Tapu ki he ‘Otua, mafi ko e vunivalu;

Tapu mo ha’a matematika, filosofia ‘o e ‘ilo he faiva lau;

Talangata ‘iate kita tuku ke u hao atu;

Malo mo langi, tuhani mai taau mo sio’oto vaivai;

Exploring medications amongst Tongan households in New Zealand

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DEDICATION

I dedicate this thesis to my beautiful parents; ‘Ofila and ‘Ofahiki Tongi

I say

“He ‘ikai ngalo ho’omo ‘ofa, mo ho’omo ngaahi akonaki. Malo ‘aupito”

ABSTRACT

The current thesis explores: how four related Tongan households understand, treat and use medications; and the 'flow' of medications into, around and out of these households. The participants for this research come from four Tongan families living in the Auckland area. A broad ethnographic approach which is multi-layered, multi-method and multi-centred was to capture such data. This included individual interviews, household discussions, diaries and photo elicitation methods. Key themes reported on are Western and Traditional Medication Use; Faito'o fakatonga; Use of Western Medication; Prayer, Faith and Medications; and Flow. Tongan cultural values and practices shape how these four households treat, use and understand medications. Participants in this study structured their lives around Tongan customary relationships, obligations to respect and care, and to have faith that resolutions would be found to any ailments or illnesses suffered by household members. Household members clearly had a respect and regard for Western medications and trust in Western practitioners but were sometimes frustrated by the dominance of this model. The same was mostly true of Tongan medicine and associated healers. Some household members went as far as using both in conjunction with each other. However, across most households, there was the presence of a firm belief that a resolution of health issues required more than medication. Good health was a product of rightful relationships and faith and trust, in medications, health practitioners and God. This study adds to research on medication use by highlighting the importance of culture to extending existing understandings of the everyday practices through which people use and share medications.

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GLOSSARY

Anga fakatonga	Tongan customary practices
Fa'etagata	Maternal Uncle
Faipele	Card playing
Fakalotu	Religious
Fa'iteliha'anga	To whom you can do as you please
Faka'apa'apa	Respect
Faito'o Fakatonga	Tongan traditional cures
Fakahela	Too much hassle
Fakamahaki	Spirit related illnesses
Fakaongoonga	Waiting and listening for instructions
Fanofano'i	Ritual for transferring the ability to heal
Fasi	Broken bones, muscle strains
Fatongia	Duty
Fo'i'akau niumonia or niumonia	Pneumonia tablets used when generally feeling unwell
Fua e kavenga	Fulfil obligations
Hangatamaki	Commonly refers to boils but also include ulcers, skin disease, swellings and tumors

Kahi	Internal difficulty believed to cause constipation
Kau faito'o fakalotu	Religious curers
Kau faito'o fakatonga	Traditional Tongan curers
Kau faito'o faipele	Card playing curers or diviners
Kau faito'o fanau iiki	Paediatricians
Kau faito'o fasi	Bone setters
Kau fotofota	Masseur
Kau toketa	Western trained doctors
Kavenga	Obligations
Kihikihi or Vai Kihikihi	Generally used for children's ulcers
Ko e 'Otua mo Tonga ko hoku Tofi'a	God and Tonga is my inheritance
Lavea	Physical injuries
Lolo Tonga	Tongan coconut oil
Lolo mai	Generally applies to frequent low energy levels
Mahaki	Disease or non specific symptoms
Mahaki-fakatonga	Tongan disease
Mahaki papalangi	European disease
Manatu	Generally applied to children who are unwell because of missing their parents

Ma'uli	Traditional birth attendants
Mehikitanga	Paternal Aunty
Mohe ofi	Sleeping close
Ngatu	Bark cloth
Pala	Ulcers
Papalangi	European
Puke	Sick
Talangofua	Obedience
Tapu	Forbidden or prohibited
Vai	Liquid, used as a general term for Tongan medications in liquid form
Vai Angoango	Liquid medication, used generally by adults for ulcers or constipation
Vai Kahi	Liquid medication used to detoxify
Vai Kete	Liquid medication for upset stomach
Vai Kita	Liquid medication, used generally by adults when feeling unwell; also used for strengthening by women after giving birth
Vai Tale	Liquid medication for coughs
Vaka	Vessel

CHAPTER 1: INTRODUCTION

In this study, I seek to explore: how four related Tongan households understand, treat and use medications; and the 'flow' of medications into, around and out of these households. There are five major sections in this chapter. The first addresses the question, who are Tongan people? Of necessity, the answer to this question emerges out of the Kingdom of Tonga, an island nation situated in the South Pacific Ocean. Because this study is concerned with Tongan people in New Zealand, the second section is concerned with reasons why Tongan people have migrated to New Zealand. All migrations of people concern more than the movement of bodies, and typically involve the movement of knowledge, customary practices and ways of doing things. It is therefore appropriate that I review what little literature there is that describes traditional Tongan conceptions of illness, for these ideas are as mobile as the people who possess them. The third section reviews the literature and previous research that explores the many pathways Tongan people pursue to address illness and to restore wellness. In particular, I describe the Western medical model, and the Tongan model of healing, along with those practitioners who practice according to each respective model. In the last section, I turn my attention to the literature that addresses the question: what happens to medications when they enter into the social lives of people and their spaces?

