningful connection with one another. Research involving Māori should use this process, as Bishop (1998) explains the importance of whakawhanungatanga in research processes:

> The first is that establishing and maintaining relationships is a fundamental, often extensive and ongoing part of the research process... The second is that researchers understand themselves to be involved somatically in the research process; that is physically, ethically, morally and spiritually and not just as a researcher concerned with methodology…The third is that establishing relationships in a M[ā]ori context addresses the power and control issues fundamental to research, because it involves participatory research practices (Bishop, 1998, p. 1)

It is imperative that this principle is implemented at the beginning of all new encounters with those wanting to be involved in any aspect of the research project, such as field expert consultants, participant recruitment, cultural support, and/or participation as a research participant.

This is where all parties, including the researcher (me), are able to get to know one another. This will help potential participants gain an insight into who I am, why I am undertaking this research, and how their contribution will be invaluable to this research. The process of whakawhanaungatanga attempts to achieve the three key notes outlined by Bishop (1998) above, and will also help to build a sense of trust and understanding for those engaged with the research.

Karakia (prayer)

Karakia is “generally used to ensure a favourable outcome to important events and undertakings such as tangihanga (the ritual of farewell to our deceased), hui (meetings), unveilings etc., however they can cover every aspect of life” (University of Otago, 2010, p. 1). As mentioned previously in this chapter, spiritual health is important to Māori and therefore it is important to make Karakia available during the research process. Therefore, a prayer will be performed at all formal meetings with the aim of 1) providing a formal start to the ceremony; and 2) informing participants that this is a place of safety where they are able to express whatever they feel without fear of judgement or threat of consequence if their views are not compatible with other opinions. Karakia will be performed in Te Reo and/or English and is a process that will inform participants that this hui will be a space, figurative and literally, where participants can express their views. Due to the nature of the kaupapa it is also a way of acknowledging those pēpi who have passed on.

Kaitiakitanga (guardianship)

“Kaitiakitanga means guardianship and protection” (Te Ara The Encyclopedia of New Zealand, 2015, p. 1). In relation to this research project the act of Kaitiakitanga will be used to ensure the participants are protected by creating an environment of safety both physically and emotionally. Participants must feel comfortable to share their knowledge and made fully aware of why their knowledge is being gathered and what it will be used for. This process will help to minimize any concerns or apprehensions participants have about the research process but will also reaffirm that they are the one with control throughout the research process.

Manaaki ki te tangata (share and host people, be generous)

During KMR it is expected that participants will be cared for. This is the principle of manaakitanga being applied. “The welfare of the manuhiri (visitors) is an important consideration” (Mead, 2003, p. 120). Participants are not only sharing their knowledge but their time and effort and they must be acknowledged for this commitment.

Participants should be hosted and this process should begin before the first meeting. Planning and preparation before formalities commence is a vital step. This includes ensuring the meeting place is adequate, in terms of size, space, temperature, cleanliness and so forth, as well as ensuring adequate resources are provided such as kai (food) (Mead, 2003). For this research project I will put funds toward the kai as well as providing a small koha (gift) in appreciation for the participants taking part in this process.

Rangatiratanga (empower to lead)

Health promotion in New Zealand is very much focused on dictating solutions for families and individuals (Caccioppoli et al., 2005). Rangatiratanga involves empowering whānau, whether it be expanding on current achievements and successes or allowing whānau to find their own solutions. Wihongi (2010) explains that tino rangatiratanga should be at the centre of health policies for Māori, "[Māori] must be in control of the decision making process including resource allocation… service delivery must address the diversities of Māori realities and Māori must be the recipients of policy decisions made". This research project aims to empower young wāhine by putting their experiences and knowledge at the forefront of SUDI prevention. By understanding the realities of this group, concerns centring on resource and service delivery will be discussed, with the potential of identifying solutions to these problems. This factor is a vital step toward empowerment for young Māori mothers.

Aroha ki te tangata

Although this is such a vital element needed in all research, it is only recently that this principle has become a necessity in research conducted on indigenous peoples. Smith (2006) has demonstrated that research in the view of many Māori, has been used, not for the betterment of Māori peoples, but for the benefit of the researcher. Aroha kit e tangata is a genuine love for the research, for those taking part, and for those the research will affect. Without a genuine desire to ensure that these three things are the priority, the outcome of this research will not benefit the intended recipients. This element of KMR has been severely lacking in previous research studies with

Māori. As a result Māori who do take part in research may understandably feel comprehensive about the research project, however if those involved in the research feel a genuine feeling of Aroha (love) from the researcher and/or the team, deeper and meaningful participation may occur.

Koha

Koha has been a traditional Māori custom pre-dating colonization (Mead, 2003). Koha can take the form of many worthy devices, such as knowledge, kai or monetary value. As a Māori and a researcher I understand that Koha is a valued practice, therefore I have made sure all participants receive a Koha as an acknowledgement of the time and knowledge that was kindly volunteered. The Koha is presented in the form of kai and monetary funds (gift voucher).

The principles detailed above are pivotal to the success of this research project and, in Chapter Three, I will elaborate on how these principles were applied during the research process.

KMR and young Māori mothers and bed-sharing

The main reason this research project is needed is the fact that Māori infant mortality rates are still much greater than non-Māori rates and mainstream solutions are not having the same beneficial impacts on Māori as they are for non-Māori (Tipene-Leach, Abel, Haretuku, & Everard, 2000; Tipene-Leach & Haretuku, 2002; Tipene-Leach et al., 2010).The use of KMR “generates our own questions (and) seek(s) solutions from within ourselves” (Smith, 1999). This is then, a research project that co-empowers the participants to realise solutions to their own situations.

KMR also attempts to “expose the underlying assumptions that serve to conceal the power relations that exist within society” (Smith, 1999, p.3). What is lacking from previous studies about bed-sharing is the realities young Māori mothers face and many research methodologies do not allow for these experiences to be validated. A KMR position promotes “an epistemological version of validity” (Bishop, 1999, p.4). Using a Te Whare

Tapa Wha framework within Kaupapa Māori Research will provide a unique perspective into the lives of young Māori mothers. By implementing these tools communities, health workers, and researchers alike will gain a much needed understanding into whether health resources such as the printed materials used by New Zealand Health organisations, are relevant and whether they influence these young mums.

Health Messages in Mainstream New Zealand

There is no doubt that health professionals are committed to improving the health of people. Over time the methods of how to reach this goal have changed. Health promotion is a relatively new innovation that has changed the way in which health professionals confront health issues, and how they deal with people (Phibbs et al., 2010).

> Health promotion is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions (World Health Organization, 2015, p. 1)

As stated previously in this chapter, health workers in New Zealand focused primarily on individual statistics, diagnosis and treatments; however, there is a strong shift toward health promotion to improve health outcomes as it is "(the fence at the top of the cliff), as an alternative to formal health care (the ambulance at the bottom of the cliff)" (Phibbs Murray, & Nicholas, 2010, p. 207). Health promotion has the potential to eliminate problems before they occur and as a result Phibbs et al (2010) state that "all health professionals are now encouraged to take an active part" (p. 207).

Although health promotion has gained positive reaction from many areas in the world, being led by the World Health Organisation (2015), there are those who criticise its use and go as far as stating that it is merely a tool used to shift blame. "We are providing people with a wealth of information about how they should live their lives not so that they will necessarily be healthier in the future, but so that we can make them responsible for their treatment if and when they need it" (Galvin, 2002, p.208). Callioppoli and

Cullen (2005) are particularly opposed to the way in which health promotion is being utilised within Aotearoa/New Zealand: “our view of Māori health promotion as a tool of colonisation that disempowers Māori” (p. 67).

Further, they suggest that the way health promotion is realised in Aotearoa New Zealand “is directly at odds with the aims of health promotion” (p.71). Callioppoli and Cullen (2005) have this opinion of ‘health promotion’ because, in their view, “it describes a range of activities that aim to persuade Māori to make certain choices considered desirable by the Crown” (p. 68).