Of necessity, this review spans a number of disciplines, including anthropology, ethnography, sociology, psychology and social medicine. The review is wide ranging and deals with questions of royalty, spirituality, religion, people and place, tradition, social relationships, cultural values and migration. A central theme that emerges that is vital to understanding the place of medications in the lives of Tongan people is the notion of faith and trust – that there will be a cure and that God will provide a pathway to good health. It is into this context that medications, however defined, enter into the life spaces of Tongan people.

The People and Kingdom of Tonga

On a world map, what may appear as insignificant points in the Pacific Ocean, are the Islands of Tonga, or more accurately, the islands that comprise the Kingdom of Tonga, a nation state, the homeland of Tongan people, descendants of ancestors whom have experienced perilous voyages, Western influences, new diseases and new migrations (Bloomfield, 2002).

The Kingdom of Tonga (referred to hereafter as Tonga) is comprised of 171 islands spread over an area of 670 square kilometres (Bloomfield, 2002; Prescott, 2009) (See Figure 1). Some islands are inhabited and smaller islands are utilized for agricultural purposes (Bloomfield, 2002). The islands of Tonga have reasonably fertile soil making it effortless to grow many tropical fruits and vegetables. Tonga has a subtropical climate with an annual temperature of 25.5 degrees Celsius (Bloomfield, 2002). While other Pacific nations have been subjected to colonial incursions by the Americans, British and the French, Tonga has always been a sovereign nation beholden to no other nation or people (Prescott, 2009).

Tonga may have escaped some aspects of colonisation, but since the 1800's and like neighbouring Pacific nations, they have had to respond to the intrusion of missionaries spreading the Good Word and Christianity, in turn, impacting Tongan worldviews, traditions and daily lives (Bloomfield, 2002). Presently, most of the population of Tonga actively practice some form of Christianity (Statistics Department Tonga, 2010) with 'the church' coming to occupy a central physical and social place within village life. Contemporary expressions of *anga fakatonga* (Tongan customarily practices) have become inextricably entwined with Christian values and beliefs to the extent that for many Tongans, Christianity like *anga fakatonga,* is simply taken-for-granted part of their daily lives. Faith, prayer, tithing, upholding the Sabbath day, reading scriptures, gathering for evening prayers are not perceived as strange or intrusive; it is simply a way of life.

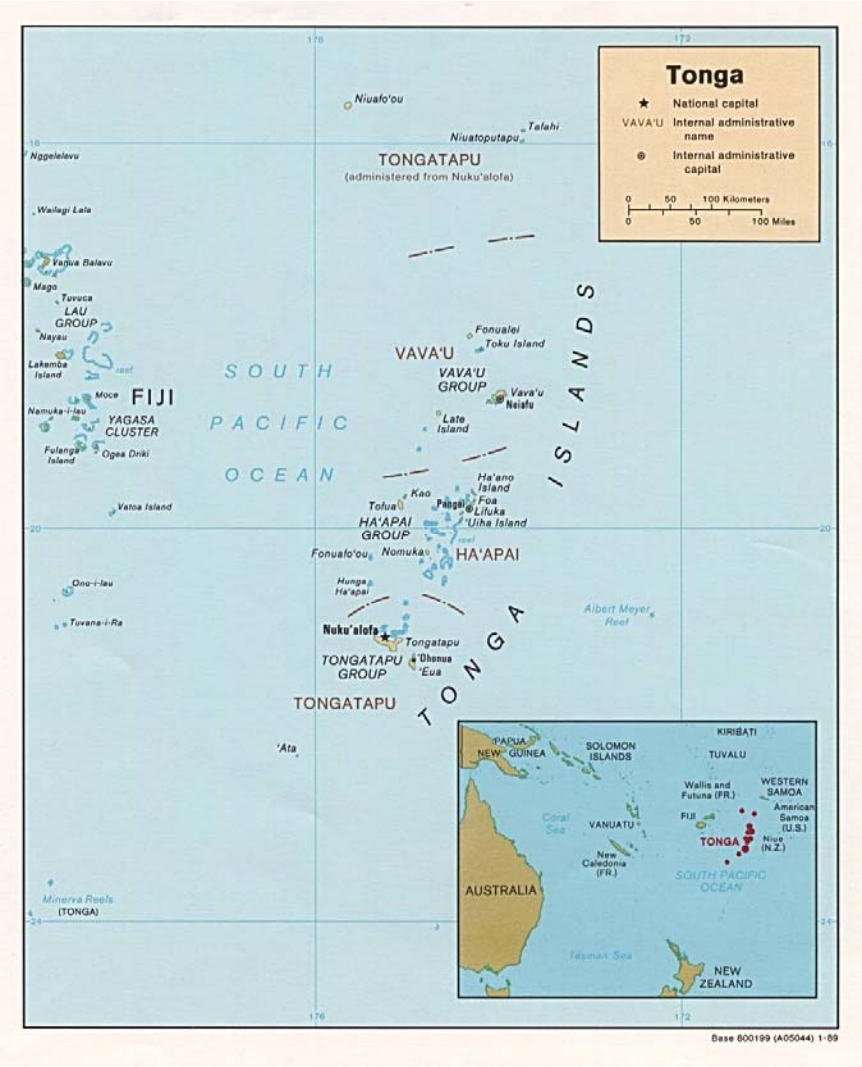

Figure 1 The Kingdom of Tonga
(Courtesy of the University of Texas Libraries, The University of Texas at Austin)

Tongan people engage the world with both Tongan and Christian values firmly held and moulded, as one, in one hand. They are not seen as separate, compartmentalised, or incompatible, but rather, as inter-related, integrated and synergistic, in that Tongan ways and Christian ways have evolved to present new ways of being in the world. While Tongan people may take such aspects of their lives for granted, the Tonga Tourism Ministry seems conscious that the rest of the world may view such practices differently and instructs visitors accordingly.

> *Sunday in the Kingdom of Tonga is devoted to church going and relaxation. The harmonized singing, clanging of church bells and the beat of the "lali" (wooden drums) are all familiar sounds of a Tongan Sunday. On a Sunday, the streets are empty, all businesses (except those for visitors) are closed, sports are prohibited and even planes don't fly. Even contracts signed on a*

> *Sunday are void. It is inadvisable to create any disturbance, operate noisy equipment, or be loud on Sundays (Tongan Visitors Bureau, 2010, para 2).*

Tongan society is hierarchically structured. The first King of Tonga, George Tupou I came to ascendency after the Tongan civil war of 1839-1845, bringing in reforms to modernize Tonga. He abolished slavery, espoused Christian ethics and promoted 'Nobles' into a hereditary land ownership system that extended to matters of local governance and the protection of Tongan identity and heritage (The Official Website of the Tongan Government, 2010a). These ideas are reflected in the Coat of Arms of Tonga which carries the text "*Ko e 'Otua mo Tonga ko hoku Tofi'a*", meaning "God and Tonga is my inheritance", further reflecting the melding of Tongan and Christian worldviews (The Official Website of the Tongan Government, 2010a, para 1). The Tongan monarchy follows an uninterrupted succession of hereditary rulers from one family, the present monarch King George Tupou V succeeding his father in 2006. In the order of Tongan hierarchy, the King is followed by land holding Nobles. Nobles are followed by the Matapule or village chiefs who might too be landholders. The status of 'commoner' represents most of the ordinary people of Tonga. While this hierarchy exists

> *…obligations and responsibilities among the groups are reciprocal, and although the nobility are able to extract favors from people living on their estates, they likewise must extend favors to their people. Status and rank play a powerful role in personal relationships, even within families (U.S. Department of State, 2010, para 23).*

Within Tongan extended families, complex sibling relationships serve to texture social relationships and daily life (James, 2002). Gender and age are important elements of the Tongan ranking system with women ranked higher than her brothers and their children, but at a lower status than her eldest sister (Bloomfield, 2002). Tupou Fanua (in Griffen, 1976, p.2) elaborates this.

> *Above that is the 'mehikitaga', the father's sister. In Tongan families the status of a woman is very high because the 'mehikitaga' is much respected in her family. Although she pays respect to her brother, to his children she is really much further up. We say that the father is the lord of the family but the 'mehikitaga' is the overlord of the family (Griffen, 1976, p2).*

The naïve reader may well conclude that Tongan society follows matriarchal rules, but this conclusion is too simple, as Bott (1981)discusses.

> *The Tongan kinship system was (and is) simultaneously domestic and political. It contains the basic and simplest forms of stratification, a system of patrilineal authority and a system of ceremonial rank. Even within the domain of domestic kinship these two principles do not coincide. Fathers and elder brothers have authority and control over one's access to land. The basic principles of rank, on the other hand, are that sisters have higher rank than brothers and that older siblings of the same sex have higher rank than younger siblings of the same sex. Sisters have no authority over brothers even though they have the higher rank. Both fathers and sisters are respected but the basis of the respect is different. Fathers have the right to command, to give or to withhold; sisters have the right to ask to be given what their brothers produce (Bott, 1981, p8).*

Tongan systems of rank, obligation and responsibility are transportable beyond the domestic settings and the shores of the Kingdom of Tonga. Health, social and educational service providers engaging Tonga individuals and families in Western contexts should not assume that Tongan people left over on such arrangements on migrating from their homeland. On the contrary, like all migrants, these configurations moved too (cf Conway & Potter, 2009). In the following section I shift my focus to consider why Tongan people migrate.