The debates ranging around bed-sharing has had a similar reception. In New Zealand, much of the research and health promotion messages produced as a direct result of quantitative findings do not enable Māori to “increase control over, and to improve, their health” (World Health Organization, 2015, p. 1) nor does the message of discouraging bed-sharing encompass a “wide range of social and environmental interventions” (World Health Organization, 2015, p. 1). For example, an isolated resource in the form of a poster that promotes ‘sleeping baby in their own bed’, may encourage an idea, however the form in which the message is conveyed often overlooks cultural, economic or environmental factors. Promotion of a message via a poster does not give people the opportunity to voice concerns, ask questions or gain clarity. Therefore families are unable to, or unwilling to, follow that recommendation.

Health promotion and public health should centre on the needs of communities, as Daly (1998) explains: “public health lays claim to being a legitimate activity because it promises to deliver health promotion programmes which benefit the peoples’ health (p. 6). Although there are perceived benefits with health resources, depending on which lens is applied, it is logical to question whose interests are at the forefront. Broom (2007) explain that “in health, resources are distributed according to political and social agendas” (p.234). This also supports Callioppoli and Cullen's (2005) view that health promoters “judge people who do not live life the way [the] health promoter thinks they ought to, and seek to punish them” (p. 76).

This mind set is evident when dealing in the area of SUDI. “Infants were effectively being killed by the continuing practice of co-sleeping… But despite continued warnings by coroners and health advisers, families continue to put their children at risk” (Watson, 2013, p. 1). As a result of these continued warnings many health agencies in New Zealand are pushing for change to improve the SUDI rates, however the change they are imposing is an option that some New Zealanders are disregarding. Solutions to address this issue have to involve those most affected.

The divide in New Zealand regarding the issue of bed-sharing is growing greater, with those who are ‘pro bed-sharing’ having to continually defend their position to critics, and those who oppose bed-sharing continually arguing that the statistics are on their side. This debate has caused misunderstanding amongst many communities and this research attempts to highlight the contradictions that are currently being promoted. This thesis will focus on the relevance of three varying health resources all prioritising Sudden Unexpected Death in Infancy Prevention. I will investigate the extent to which these health promotion materials have had on young urban Māori mothers. I will then examine whether these resources have had any influence on these young wāhine. Throughout the process I will discuss the rationale for bed-sharing provided by participants and whether the health promotion resources are indeed having any impact on these young mothers.

Chapter Three: Kaupapa Māori Research in Action

This research project was constructed with the intention of gaining a deeper understanding into the lives of young Māori mothers, therefore adopting a methodology that reflects this value was of the utmost importance. According to Walker, Gibbs, and Eketone (2006),

> Kaupapa Māori research has shown itself as a radical, emancipatory, empowerment - oriented strategy and collaborative - based process, and when it is used systematically it can produce excellent research which can lead to improved policy, practice, and individual outcomes for Māori people. (p. 343).

Kaupapa Māori Research methodology is an approach that has the interests of the community, rather than the researcher, at the forefront. The process and procedures used reflect the aim of Kaupapa Māori Research, which is to ensure that the research benefits the participants.

There is debate amongst researchers as to what constitutes Kaupapa Māori research and who can, and who should, undertake it, however this space does not allow for in-depth analysis. This thesis does not attempt to provide an exact definition for Kaupapa Māori Research but will instead focus on the KMR principles that were discussed in Chapter Two and how they have been applied in this research process. According to Durie (1996), “what is important [when researching Māori]…is the terms under which Māori will participate in the project, but also the incorporation of Māori world views into the research design and the utilisation of measures which are capable of reflecting Māori positions” (p. 9).

Criteria Selection

The purpose of this research project is to understand the motivations and rationale behind bed-sharing, as it is identified by the Ministry of Health as a risk factor for SUDI. The criteria selection for this project was based on a number of factors that represent the most ‘at risk’ group of experiencing a SUDI. Therefore criteria for selection of this project was primarily based on which population group SUDI prevention messages should target. This was based on the majority of SUDI incidences and other related factors. Table 1 highlights data relating to SUDI deaths between 2007-2011. Data from these findings reveal that many of the SUDI deaths were Māori, occurred in areas of high deprivation, and the infant generally had a mother of 20 years or younger. Table 2 shows that the majority of post neo-natal deaths between 2007-2011 occurred greatest in the Counties Manukau and Waikato region. These findings created a starting point for potential participants.

Table 1- Distribution of Sudden Unexpected Death in Infancy by NZ Deprivation Index decile, maternal age, ethnicity, gender, and gestation at birth, New Zealand 2007–2011

Sudden Unexpected Death in Infancy			
Variable	**Rate**	**Variable**	**Rate**
New Zealand Deprivation Decile		**Ethnicity**	
1-2	33.5	Māori	211.3
3-4	35.1	Pacific	95.1
5-6	60.1	Asian/Indian	14.4
7-8	104.8	European/Other	44.9
9-10	184.8		
		Gender	
Maternal Age		Female	76.4
<20 years	295.2	Male	114.6
20-24 years	183.2		
25-29 years	77.4	**Gestation at Birth**	232.6
30-34 years	42.5	20-36 weeks	76.5
35+ years	36.9	37+ weeks	

Source: (New Zealand Child and Youth Epidemiology Service, 2014)

Table 2- Post-neonatal deaths: time trends

DHB	**2007**	**2008**	**2009**	**2010**	**2011**	**Total**
Northland	4	6	8	11	4	33
Waitemata	10	14	5	16	7	52
Auckland	12	17	10	8	8	55
Counties Manukau	27	18	30	18	28	121
Waikato	16	13	17	10	18	74
Lakes	13	5	3	6	6	33
Bay of Plenty	10	6	5	10	8	39

Source: Ministry of Health. (2014). Fetal and Infant Deaths 2011, Retrieved on 20th March 2015 from http://www.health.govt.nz/publication/fetal-and-infant-deaths-2011

Ethnicity

Māori is the central focus of this research project; however, defining "Māori" can be difficult. For example, Durie (1996) writes,

> …defining Māori for the purposes of research is problematic because although there has been a general move towards a definition based on descent (from a Māori) and self-identification (rather than biological inheritance), the link between identify and health has not been as well researched as the links between lifestyle and health or genetics and health. Because Māori live in diverse realities, assumptions about either lifestyle or genetic loading can no longer be made in respect of persons who opt for Māori identity. (p. 7)

There have been a number of researchers, Callister 2003, Chapple 2000, Durie 2001, who have argued the definition of Māori and what constitutes someone being Māori. Such debate has stirred up questions that Kukutai (2004) poses:

> What is it that makes a person Māori? Is it a preponderance of Māori ancestors – something akin to the notion of being a “full blood”? Is it knowledge of cultural practices and engagement in Māori networks? Is it having a Māori ancestor, no matter how far back? Or, is being Māori merely a state of mind? (p. 2)

Questions posed by Kukutai (2004) make a valid point and relate directly to the issue of SUDI. For example are infants dying from SUDI as a direct result of them being Māori, i.e. does genetic inheritance play a role? Or are these infants dying because those that identify as being Māori share a number of common factors relating to social, economic, or political influences? These two valid characteristics, 1) genetics or whakapapa and 2) self- identification are deeply entwined into the topic of SUDI, and have determined the criteria of being Māori for this project. Yet there are different Māori with different cultural beliefs, values and attitudes. In Ellis, Collings, and New Zealand Public Health Group (1997) three different distinct Māori groups are emerging:

> Members of the first group participate in many Māori activities, such as sending their children to Kohanga Reo

> and participating in Māori sport and cultural activities, and are involved on their marae. The children of this group are likely to feel fairly comfortable on the marae, will be able to speak Māori and will participate in a range of Māori activities, such as attending tangihanga. Members of this group identify strongly as Māori and probably defined themselves as 'sole Māori' in the 1991 census. The next group is likely to be much more a part of mainstream New Zealand society and the lifestyles of its members will closely resemble that of their Pakeha neighbours. Although from outside appearances they may seem no different from Pakeha, members of this group identify strongly as Māori. The third group are those Māori who do not participate strongly in either Māori or mainstream activities. They are seen as being relatively isolated, and from a health perspective, are likely to have greater needs. For example, they are likely not to have their own general practitioner and may have limited knowledge about when and how to access health services. Although members of this group may be cut off from their cultural roots, they also identify strongly as Māori. (p.86)

SUDI mortality data from the Child Poverty Monitor 2014 report show a high percentage of SUDI deaths in Māori infants living in urban, heavily-built up suburban areas (New Zealand Child and Youth Epidemiology Service, 2014). As many marae are based away from major cities, many Māori who reside in major cities are alienated from their ancestral homeland. Living in urban settings, disconnected from ancestral roots, has had a major impact on the health of urban Māori. This is reflective of the high SUDI rates in urban areas. As a result it was not accurate to assume all Māori are prone to SUDI deaths therefore a decision to include Māori mothers who were not immersed in Māori culture on a daily basis, and reside in urban areas was reached.