Migration motivations

When traditional societies modernise, the introduction of currency, like the British Shilling and Pounds, or the US Greenback, is typically part of the process, the arising consequences being change in the fabric of social relationships and exchange economics (Guerin, 2004). To understand modern Tongan migration, Small (1997) tracks the economic history of *ngatu* (bark cloth) making and its use in traditional Tongan society, an activity that formed the foundation of Tongan economics, status and prestige. Traditionally, Tonga had a barter system through which everyday necessities and services were acquired and exchanged. Status commodities like *ngatu* were also subject to exchange and, due to the collaborative labour intensive production process, its possession was taken as a measure of prestige, wealth and status. Money, when it was introduced, was initially used only to trade with Europeans but later entered into exchange transactions between Tongan people themselves. European material attained by Tongan people came to signify prestige and was association with people of status; the accumulation of economic wealth, that is, money, meant having the capacity to live a chief-like lifestyle. Later, movies and magazines featuring European life further moulded Tongan notions of status and prestige. Coupled with the arrival of

American soldiers during World War II (Lee, 2003), Tonga became less interested in making and attaining traditional material wealth and rather more interested in money and Western goods. Money was prestigious and had become a part of the traditional Tongan exchange system; and it was becoming quite Tongan (Small, 1997).

As Small (1997) elaborates, money changed traditional notions of exchange and payment. *Ngatu* came to serve mostly ritual purposes and diminished as an exchange object for everyday goods. School fees had to be paid; *kavenga* (obligations) to family involving money had to be fulfilled; donations to churches and to the village had to be made, and, overtime, these obligations placed considerable demands on families. Families responded by working longer hours to grow enough food for family consumption and to sell at the markets; or to make enough *ngatu* to *fua e kavenga* (fulfil obligations) and to sometimes sell for money. However, these strategies still fell short of meeting family demands. As a consequence, the idea of sending a member of the family overseas became appealing. Migration was seen as a way to lessen the financial burden and to manage future financial demands (Small, 1997). It became an instrument through which individuals and their families could achieve a more prosperous life, in turn, reflecting changing values, the want and capacity to acquire wealth and prestige, and to shift one's 'rank' in a very status conscious and hierarchical society. Small (1997) notes that migration is less about a movement of people; and more about a transformation and the reinterpretation of institutions, relationships, and objects, such as *ngatu*.

Since the 1900s, the Tongan elite began to place a high premium on Western education. Queen Salote Tupou III, as a young woman, often visited New Zealand, bringing with her relatives to care for her, and the children of chiefs to be educated, just as she was (Wood-Ellem, 1998). Her son, King George IV was educated at Newington College and studied Law at Sydney University while resident at Wesley College in Sydney, Australia (Taulahi, 1979). He returned to Tonga and served as Minister of Education, Minister of Health and as Premiere. The present monarch, King George V attended primary school in Switzerland and secondary school at King's College in Auckland and The Leys School in

Cambridge, and went on to study at Oxford University and the Royal Military Academy Sandhurst in England (Parry, 2008). Prior to succeeding his father, he served as the Minister of Foreign Affairs and was a successful international businessman. His sister, the Princess Pilolevu attended Diocesan Girls' High School in Hamilton, New Zealand and also has significant business interests.

The education strategies the Royal's held for themselves did not go unnoticed by the people of Tonga. People left Tonga to become qualified and returned to occupy prestigious and sought after government positions. For example, the present Prime Minister of Tonga, the Hon Dr. Feleti V. Sevele completed his university education at the University of Canterbury in New Zealand in the 1960s and 1970s (The Official Website of the Tongan Government, 2010b). He returned to Tonga and joined the Tonga Commodities Board as Board Secretary (The Official Website of the Tongan Government, 2010b). The capital afforded the educated individual by way of qualification and income enabled them and their families a degree of upward mobility in Tonga, providing an incentive for return migration (Small, 1997). However, given that Tonga has limited work opportunities, returning, for most, was not an option. Capitalising on education and skills can only occur where there is a demand for services (Özden, Schiff, & The World Bank, 2007) and the migration pathway took Tongans into contexts where their skills and education could be put to work.

In their overview of Tongan migration, Gibson & McKenzie (2007) write that "the first notable migrations for Tonga to New Zealand began in the 1960s and 1970s, as Tongans migrated on temporary work permits" (p.217). Following the infamous dawn raids on Tongan and other Pacific migrants who had overstayed their original 3 month work permits, an amnesty in 1976 saw many granted permanent residence. Their numbers continued to be added to as migration for work continued. New Zealand population counts, as noted by Gibson et al (2007) record 7,060 Tongans in New Zealand in 1986, 12,972 in 1991, and about 31,400 in 1996. In 1991, New Zealand introduced a points system for immigration (Gibson & McKenzie, 2007). Potential migrants were scored according to education, skills and business capital, and for occupational categories in demand. Few Tongan applicants scored well under this system, and so, the majority of

migrants in the 1990's were admitted under the family sponsored categories, that is, as a spouse, child or parent of an existing migrant. By the 2001 census, the Tongan-born population numbered 17,682.

Since 2002, Tongan migrants could also apply under the Pacific Access Category (Gibson & McKenzie, 2007). To do so they had to be aged between 18 and 45 years, have a minimum standard of English, be generally healthy and of good character, and have an offer of fulltime, ongoing and sustainable employment. An upper limit of 250 applicants could be admitted under this scheme per year. If the applicant was successful, they could move to New Zealand as permanent citizens with their spouse and dependent children. In Gibson & McKenzie's (2007) study of the Pacific Access Category, they found that amongst the 198 people surveyed, the greatest motivations for migrating were: to benefit from the better public services in New Zealand; to be with family members; to earn higher wages; and so children could attend school. Lesser motivations for migrating were: for a better social life; to pay for social responsibilities in their home village; to pay for Tongan school fees; less cultural restrictions; to earn money to build a house in Tonga; as a way of getting to Australia; or, to earn money to start a business in Tonga. The results of this study seem to suggest a shift of commitment by migrants from their homeland, towards those places and contexts to which they had migrated.

As Guerin (2004) has noted, when societies convert from traditional economies, to those that are currency based, social fragmentation will often result. Unlike perishable items of exchange, like food crops, money can be hoarded, for example, in banking institutions. Whereas cooperative endeavour and collaboration may have been a necessity premised on the creation of obligations and meeting of responsibilities, in a cash economy the requirement to reciprocate is ameliorated by a capacity to avoid the obligation in the first instance - cash can be used to procure resources and labour, resulting in a degree of self-reliance and independence in contrast to the interdependence previously relied on. Tongan motivations for migrating, in part, simply reflect the effects of an introduced cash economy.

When migrating, people take more than just themselves. As this research is particularly interested in medications, that is, substances people use to maintain their health and wellbeing, in the next section I examine the ways in which Tongan people achieve and maintain wellness. The Western medical model of health and its associated biomedical technologies has taken root in most places in the world, even in Tonga and attests to its portability. The same can be said of other health models and healing technologies, for example, since February 2010 it is now possible to gain a degree, accredited by the New Zealand Qualifications Authority with majors in Chinese Medicine, Acupuncture and Chinese Herbal Medicine (New Zealand College of Chinese Medicine, 2005). With respect to healing practices of New Zealand Maori, people can also gain an NZQA approved qualification that "develops bilingual and bicultural healers in traditional and contemporary Māori healing for whānau, hapū and iwi, Māori and non-Māori organisations" (Te Wananga o Raukawa, 2010, para 6). Against this backdrop of movement, it is more than reasonable to expect that Tongan migrants brought to New Zealand their own traditional Tongan healing practices and substances, or *faito'o fakatonga* (Tongan traditional medicine). In the next section, I have chosen to consider the relational context within which such healing practices are enacted as such are critical to understanding the causes and pathways to cure illness.

Illness and social relationships

> *The most common definitions describe religion as a 'set of beliefs and practices' or a 'particular system of faith and worship'. Such beliefs or faith are concerned with the human effort to form and maintain, through worshipful practices, a 'right relationship' with various 'superhuman entities' or 'spiritual beings', who require 'propitiation or conciliation' in order to obtain their favour. Needless to say, those humans who sustain this relationship themselves obtain power and authority within the society they serve (Reilly & Herda, 2005, p.2).*

Ideas about health and illness are central to every culture, and medical knowledge and practices in all societies are closely associated with other widely held beliefs (Selin, Shapiro, & Springer, 2003, p.xix). In Tonga, wellness and health are inextricably entwined with 'religion', that is, religion that springs from Tongan tradition, Christian tradition and Western tradition. The practice of *faito'o fakatonga* positions illness as an affliction resulting from some violation of the gods, or of those descended from them. "Things that are forbidden or prohibited

are *tapu*. Breaking a *tapu* leaves one open to retribution by the supernatural. It is in this sense that the early Tongan chiefs, and objects touched by them, were *tapu*. To some degree, the lesser chiefs shared this *tapu* status" (McGrath, 1999, p488). If the gods had in some way been displeased, then the resolution of an illness was found in invocation, sacrifice and appeasement. These unwanted consequences have served to structure social relations and social behaviour in Tonga. The same might hold to be true within a Christian paradigm. God heals, and through faith, prayer and the incorporation of Godliness into social relations and behaviour, good health prevails (Bloomfield, 2002). Because the notion of right behaviour in social relations is central to wellness in the Tongan world, it is worthwhile dwelling on these matters.