Maternal Age

Table 1 shows a contrast rate of SUDI deaths of infants with a maternal mother who was aged 20 years or young 295.2 per 100,000 live births compared to maternal mothers 35 years and over, rate of 36.9 per 100,000 live births (New Zealand Child and Youth Epidemiology Service, 2014). This stark contrast in infant mortality rates was a determining factor for carrying out a case study on young Māori mothers.

High Deprivation

Abercrombie, Hill, and Turner (2006) "defines [sociological] deprivation broadly as inequality of access to social goods. It includes poverty and wider forms of disadvantage" (p.1). Deprivation is an important component of establishing where the greatest need of health intervention is required, though knowing this information and utilising it to improve health outcomes is a separate argument. "The New Zealand Deprivation Index is a measure of the level of socioeconomic deprivation in small geographic areas of New Zealand (mesh blocks)" (Ministry of Social Development, n.d.). Table 3 is a list of variables that determine deprivation index for different areas in New Zealand.

Table 3- Variable included in NZDep 2013

Dimension of Deprivation	**Description of variable(in order of decreasing weight in the index)**
Communication	People aged less than 65 with no access to the Internet at home
Income	People aged 18-64 receiving a means tested benefit
Income	People living in equivalised households with income below an income threshold
Employment	People aged 18-64 unemployed
Qualifications	People aged 18-64 without any qualifications
Owned home	People not living in own home
Support	People aged less than 65 living in a single parent family
Living space	People living in equivalised* households below a bedroom occupancy threshold
Transport	People with no access to a car

Source – (Atkinson J, Salmond C, & Crampton P, 2014, p. 19)

There are a number of studies that show a clear relationship between deprivation and poor health (Abel et al., 2001; Abel & Tipene-Leach, 2013; Allen & Hector, 2005; Caccioppoli et al., 2005; Carpenter et al., 2013; Dew & Matheson, 2008; Ellis et al., 1997; Hutchison et al., 2015; McManus, Abel, McCreanor, & Tipene-Leach, 2010; Ministry of Health, 1998; New Zealand Mortality Review Data Group, 2013). For example, Howden-Chapman and

Wilson (2000) explain “poor housing can increase susceptibility to disease, injury and death” (p. 133) while Dew and Kirkman (2007) state “there are strong associations between unemployment and health” (p. 245).

As well as having the top SUDI rates in New Zealand, Counties Manukau and Waikato were the two areas selected for this research project because of their high deprivation index. As stated above in Table 1- SUDI rates were found predominately in areas of high deprivation. In decile 10 areas SUDI rates were 184.8 per 100,000 live births, whereas decile 1 areas recorded 33.5 per 100,000 live births (New Zealand Child and Youth Epidemiology Service, 2014). Ultimately participants who elected to take part in the study resided in the Hamilton suburbs, in or around the following locations with the corresponding deprivation index (see Table 4).

Table 4- Deprivation Index by Suburb

Suburb	**Deprivation Decile**
Nawton	8
Grandview	9
Crawshaw	10
Maeroa	8
Swarbrick	10
Dinsdale South	8

Source: (Ministry of Social Development, n.d.)

All of these factors—maternal age of mother, identifying as Māori, and residing in an area of high deprivation—have framed the criteria for this research and, more specifically, for participant selection.

Recruitment

The principles of whakawhanungatanga and aroha ki te tangata have been applied in this process. Using whakawhanungatanga and the connections I have made with previous contacts, I was able to set up meetings with these influential people. They then approached members of the community including young Māori mums and asked if they were willing to contribute in a research project focused on bed-sharing. Using this approach, the mothers were able to make a decision without my influence: that could be construed as outside pressure. Because of the age group of the intended participants, being relatively young, a decision was made that pre-existing groups would ensure participants felt comfortable and willing to speak in front of others. As Gill, Stewart, Treasure, and Chadwick (2008) explain:

> Interaction is key to a successful focus group. Sometimes this means a pre-existing group interacts best for research purposes, and sometimes stranger groups. Pre-existing groups may be easier to recruit, have shared experiences and enjoy a comfort and familiarity which facilitates discussion or the ability to challenge each other comfortably. In health settings, pre-existing groups can overcome issues relating to disclosure of potentially stigmatising status which people may find uncomfortable in stranger groups (p. 293)

Focus group sessions can sometimes be a daunting experience, and as the researcher I wanted to ensure the participants were comfortable throughout the process. Ensuring an environment of familiarity with people the participants knew well, was one of the determining factors for running a session with a group that was already acquainted.

Potential participants were given a Participant Information Sheet (Appendix 1) that explained the research project, the researcher, and what involvement was required. Some of the potential participants expressed an interest—and a venue, time and date for further contact was chosen. The size of the group was important as “the optimum size for a focus group is six to eight participants (excluding researchers)” (Gill, Stewart, Treasure, & Chadwick, 2008, p. 293). Initially 10 people were invited to take part, allowing for group attrition.

Previous qualitative studies regarding bed-sharing have had less Māori participation than other ethnic groups—that is, they have been largely comprised of New Zealand European participants (Tipene-Leach, Hutchinson, Tangiora, Rea, White, Stewart, & Mitchell, 2010). Tipene-Leach, et al. (2005) explain that “315 of the potential cohort of 734 were unable to be contacted and transience of members of the lower socioeconomic communities explains this” (p. 94). As a result it was imperative that any barriers to participating in this project are as minimal as possible.

As the desired participants reside in a lower socioeconomic area it is was important to make ease of access to the venue for the focus group session, and selection of a time and date at the discretion of the participants. It was also made known that an acknowledgment of appreciation for time and input, which was in the form of kai (lunch) and koha (donation) will be provided. Although this project is a small case study, the importance of young Māori mothers, as a particular group of participants, is vital to understand and improve upon New Zealand SUDI rates—especially in the Māori population.

Procedures

A large portion of time and effort went into the planning of the focus group. Concerns included what questions to ask, focus on who the participants are, what participants will bring to the session, and how might the session be facilitated to ensure the voice of the participants comes through and their needs are met. Understanding the participants' cultural backgrounds and contexts is critical in successful KMR:

> The cultural lifestyles of Māori are diverse and flexibility is required in responding to Māori Health needs: culture maybe considered less important than simply responding to the needs of a particular individual. Immersion in a culture therapy programme may lead to a sense of alienation if there is no previous understanding of Māori culture, language or tikanga. (Durie, 2001, pp. 236-237)

It is important to remember that not all Māori have an entrenched knowledge of their heritage and culture. On one end of the spectrum, Māori culture should be entrenched in the entire interview process; on the other side it should not become an overwhelming practise that results in participants feeling awkward or somehow inferior. “Some Māori are part of Māori society. Some Māori are part of general society. Some Māori are alienated from both. The main point is that choice should be available for Māori” (Durie, 1994, p. 9).