A central value that offers safety, wellness and social harmony is *faka'apa'apa* (respect). It is enacted through the body in physical dispositions of deference, acts of humility, through discharging prescribed obligations and responsibilities, sometimes enacted in ritual form, and most definitely through language (Bott, 1981). Such performances of respect are vital to wellness in a rank, status and relationship oriented society such as Tonga. For example, Tongan royalty require the use of particular honorifics (Makihara & Schieffelin, 2007), if one is privileged enough to be in such company. The same is required of Nobles and Commoners. There is also everyday speech and chiefly or polite speech. Makihara (2007) notes that while the same idea can be conveyed through each form of speech, the more important difference is in the values that are communicated, in the aforementioned example, the value being that of *faka'apa'apa*.

The notion of *tapu* and how to avoid negative consequences is taught to children very early in life through *mohe ofi* (sleeping close) to their mothers (Morton, 1996). As Morton (1996) explains, children learn by observing parental and other adult behaviour. For example, although both parents hold significant roles within the Tongan family, the father is the head of the family, for it is from him that his children inherit their position or status in society (Rogers, 1977). My notes on language in the paragraph above testifies to the importance of children, indeed everyone in Tonga, knowing their place and where they fit in, for fear of behaving inappropriately, being disrespectful, bringing about disharmony between people,

and risking the wrath of the spiritual, a theme constantly repeated through the literature (Bassett & Holt, 2002; Bloomfield, 2002; Bott, 1981; Daly, 2009; James, 1997; Morton, 1996; Parsons, 1984; Toafa, Moata'ane, & Guthrie, 1999, 2001). This has application beyond relationships with Royalty, Nobles and Commoners. Of fathers, children are never allowed to touch their father's head or eat his leftover food (Bloomfield, 2002). For unmarried young women, it is unacceptable to wonder around alone or to go on a date without a chaperon (Morton, 1996). Adolescent boys usually sleep in a separate building outside of the main house where the girls sleep. If the sister or female cousins enter the main house the boys are then expected to leave the house reflecting the Tongan and Christian abhorrence of incest (Morton, 1996).

Another significant social relationship occurs between a brother and sister; and the respect in sibling relationships also extends to cousins (Bott, 1981; James, 1997). As Griffen writes "…the relationship of brothers to sisters is respectful and protective; the culture spells out rules of behaviour of brothers in the presence of sisters. As sisters, women receive respect from brothers, but as wives they are expected to show obedience to husbands" (Griffen, 2006, p15). The relationship between a brother's sister and his children are important as well. As mentioned earlier, the sister is her brother's children's *mehikitanga* (paternal aunty) and has special responsibilities to and expectations of them. In Tongan custom, the brother's children are the *mehikitanga's fa'iteliha'anga* (to whom you can do as you please) (Bloomfield, 2002). The final social relationship is that of a sister's brother and her children. The brother is his sister's children's *fa'etagata* (maternal uncle). The *fa'etangata* is also seen as the children's *fa'iteliha'anga* (Bloomfield, 2002). Not maintaining or breaching any of these social relationships is seen as the cause of unwellness.

Tongan social relationships are complex and fluid and well beyond the scope of this study. However, when considering households that are dominated by Tongan values, Christian beliefs and kinship relationships, the researcher needs to keep these values, beliefs and relationships in mind. To do otherwise is to risk an inaccurate interpretation or conclusion. One further point is also important to make. McGrath (1999) suggests that historical accounts have tended to focus on

the remarkable facets of Tongan life, like the afflictions of Royals and high chiefs, or of child sacrifice or amputation as acts of appeasement, rather than descriptions of mundane afflictions, illnesses and cures. She suggests that a biased picture has resulted "…of healing among the chiefly class in early Tonga with the supernatural at the centre of the medical paradigm" (McGrath, 1999, p488). In contrast, McGrath points to the observations of surgical intervention, massage, and manipulation of bones, and to Tongans being well known around the Pacific as skilled surgeons and herbalists. While illness might have been associated with supernatural causes, Tongan ideology also accommodated secular causation (McGrath, 1999, p.489).

To summarise, within a Tongan world view, the cause of ill health can be found in violations of *tapu*, or inappropriate behaviour in relationship with God or the spirit world, or in relationships with others. As much as Tongan ideology subscribed to such beliefs, there was also an understanding that illness also had secular explanations under the control and intervention of humankind, an understanding that has given rise to an indigenous system of healing that resides in association with Christian belief and the Western medical model of health care. In the section that follows, I turn to consider those steps Tongan people may take to restore wellness.