The particular group that has been invited to take part in the interview generally do not engage with Māori tikanga practices on a daily basis. Therefore as a facilitator it is crucial that participants are made to feel comfortable and any Māori words that are used should be expanded on, i.e. Pēpi/ baby.

As well, due to the nature of the conversations that inevitably took place during the focus group, it was important to make the physical environment as private as possible. “The venue for a focus group is important and should, ideally, be accessible, comfortable, private, quiet and free from distractions” (Bloor, Frankland, Thomas, & Robson, 2001). The issue of bed-sharing has meant that some people are afraid to reveal their practices because of the negative reception they encounter from people who frown upon the practice. In order for participants to reveal their opinion they need to feel they are in a safe place—in a variety of ways—to do so.

During karakia and whakahwhānaungatanga it was established how immersed the participants were in their culture. Some of the participants were able to identify their Iwi but there was no acknowledgement of other Māori mihi components such as hapu, awa (river) or maunga (mountain). Some of the participants also asked what the meaning of Pēpi was which indicated that Māori language was minimal. The relationship of power and control was highlighted when it was explained that participation is voluntary, and they were free to leave at any time and it will not result in any negative consequences. Once that was said, one participant acknowledged “oh, cool” and immediately signed the consent form (Appendix 2).

Participants were also informed there will be an individual follow-up conversation(s) to inform them that the interview had been transcribed and to ensure interpretation by the researcher is correct. If needed, further clarification on points mentioned would occur during this follow-up conversation. At the conclusion of the focus group this point was restated and although the participants said they did not require follow up, participants were contacted.

Chapter Four: Findings

This chapter consists of the results of the focus group session and one on one follow up conversations. The focus group session took the form of a semi-structured interview. The one-on-one follow-up conversations took the form of an individual phone call or visit with a maximum duration of 15 minutes. The focus group session consists of,

> . . . several key questions that help to define the areas to be explored, but also allows the interviewer or interviewee to diverge in order to pursue an idea or response in more detail. This interview format is used most frequently in healthcare, as it provides participants with some guidance on what to talk about, which many find helpful. The flexibility of this approach, particularly compared to structured interviews, also allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as pertinent by the research team. (Burnard, Gill, Stewart, Treasure, & Chadwick, 2008, p. 291)

The focus group questions were organised into four main headings, each of which will be presented below, with open-ended questions, allowing for myself to ask questions that were not preconceived or the ability to rephrase questions to ensure participants understand the question (See Appendix 3). The intention of the questions was to allow the participants to lead the facilitator on a journey which explored individual and group infant sleep practices and provide rationales for these practices. The structure of the focus group interview aimed to explore 1) the relevance and influence of current SUDI prevention health messages on these young mothers; and 2) current bed-sharing knowledge within the group members.

The first part of the focus group involved participants' response to the three health promotion resources below (see Figure 6, 7 and 8). These three resources were selected for two main reasons, 1) all three of these resources were found on the maternity ward of the Waikato District Health Board, freely available for residents living within the Waikato region, and 2) they provide conflicting messages, i.e. sleep baby in their own bed vs how to bed-share safely. Figure 6- keeping your baby safe during sleep, is a double sided A4 pamphlet, Figure 7- caring for your baby at night is an 8 page booklet and Figure 8- PLACE baby in a baby bed is an A5 talk card, number 2 in a set of 5 SUDI prevention resources.

If you choose to sleep in bed with your baby, put them in their own baby bed beside you – for example, a pēpi-pod® or wahakura. This will help reduce the risk of your baby suffocating while they are asleep. Information about using a pēpi-pod® or wahakura is available online at www.whakawhetu.co.nz and www.pepipod.co.nz

It is never safe to put your baby to sleep in an adult bed, on a couch or on a chair.

Car seats or capsules protect your baby when travelling in the car. Don't use them as a cot or bassinet.

If you need financial assistance so that baby can have their own bed, you may be eligible for help from Work and Income. For more information visit www.workandincome.govt.nz or call 0800 559 009.

Protect your baby's head shape

When your baby is sleeping, turn their head so that sometimes they face left and sometimes they face right.

Tummy time while baby is awake will help protect their head shape and make their arms strong.

- Back for sleep
- Front for play
- Upright for cuddles and hugs

More information

- Speak to your midwife, Well Child Tamariki Ora nurse, doctor or practice nurse
- Ring PlunketLine on 0800 933 922
- Visit the Ministry of Health website: www.health.govt.nz
- Other websites:
  - Whakawhetu National SUDI Prevention for Māori: www.whakawhetu.co.nz
  - TAHA Well Pacific Mother and Infant Service: www.taha.org.nz
  - Change for Our Children: www.changeforourchildren.co.nz

This resource is available from www.healthed.govt.nz or the authorised provider at your local DHB. Revised March 2015. 03/2015. Code **HE1228**

Keep Your Baby Safe during Sleep

Every year, too many New Zealand babies die suddenly during sleep.

Many of these deaths can be prevented.

You can help protect your baby from dying suddenly in their sleep by:

1. Making sure baby is in their own bed for every sleep (and close to parents/caregivers at night)
2. Making sure baby is on their back for every sleep
3. Keeping baby smokefree from the start
4. Breastfeeding your baby
5. Immunising your baby on time

This pamphlet describes the best ways to protect your baby from dying suddenly in their sleep. It aligns with the Child and Youth Mortality Review Committee publication, *Special Report: Unintentional suffocation, foreign body inhalation and strangulation* (March 2013). This report is available online at www.hqsc.govt.nz/our-programmes/mrc/cymrc/

Make Every Sleep a Safe Sleep

Always follow these safe-sleep routines for your baby and your baby's bed.

Make sure your baby is safe

- Always sleeps on their back to keep their airways clear
- Is in their own bassinet, cot or other baby bed – free from adults or children who might accidentally suffocate them
- Has a parent/caregiver who is alert to their needs and free from alcohol or drugs

Make sure your baby's bed is safe

- Has a firm and flat mattress – to keep baby's airways open
- Has no gaps between the frame and the mattress – that could trap or wedge baby
- Has nothing in the bed that might cover baby's face or lift their head – no pillows, toys, loose bedding or bumper pads
- Is close to the parents/caregivers at night for the first 6 months of life

Make sure your baby is healthy and strong

- **Smokefree** in pregnancy and after birth – protecting their lungs and airways
- **Exclusively breastfed** to around 6 months of age and continues to be breastfed to 12 months of age
- **Immunised** on time

Figure 6- Keeping your baby safe during sleep (Ministry of Health, 2015).

Caring for your baby at night
A guide for parents

BABY FRIENDLY INITIATIVE

unicef

The Royal College of Midwives

fsid
The cot death charity

Putting your baby down to sleep

To keep your baby safe and to reduce the risk of sudden infant death (sometimes called cot death) always make sure:

- You put the baby down on their back to sleep, never on the front or side
- The cot is beside the parents' bed for at least the first six months
- The mattress is firm and flat – waterbeds, bean bags and sagging mattresses are not suitable
- Your baby is not overdressed or covered with too much bedding (no more than you would use yourself)
- The bedding must not be able to cover the baby's head
- The room is not too hot (16-20°C is ideal)
- The room in which the baby sleeps is a smoke-free zone

BED-SHARING

Some parents choose to sleep with their baby in bed and some fall asleep with their baby during the night while feeding and comforting whether they intend to or not. Therefore it is very important to consider the following points.

If you decide to share a bed with your baby:

- Keep your baby away from the pillows
- Make sure your baby cannot fall out of bed or become trapped between the mattress and wall
- Make sure the bedclothes cannot cover your baby's face
- Don't leave your baby alone in the bed, as even very young babies can wriggle into a dangerous position
- It is not safe to bed-share in the early months if your baby was born very small or pre-term

WARNING

- The safest place for your baby to sleep is in a cot by the side of your bed
- Do not sleep with your baby when you have been drinking any alcohol or taking drugs (legal or illegal)
- Do not sleep with your baby if you or anyone else in the bed is a smoker
- Do not put yourself in the position where you could doze off with your baby on a sofa or armchair

6

Figure 7- Caring for you baby at night (Unicef UK Baby Friendly Initiative, 2015).

PLACE baby in his or her own baby bed, face clear of bedding

- Placing baby in a baby bed, face clear of bedding, helps protect baby from SUDI
- Make sure there are no pillows or toys in the baby bed
- Make sure that the bedding does not cover baby's face
- Make sure the mattress is firm and there are no gaps between mattress and the sides of the baby bed

Figure 8- PLACE baby in a baby bed (Whakawhetu: National SUDI Prvention for Maori, 2014a)

The positioning of these questions at the beginning of the session was to gain prior understandings individuals had centring on the three resources, primarily so conversations that inevitably take place during the interview, such as any new learnings, would not influence the prior knowledge of the group. In other words, it was important to gather first impressions and opinions of the three resources before a whole group discussion so as not to influence previous individual thinking.

In order to minimise facilitator influence, the beginning questions involved group work, in groups of three that centred on the three health resources, and progressed into a whole focus group session. The progress from group work to a whole group session was intentionally used to allow participants to progressively gain trust amongst other participants and myself.

The second part, and majority of the time, focused on a discussion of bed-sharing and the motivations behind this practice. Once participants had time to work in their group the session became a whole group conversation where each participant was able to take part at their discretion. This strategy had a positive impact on the group as they began to engage willingly during the whole focus group discussion.

Toward the end of the focus group workshop each participant was given a Participant Summary Sheet (Appendix 4) to fill in. This allowed participants the opportunity to supplement what had been discussed. Participants were asked to indicate three main reasons for bed-sharing. They were also asked to expand on any shifts in their understandings or appreciation of the topic during the session as a result of either peer responses or introductions of the three resources supplied, and any other information they wanted to convey to the facilitator privately.

At the conclusion of the focus group session, participants were once again informed that the answers would be collated and a follow-up conversation will take place to ensure that what they said during the interview had been interpreted correctly. As well, the follow-up would allow for expansion into certain areas if needed. Participants were then invited to have some kai (food) as a gesture of appreciation for their contribution, as well as given a small token of appreciation- a $20 Warehouse voucher each.

Hinengaro (Mental Health)

This section focuses on the association between health messages and participants' understanding of health messages. Participants were put into groups of three and asked a series of questions about each of the three different resources relating to the topic of bed-sharing (again see Appendix 3). Participants were asked a series of questions regarding the three resources, including what message and recommendation they believed is being promoted by each resource, and whether they would follow these recommendations.

Findings for Hinengaro Health

Does this resource promote bed-sharing?

The two groups had varying answers.

Group One believed all three resources promoted bed-sharing and gave the following reasons why:

Card A (Figure 6): "*Because it tells you how to put your baby down and good types*";

Card B (Figure 7): "*Because it gives tips on how to keep your baby safe while sleeping"*;

Card C (Figure 8): no justification.

Group Two had a different opinion on each card.

Card A: "*Not at all"*.

Card B: *"Sort of. Not fully saying do it but if you do there's guidelines given"*;

Card C: *"No because it says to put them in their own bed*";

Of all the participants only one member had sighted 1 of the 3 resources prior to the focus group session. ***When asked to provide a number between 1-10 (1= Never followed these guidelines and 10= followed these guidelines every day)*** the participant indicated a score of 3.5.

After seeing this resource today provide a number between 1-10 (1= Never follow these guidelines and 10= follow these guidelines every day). One participant was unable to answer this question for each resource.

Table 5- Results- After seeing this resource today provide a number between 1-10

CARD	Participant Responses				
A	8	7	8	8	8
B	8	8	7	7.5	7-Would use the info except putting baby in own bed
C	8	9	8	5	4

Current Knowledge of Bed-sharing

Participants were asked what they understood to be the positives, if any, associated with bed-sharing.

not having to get up, i.e. to breastfeed,
I keep warm because I don't get up,
not worrying about baby,
Mum doesn't get cold coz don't get up,
cuddles,
bonding,
warmer in the morning for baby,
softer for baby- baby beds are hard,
baby sleeps longer with me,
they [baby] *are more content.*

Participants were asked what they understood to be the negatives, if any, associated with bed-sharing.

rolling,
suffocating,
them falling off the bed,
mum not having a comfortable sleep,
parent blanket covers baby,
baby sweating/ overheating,
baby pooing or spewing and me having to change the sheets,
space in the bed interferes with partner -cant interact,
baby choking on milk while asleep or baby spew.

Thinking back to the last 7 days, of the following choices how many times have you or another person, bed-shared with your pēpi?

> *Four participants have indicated that baby has been in a bed-sharing situation 7 or more times in the past week. Two participants have indicated that baby has been in a bed-sharing situation 3-6 times in the past week.*

Wairua

This section asked participants about their feelings toward bed-sharing, what emotions they have when they experience bed-sharing with their pēpi.

> *safe,*
> *love,*
> *annoyed (2x people),*
> *stress- coz baby thinks its awake time,*
> *baby waking & rolling over,*
> *worry- pillow, blankets,*
> *paranoid- keep waking to check if they ok*

Any regular routines you do with your pēpi?

> *read a book and bath before bed*

What happens if the routine is interrupted, such as, when you and baby sleep at a friend or relative's house where does baby sleep?

> *the group replied confidently and unfazed, "With me".*

Are there any spiritual reasons why you choose to or choose not to bed share with your pēpi?

> *All participants shook their head, and most replied "nah" or "nope".*

Tinana

This section of the interview focused on any physical attributes (e.g. size of house, number of household members, and number of bedrooms or sleeping spaces) that impacted on the decision to bed-share with their pēpi.

How many people do you share a household with?

> *Of the six participants two people indicated they lived in a household with four to six people while four participants indicated they lived with seven or more people.*

Does the physical environment impact on where baby must sleep?

> *The group responded with "no" and one participant elaborated with "no, baby is the youngest so we get the big room".*

Is the physical environmental or are cost factors an issue in relation to baby having to bed-share?

> *Again the group responded with "no".*

Whānau

Results varied when participants were asked to rate on a scale of 1 to 10 (1= not at all and 10= extremely), ***how important has whānau been in helping you to raise your pēpi?*** The majority of participants indicated a score band ranging from 6 to 10 while two participants indicated a score of 3 and 4.

What kind of involvement have you had in helping to raise your pēpi?

> *Taking baby when I'm stressed,*
> *letting me have a breather,*
> *unwanted help and advice,*
> *time to shave both legs.*

Who has been one of the central guiding people in your life or who has a big influence on how you raise your pēpi?

> The only two responses were, "mother and mother in law".

Has this person given you advice regarding bed-sharing and if so what kind?

> *"Yep" with one participant going on further to say "one says don't bed-share, the other says I should".*

Has this advice influenced you with your current practices?

> *All participants indicated a "no, nah or not really" with one participant saying "nah I do what I wanna do" and many of the other participants agreeing. When asked if there were any whānau reasons why you choose to or choose not to bed share with your pēpi, the group shock their head and most either said "no" or "nah".*

Participant Summary Sheet Findings

Bed-sharing

Participants were asked to highlight the key reasons why they bed-share with their pēpi.

Convenience for mum

> *"Too lazy to walk to him all the time to give him dummy"*

Emotional feelings

> *"Love having cuddles at night"*

Baby's safety and well-being

> *"Makes me feel safe with him next to me"*

Feelings of conflict

> *"It's not healthy"*
> *"I don't want my kid thinking he can sleep with me for the rest of my life"*

Reaction to advice that you should not bed-share

> *"Tell them straight up to go away"*
> *"I would listen but won't do it"*

Are there any resources that could make it easier for you to not bed-share if you wanted to?

> *"Oh yep. The pēpi-pod is cool"*

If you have or had any concerns about bed-sharing who would you go to?