Restoring wellness

> *… illness, like religion, is approached in a pragmatic manner in Tonga. Individuals and families try all available therapies, both traditional and biomedical, until one works. Only after completion of therapy is consensus reached. If the intervention is not successful, there is little indictment of the therapy; it simply is not the appropriate one in that situation. If it is successful, then the cause of the illness can be discussed with certainty. Seeking a cure is a very fluid process (McGrath, 1999, p483).*

When Tongan people are unwell, they indicate so through the use of the terms *puke* and *mahaki.* The former expresses feelings of sickness or a state of being unwell. The latter indicates disease and an underlying persistent condition. Both states of unwellness are symptomatic of the individual, or those whom they are connected to, having violated some *tapu* (Bloomfield, 2002). There are three possible pathways to good health. They are: (i) Western medicine; (ii) *Faito'o*

fakatonga (Tongan traditional cures); and (iii) *Faipele* (card playing) and *Fakalotu* (Religious). *Faipele* and *Fakalotu* are also generally referred to as *Faito'o fakatonga*. Each is considered in turn below.

Western medicine

Through Christian missions, The Kingdom of Tonga was introduced to the Western model of health. Later, King George Tupou IV (1918-2006) encouraged the brightest students to study overseas by supporting selective and generous scholarships. McGrath (1999) identified in her research that few of the 40 physicians and over 200 nurses in Tonga at the time, were non-Tongan. There are three hospitals disbursed through the Kingdom of Tonga, the largest, Viola Hospital, is on the main island of Tongatapu. Western health systems, are therefore, not unfamiliar to Tongan people. It is worthwhile then, to briefly describe what this system is and the underlying paradigm that drives it.

The Western medical model of illness is premised on the belief that illness and symptoms arise from some abnormality within the body (Wade & Halligan, 2004). The development of the Western medical model with its reductionist approaches, have given rise to a range of sub-disciplines and specialties which combine to form a comprehensive system of healing. However, the reductionist approach to health has also had other implications. Within the biomedical model, illnesses are required to be medically validated with diagnostic labels (Wade & Halligan, 2004). Alongside this, healthcare resources tend to be organised in relation to the treatment of those diagnoses, with the associated assumption that post-diagnosis, treatment will be brief and rapidly effective (Wade & Halligan, 2004). With the patient considered a passive recipient of treatment, the role of the sick person can only be validated by a medical professional (Wade & Halligan, 2004). Within this model, wellness equates to the absence of disease, a view increasingly being called into question. For example, the World Health Organisation (1948) considers health to be a state of complete physical, mental and social wellbeing, not merely the absence of illness or *mahaki* (disease). In this way, the Western medical model fits more appropriately as a model of illness, as opposed to a model of health (Bassett & Holt, 2002).

Though great advances have been made in Western medicine, the model and system of care, sometimes fails to take into account the health paradigms of non-Western peoples, such as those practiced by Tongan people. Research has demonstrated Pacific peoples use health care services in New Zealand differently to non-Pacific people, for example, visiting general practitioners less and having a higher rate of hospitalization (Bassett & Holt, 2002). When exploring the health and illness beliefs of Tongan people in New Zealand, Bassett & Holt (2002) found that: participants engaged both western and traditional methods of healing; and those who did, were more likely to be fluent Tongan speakers; and when they received services from Western practitioners, they were likely to be satisfied particularly if their illnesses or symptoms were relieved or cured. Those who used Tongan healing methods were more likely to do so when western medicine lacked efficacy in terms of symptom treatment or cure (Bassett & Holt, 2002). Clearly, the study by Bassett & Holt (2002) and that by Bloomfield (2002) supports the earlier work by McGrath (1999).

In Bloomfield's (2002) study of illness and cure in Tonga, it is important to note that her participants held Western health practitioners in high esteem. They were seen as prestigious, legitimate, intelligent and skilful. However, because of these characteristics, they were also seen as unapproachable. While hospital treatment was valued, particularly when symptoms were relieved, participants tended to fear such settings for they were viewed as places where people died, that is, health tended not to be restored and death resulted. Modern medicine was also sought after, readily used by her participants, sometimes stockpiled because they resided at a distance from medical care, and, because of its relatively low cost, sometimes sent to family residing overseas. For example, *fo'i'akau niumonia* (pneumonia tablets) or sulphadimidine tablets were very popular. For some of her participants, the use of Western medicine was just simply more convenient than expending time and energy negotiating the sometimes rugged Tongan terrain, to source and then prepare *faito'o fakatonga*. In summary, of Tonga, she writes:

> *Modern health care is preferred officially and is the preference of most of those sampled in the research. Modern medicine is seen as fast acting, clean and often easier to obtain and to keep. The doctors are seen as clean and clever. Their skills were learned from the developed countries where most good things for development were assumed to come from. On the negative side, modern doctors were seen as unapproachable and lacking*

compassion with the traditional, card-playing and religious curers (Bloomfield, 2002, p129).