> *"Friend"*
> *"Plunket nurse"*

Who would you likely take advice from?

“Someone who has had a baby”
“I am willing to take advice, but I will do what I want”
“I might try something but if I don’t like it, I won’t do it”

Chapter Five: Discussion

This case study has demonstrated that these young Māori mothers bed-share regularly with their pēpi. Their justification for this practice ranged from reasons of convenience for mother (*“I keep warm because I don’t get up”* and *“not having to get up, for breastfeeding”*), to reasons of safety and security for the infant (*“makes me feel safe with him next to me”*).

Although each of the participants indicated they bed-share on a regular basis, the majority of these mothers did not want to bed-share. Their responses ranged from *“No, [bed-sharing] is not a healthy practise”* to *“Yeah, I don’t want my kid thinking he can sleep with me for the rest of my life”*. The participants also noted a number of negative associations with bed-sharing, such as *“rolling”* and the risk of *“suffocation”*. These factors lead to two interesting conclusions: 1) this group of mothers is aware of the perceived dangers associated with bed-sharing; however, there is a prioritised reason for bed-sharing that takes precedence; and 2) current methods of health message delivery are not influencing behavioural change.

Why Bed-Share?

The results from the focus group session and follow up conversations show that convenience and ease of access to baby was one of the main reasons for bed-sharing with baby. The participants identified a number of benefits associated with bed-sharing that have positive impacts for both mother and infant. Feelings of safety and security, emotional connections and bond with baby, and ability to ensure baby is kept warm during the night, all of which are factors composed of the Te Whare Tapa Wha model. For example, the feeling of having baby close and the emotional connection of knowing that baby is safe and loved is an example of Wairua. Keeping baby warm is accomplished easier in the adult bed, is an example of Tinana. The majority of participants acknowledged living in a household of seven or more people, which was not identified as a determining factor for their bed-sharing decision, however to a small degree Whānau and friends have been identified as vehicle of listening and accepting new infant care practice information, "*I would listen to someone who has had a baby like my friend or mum*". Although these young mothers made it explicitly clear that they would ultimately do what they want, they are willing to listen to those who have experience raising a baby and people they can relate to.

The "ease of bed-sharing for mother" was one of the main motivators for these mothers to bed-share. Many of the participants explained the reason they bed-share was "*because I'm too tired and lazy to put him back in his bed during the night*" and "[I'm] *too lazy to walk to him all the time to give dummy*". A number of the reasons given prioritised the mothers' agenda; however, a number of these factors relate directly to practicality, i.e. ease of breastfeeding (Ball, 2002). In this particular case the motivations behind bed-sharing are of great assistance for the mother. Having baby at an accessible distance makes it easier for mother to undertake a number of tasks that arise during the night.

In spite of the perceived potential risks associated with bed-sharing, these mothers made an intentional choice to bed-share with their pēpi. The resources had no influence on their thinking because *"I already knew the information and don't worry about it. It doesn't affect me"*. The mentality of the group was one of, "it won't happen to me". The participants identified that there are some risks but they are not worried because it has not affected them, meaning they may not take the risk of SUDI seriously until they, or someone very close has experienced it.

This group of young mothers is determined that they will do what they want. When asked how they would react to advice recommending they should not bed-share, one participant said, "*Tell them straight up to go away*" and "*I would listen but won't do it*". Although Whānau is a major factor in health, for these particular young mothers, they find some family members to be a "burden or stress" and choose not to listen to advice from family.

Delivery of Sudden Unexpected Death in Infancy (SUDI) Prevention Messages

The reaction to the three health resources had a similar reception from all participants. The information gathered at the beginning of the interviews indicated that many of the mothers would use the guidelines given by each of the resources (refer to Table 5- Results). After further discussion, it was concluded that the mothers would use the guidelines that related to other preventative factors such as mum being smoke-free and sleeping baby on their back, with one participant indicating that they *“learnt a lot from card A”* (Figure 6).

It was established that the participants would not follow any guideline that discouraged bed-sharing. In fact, all but one participant indicated that none of the resources shown to them today influenced their thinking about bed-sharing. Some of the respondents explained that the resources did not influence their thinking around bed-sharing *“because I already know it’s not good for baby to sleep with me”* and *“because I’d rather do things myself and my way”*.

The focus group session and follow up conversations provided valuable insight into the area of SUDI prevention and the role of current health systems and processes regarding those considered ‘most vulnerable’. The three resources that have been created, with the intention of, “protect[ing] your baby from dying”, have no influence on these young women. When asked whether these resources have influenced their thinking, some of the responses include:

> *No- too much info to read and won’t really stay in mind*
>
> *No- I tried it before but he wanted me all the time*
>
> *No- because I already knew the information and don’t worry about it. It doesn’t affect me!*

A conclusion can be drawn from this point: these pamphlets are not a suitable or appropriate device to communicate with this particular group. These young mothers identified certain characteristics that might encourage behavioural change: advice from *“someone who has had a baby”*. Others identified that they would be *“willing to take advice but I will do what I want”* or *“I might try something but if I don’t like it I won’t do it”.*

This response shows that communication from a visual resource—that is, a pamphlet—may not be the most effective way to communicate with this participant group. Baker (2011) elaborates on possible reasons why:

> In some Māori families where SUDI occur the mothers and family as a whole may be living in ‘survival mode’, with multiple stressors to contend with. They may be marginalised from wider support networks. In this setting simple provision of information is a poor mechanism for change, efforts are needed to support engagement with innovative and culturally appropriate behaviour modification approaches as well as addressing determinants of deprivation (p.11).

Health resources in the form of pamphlets are now an ineffective tool for behaviour change, as there is no connection between ‘it’ and the receiver. Resources need to have a deeper connection. Emotional communication may have some bearing on these young mothers. “Emotional communication can assume an importance which is meaningful as an exchange of words and valued just as much” (Durie, 1998, p.8). A meaningful device that communicates a message as important as SUDI prevention needs a mechanism that these young mothers can respond to and relate with.

In relation to bed-sharing, the three pamphlet resources did not influence behavioural change, which means this is not the most appropriate means of health improvement. The Ministry of Health (1996) has recognised that “before deciding what type of resource needs to be developed, it is important to know as much as you can about the health issue…it is also important to know as much as possible about the *priority group* for whom you are producing the resource and with whom you will be working” (p.10). In other words, it is now a priority to acknowledge, understand, appreciate and include the needs of young Māori mothers, and orientate resources toward these areas.

This research project has undertaken some of the roles of a needs analysis, which “increases the chance of identifying important issues outside the immediate health issue” (Ministry Of Health, 1996, p.10). The group identified at least one issue with current SUDI prevention messages and that was the confusion about what messages were being promoted for each resource.

One group indicated that all three resources promoted bed-sharing. During the follow-up conversation one participant indicated that Figure 6 promoted bed-sharing because baby was in the adult bed even though the baby was in a pēpi-pod [plastic sleeping device]. Although researchers and health professionals are, as of late, aware of this distinction, again communication to communities has not followed through, has been unclear, and has led to misinterpretations of information. This means when health professionals engage with communities it is important that factors such as language and terminology are not taken for granted and assumptions such as bed-sharing, is an understood term, as this can lead to misinterpretation and confusion.

For this particular group of young mothers the value of SUDI prevention messages, specifically the issue of bed-sharing, involves solutions that address concerns raised by these mothers, such as close proximity for ease-of-night duties. In 2006-2007 a Wahakura (weaved basket for sleeping pēpi) project took place in Gisbourne. As Abel and Tipene-Leach (2013) explain:

> The wahakura seeks to provide a safer sleeping place for infants, particularly within a shared parental or caregiver bed. This form of maintaining closeness with baby is likely to find favour with Māori over the currently promoted bassinet beside the bed. In particular, the traditional origin and the ‘Māori flavour’ of the flax construction are designed to appeal to the Māori mother who might otherwise reject advice not to bedshare in an unsafe fashion. (p.3)

Projects involving the wahakura may be a suitable vehicle of communication for these young mothers, with a number of antennal classes now introducing the wahakura as a means of delivering SUDI prevention messages to mothers and providing a practical alternative to ‘unsafe’ bed-sharing practices (Abel & Tipene-Leach, 2013).

The value of wahakura is extremely underrated. In antennal classes the wahakura is weaved by the mothers. Feelings and emotions of love and excitement are intertwined and the wahakura becomes more than a sleeping device for their baby, it becomes a tanoga (treasure).

Davidson-Rada et al. (1995) explain that “while mass communication may be very useful, its effectiveness is greatly enhanced if it’s combined with other methods of communication” (p. 164). The research participants were aware of risks associated with bed-sharing; however, they were unable to relate to the messages on a personal level. The wahakura could be a potential medium that has an emotional, personal connection with these mothers because of the effort, time and love required to make it. The wahakura also becomes the focal point when discussing SUDI prevention messages, creating a deep, meaningful connection for these mothers.

Although there is still much research to be carried out in this particular area it is important that health services and programmes are evaluated using “quality data…from health information systems” (Waetford, 2006, p. 167). This data should “capture health and quality of life in Māori terms [which] will provide more comprehensive information on Māori health, with the goal leading to improved health outcomes for Māori” (Waetford, 2006, p. 167).

Conclusion

The findings from this research project and studies from other researchers such as Abel and Tipene-Leach (2013); Tipene-Leach (2010) has shown that Māori are more inclined to bed-share with their pēpi. This case study has revealed reasons behind this practice, relating to reasons of convenience, ease of access, emotional connection and bond between mother and infant, and belief of safety with the infant being in close proximity. The experiences of these young mothers and bed-sharing with their pēpi is a major missing link in SUDI-prevention strategies in New Zealand. The previous lack of insight into the lives of this particular group of young mothers, now needs to be addressed.

Many of the SUDI prevention messages being promoted contradict one another and, as a result, many communities are annoyed and fed-up with being patronized about the subject. The group of young Māori mothers who participated in this research project have received advice from many sources and have reached the point that they will no longer listen to unwanted advice and will now ”do what I [they] want”. The dominant, top-down model of health care in New Zealand has resulted in many people creating policy around a subject that does not take into account social and structural inequality within and between groups. Daly (1996) warns:

> If we ignore structural inequality and its relationship to ill-health, this brings our efforts into disrepute. More seriously, the very people we are trying to influence may build up a resistance to what we are proposing if it appears we do not know or care about their problems. (p.6)

The attitude “*I do what I want*” is a direct response from some of the participants in this study, and is a manifestation of raw feelings toward outsiders who claim to help these young mothers. Unfortunately, the messages these mothers are being told to follow have no meaning or relevance, and as a result, have not influenced behaviour change.

The impact of urbanisation has caused displacement of identity and this has been demonstrated amongst the discussions with the research participants.

“Rapid urbanization and displacement of Māori from Turangawaewae or places of origin that maintained their Māoritanga, have had a negative effect on the whānau” (Ministry of Health, 1994, p.10).

This issue relates to these young mothers who have not been immersed in their Māori culture and heritage. Therefore the influence whānau may have once had, no longer has as much standing in the lives of these mothers. What this means is The Ministry of Health’s (1994) goal that “health services should concentrate on increasing access and reducing barriers against Māori” (p. 21) has to take on new formations to accommodate the population of Māori where mainstream health promotion is not working.

One possible solution to this cultural disconnection may be a traditional Māori approach to infant sleep practices, adapted for the needs of young Māori mothers. The wahakura is indeed a vehicle that will bridge the barriers for young Māori mothers as it is a meaningful and practical tool for health message communication.

In any case, the most significant finding in this research is using a pamphlet as an isolated resource for SUDI prevention is no longer an effective vehicle for behavior change. Solutions need to address the issues raised by these young Māori mothers. To succeed in reducing the number of SUDI deaths in New Zealand, working in partnership with Māori mothers needs to be the priority.

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Appendix One: Focus Group Participant Letter and Participant Information Sheet

Focus Group Participant Letter

Dear interested participant,

My name is Nikki Haereroa and I am looking for young Māori mothers who are willing to share their experiences about raising their pēpi with other young mothers. As a young mother myself I find that everyone is always telling me what to do and how to do it, so I decided to do a project to hear what other young mothers think.

I want to talk to you about your knowledge and experience when it comes to sleeping with your pēpi. Have you had heaps of people tell you, you should do this or you shouldn't do that? Well I would love to hear all about your experience and how these have made you feel. The aim of the discussion is to find out (1) what you have heard in regards to bed-sharing, (2) what role does bed-sharing play in your home, and (3) are there any factors that contribute to your sleeping practices with your pēpi/baby?

If you decide to take part I want you to feel comfortable to express your views and opinions as this project is all about you and your experiences. If you are interested please let [insert contact details of staff member/ health worker who organised this meeting] or myself, Nikki Haereroa, on the details below. If you are feeling apprehensive or unsure you can indicate you are interested and I can explain the research project to you in person in more detail before you commit to anything.

If you have any questions, feel free to contact me or my supervisor Associate Professor Robert Rinehart.

Nga mihi nui.

Nikki Haereroa- Masters Student
[redacted]
nmh15@students.waikato.ac.nz
……………………………………………………………………………………
Associate Professor Robert Rinehart
Department of Sport and Leisure Studies
The University of Waikato
Ph: 07 8384466 ext. 7957
Email: rinehart@waikato.ac.nz

Participant Information Sheet

Project Title:

Young Māori mothers and bed-sharing with their pēpi/baby: A case study.

Purpose

This study will examine Young Māori mothers' bed-sharing practices with their infant. Two fundamental research questions emerge;

1. What is the relevance of three varying health promotion resource?
2. Do these resources influence young urban Māori mothers?

The purpose and importance of my research is to *understand* reasons why young Māori mothers choose to bed-share with their pēpi, as opposed to *dictating* what they 'should' be doing in regards to infant sleep practices.

In other words, this project is about sharing your knowledge and experiences of sleeping your pēpi. Here is your chance to **speak up** and express your views and opinions.

Criteria:

If you fit the criteria below then we would like to invite you to take part in this research project.

- ✓ Wahine
- ✓ *Have at some period fallen asleep with your pēpi on the* ***same*** *sleep surface, i.e. sleeping together on the same bed, on a sofa, on a mattress on the floor, hospital bed.*
- ✓ *Māori*
- ✓ *Be under 20 years of age when you gave birth to your pēpi*
- ✓ *Live in either Counties Manukau and/or Waikato District Health Board areas*

What will you have to do and how long will it take?

The interview will be approximately 1 hour and 30 minutes with a 20 minute break for kai- which will be provided and you will receive a token of appreciation for your time.
The interview will be a group discussion focusing on bed-sharing with your pēpi.

What will happen to the information collected?

Information will be collected during the interview via an audio recording and then transcribed. Once the data has been transcribed I, Nikki Haereroa, will follow up with all participants to allow participants the opportunity to clarify points they have raised and allow for a deeper understanding of these key points. From here I will be able to write up these findings and present a thesis.

Declaration to participants

As a voluntary participant you have the right to:

- ✓ To withdraw at any time, however please note at the conclusion of the group interview any data you have provided cannot be withdrawn from the research project
- ✓ Refuse to answer any particular question
- ✓ Ask any further questions about the study
- ✓ Will have an opportunity to reflect and clarify points that are raised during a follow up conversation
- ✓ Be given access to the thesis once it is completed.

Who's responsible?

If you have any questions or concerns about the project, either now or in the future, please feel free to contact either:

Researcher: Nikki Haereroa [redacted]
nmh15@students.waikato.ac.nz
Supervisor: Robert Rinehart 07 8384466 ext. 7957
rinehart@waikato.ac.nz

Appendix Two: Consent Form

Consent Form- Participant

I consent to:

1. taking part in a 80 minute group discussion with approximately 6 other mothers
2. being contacted by Nikki for a follow conversation for approximately 10-20minutes
3. the discussion being audio-recorded *(Recordings will only ever be heard by Nikki Haereroa, her supervisor, and a third party who will transcribe the recordings)*
4. being asked about my opinions and experiences regarding sleep practices with my pēpi/baby
5. Nikki using the information I provide to write her Masters Thesis
6. being assigned or creating a false name or using my real name in her thesis
7. my data/talk, as presented and interpreted in Nikki's thesis, being used for future research articles, presentations, and teaching – so long as my identity is protected and I cannot be identified – unless I have given my ***explicit consent*** to be named (see point 5)

I understand that:

8. my participation is voluntary and therefore I am free to withdraw from the study at any time and can decline to answer any particular questions
9. any data presented at the focus group cannot be withdrawn but any individual data given can be withdrawn up until data analysis
10. in signing this form I am saying that I understood the purpose of this research and my rights as a research participant *before* the discussion began
11. Nikki will follow up with me after the interview to clarify any points that were raised and provide me with the opportunity to provide a deeper understanding of my experiences
12. only Nikki will have access to my data and she will keep it in a secure location for the duration of the research process
13. after Nikki's thesis has been submitted for examination my information will be kept in a secure location for approximately 5yrs (for academic examination, challenge, or peer review), after which it will be destroyed
14. after assessment Nikki's thesis will become widely available via the University's website http://researchcommons.waikato.ac.nz
15. because this is a *group* discussion confidentiality cannot be guaranteed
16. if I have any questions, concerns or would like to make a

complaint I can contact Nikki's chief supervisor, Associate Professor Robert Rinehart (07 8384466 ext. 7957, email: rinehart@waikato.ac.nz)

I agree: *(please tick)*

○ that I meet the criteria set out in the Information Sheet (i.e. of Māori descent)

○ that I have read the Information Sheet and the details of the study have been explained to me

○ that my questions have been answered to my satisfaction

○ to participate and supply information to Nikki under the conditions set out above

○ not to repeat what is said in the discussion group to others, or to talk to others about who participated in the discussion

Name……………………………………………………………………………

Contact Number……………………………
Email………………………………

Signed……………………………………………………… Date………………

Appendix Three: Interview Questions

Focus Group Questions

Karakia
Whakawhānaungatanga

Discussion about the research process including;

- going over information letter and consent form
- general questions
- opportunity for those who no longer wish to take part to leave

Interview Questions:

Bed-sharing refers to an infant sharing the same sleep surface as another person, i.e. sleeping in the same bed, on a sofa, on a mattress on the floor etc anything where baby and another person have slept together.

Hinengaro (Mental health)

For the first part of this interview we are going to be looking at 3 different health resources that discuss bed-sharing.

In groups of 2-3 people.

Using the butcher's paper provided I want you to answer the following questions about each of the three resources labelled Card A, Card B, and Card C.

Answer the following questions for Card A, Card B, and Card C.

1. Do you think this promotes bed-sharing?
    a. If so why, if not, why not?

2. Have you seen this resource before today?
    a. If so where?
    b. On a scale of 1 to 10, what would you rank this resource?
       1= Never followed   10=followed these guidelines every day

3. On a scale of 1 to 10, after seeing this resource today would you use it?
       1= Never use it   10= would use these guidelines every day

In groups of 2-3 people.

Using the butcher's paper provided I want you to answer the following questions about each of the three resources labelled Card A, Card B, and Card C.

Answer the following questions for Card A, Card B, and Card C.

1. Do you think this promotes bed-sharing?
    b. If so why, if not, why not?

2. Have you seen this resource before today?
    c. If so where?
    d. On a scale of 1 to 10, what would you rank this resource?
        1= Never followed 10=followed these guidelines every day

3. On a scale of 1 to 10, after seeing this resource today would you use it?
        1= Never use it 10= would use these guidelines every day

We are just going to put our butchers paper to the side for a minute and will come back to it shortly but first I want to get an understanding of some of the things you have been told by either health professionals, friends, whanau, teachers, anyone you can think of, relating to bed-sharing. So my first question is;

1. What are some positive things you have heard in regards to bed-sharing?
2. Has anyone told you that bed-sharing is good and encouraged you to do so?
    a. Do you agree or disagree, if so why?
3. What are some negative things you have heard about bed-sharing?
4. Has anyone told you that bed-sharing is bad and encouraged you not to do so?
    a. Do you agree or disagree, if so why?
5. Thinking back to the last 7 days, of the following choices how many times have you or another person, been bed-sharing with your pēpi?

    Never, 1-3 times, 3-6 times or more than 7 times.

6. Did any of the answers in questions 4-7 influence your choice? [read out some of the answers given if needed]

7. Looking back at our butchers paper and after reviewing your answers from the last few questions why or why not, would you use;
    a. Card A?
    b. Card B?
    c. Card C?

Wairua

8. What are your feelings toward bed-sharing? (For example what feelings arise when you think of your baby bed-sharing with another? i.e. joy, peace, fear, anxiety)
9. Do you undertake any regular practices when it comes to putting your pēpi to sleep? (e.g. always say a karakia before bed, read a book, tuck him/her in?)
10. Is there a regular routine for sleeping your pēpi?

11. What happens when your routine is interrupted?
12. Are there any spiritual reasons why you choose to or choose not to bed share with your pēpi? (i.e. the emotions you feel?)

Tinana

13. How many people live in your household?
14. Does this impact on where baby must sleep?
    a. If so how?
15. Are there any environmental factors that affect how you want to sleep baby? (i.e. the temperature of the house, the size of the bedroom too small for a cot)
16. Are there any cost factors that influence how you want to sleep baby? (i.e. cots too expensive)
17. Are there any physical reasons why you choose to or choose not to bed share with your pēpi? (physical can involve both your environment or physical health of your baby or yourself, i.e. still breastfeeding so easy to bed-share)

Whānau

18. On a scale of 1 to 10, with 1 being- not at all and 10 being- extremely, how important has whanau been in helping you to raise your pēpi?
19. What kind of involvement have they had in helping to raise your pēpi?
20. Who has been one of the central guiding people in your life who has a big influence on how you raise your pēpi?
21. Have they ever given you advice regarding bed-sharing?
    a. If yes, what has this advice been?
    b. Has this advice influenced you with your current practices?
22. Are there any whanau reasons why you choose to or choose not to bed share with your pēpi? (i.e. nanny believes that she did it with all her children so my pēpi will be fine sleeping with me)

Participants to complete "Participant Summary Sheet".

Summary

23. To summarise do you think bed-sharing is an unhealthy practice? Or is normal?
24. What would you say to someone who told you, you cannot bed-share with your pēpi?
25. Are there resources (e.g. cots, wahakura, pēpi-pod) out there that would make it easier for you to not bed-share if you wanted to?
26. If you have or had any concerns about bed-sharing who would you go to?
27. This research project is about gathering your opinions on bed-sharing and why you have done so in the past and may still now. Is there

anything else you would like to say on the topic?

Thank you so much for your time and sharing your knowledge here today. Your insight is filling a large hole in the current health system and believe me when I say everything you have shared today is valuable.

Karaki

Kai

Appendix Four: Participant Summary Sheet

Participant Summary Sheet

Assigned Name: ____________________________

The purpose of this sheet is to summarise what you have talked about today. When I contact you in the next couple of days we can discuss in more detail anything you write down.

A). Please list 3 reasons why **you** bed-share with your pēpi.

1. ____________________________

2. ____________________________

3. ____________________________

B). Have any of the resources shown to you today influenced your thinking about bed-sharing?
(Please circle Yes/No/Don't Know and briefly how)

Card A- Yes/No/Don't Know. How-

____

Card B- Yes/No/Don't Know. How-

____

Card C- Yes/No/Don't Know. How

____

C). Anything else you would like to expand on that was brought up today or something new that you would like to talk about that was not brought up in the group.

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