Faito'o fakatonga (Tongan traditional medicine)

The use of traditional medicine or *faito'o fakatonga* in Tonga is taken for granted and sits alongside that of the Western health care system even though some Western health professionals, particularly surgeons frown upon such practices (Bloomfield, 2002). It is interesting to note that while King George Tupou IV had medical physicians who waited on him, he also had his own traditional healers, an arrangement that perhaps served to legitimate the roles of traditional healers and medicine, even it frustrated some of the Western trained medical fraternity. Participants in McGrath's (1999) work estimated that there were over 200 practicing traditional healers on the main island of Tongatapu alone. In parts of the Kingdom of Tonga where Western practitioners and medicines were inaccessible, the health system, by default, was and continues to be *faito'o fakatonga.*

As a system, *faito'o fakatonga* comprises cures and curers. Traditional herbal therapies have been documented by Bloomfield (2002), George (1989), Singh, Ikahihifo, Panuve and Slatter (1984) and Whistler (1992). Whistler (1992), for example, describes plant families with their Latin and Tongan names and records ninety-one remedies using fifty-nine different species of plants. As with other indigenous knowledge, the harvesting of traditional knowledge of the natural environment for the development of pharmaceuticals is also occurring with respect to Tongan herbal knowledge. For example, Ostraff, Anitoni, Nicholson and Booth (2000) investigated traditional Tongan cures for morning sickness with results positive enough for them to recommend further research that would identify a compound to alleviate morning sickness. While indigenous people rightfully have concerns about the exploitation of their knowledge and natural environment (Antons, 2009), the attention of pharmaceutical companies goes some way towards attesting to the worth and legitimacy of *faito'o fakatonga*.

Traditional knowledge of *faito'o fakatonga* is passed from one generation to the next, usually within families who become renowned for their capacity to treat

certain ailments and conditions (Bloomfield, 2002). While there is some variance across authors, according to Toafa, Moata'ane and Guthrie (2001), ailments might be grouped as: *fakamahaki* (spirit related illnesses); *lavea* (physical injuries) or, according to Bloomfield (2002) referred to as *fasi* (broken bones and muscle strains); *hangatamaki* (concerning boils but might also include ulcers, skin disease, swellings and tumors) and *mahaki* (non specific symptoms). Parsons (1984) has analyzed the link between stressful interpersonal relations and sickness in Tonga and makes note of two new illness categories that reflect more recent social change. The first is *manatu*, a sickness striking small children who remain in Tonga while their parents travel to New Zealand for employment, and the second is *lolo mai*, a sickness caused by an individual's inability to adjust to the effects of Westernisation.

The search for cures is directly related to what is determined to be the cause of unwellness. As well as the above considerations of causation, Bloomfield (2002) informs us that most Tongans see illness as either *mahaki faka-Tonga* (Tongan disease), or *mahaki papalangi* (European disease). Tongan illnesses are known to have Tongan cures, and *papalangi* illnesses are known to be cured quickly by modern medical cures.

Without elaborating the whole taxonomy of ailments and cures in the Tongan worldview, the review of the aforementioned categories presents a window on what is a complex and dynamic system of healing. With the respective categories of illness are the accompanying possible spiritual causes that must be addressed beyond the administration of traditional medicines. Tongan healers, therefore, must address both the physical ailments and spiritual transgressions.

There are many types of Tongan healers. Bloomfield (2002) describes four categories of healers: *Kau toketa* (Western trained doctors), *kau faito'o fakatonga* (Tongan traditional curers), *kau faito'o fakalotu* (religious curers), and *kau faito'o faipele* (card playing curers, or diviners). Of the *kau faito'o fakatonga,* there are a number of specialisation, for example: *ma'uli* (traditional birth attendants), *kau faito'o fanau iiki* (paediatricians), *kau faito'o fasi* (bone setters) and *kau fotofota* (masseur). Although Tongan healers will accept gifts from time to time, they

typically do not expect payment for their services as such would render their curing practices void and they would place themselves at spiritual risk (Bloomfield, 2002). Healers are perceived as the *vaka* (vessel) for the healing power of God (McGrath, 1999).

As Bloomfield (2002) explains, knowledge of *faito'o fakatonga* for particular ailments and diseases was usually held in secret by particular families and healers, transferred from one generation to the next through the ritual of *fanofano'i* (ritual for transferring the ability to heal). The preparation, use and efficacy of particular *faito'o fakatonga*, by persons to whom the knowledge was not transferred through *fanofano'i,* is seen to be diminished or ineffective as knowledge of the spiritual healing component is absent. Moreover, while a sick person submits to whatever is prescribed by the healer, the healer themselves carry out further activities to make spiritual reparations, or may instruct the person who is ill, or their family to pursue certain courses of action. Without elaborating on Bloomfield's work and the numerous examples she provides, it is sufficient to point out that healers concerned with *faito'o fakatonga* do not restrict their wellness seeking strategies to the body, but go beyond to consider spiritual and social causes. For example, a child might present with a bone fracture after falling out of a tree. Questions will be asked of how the child came to be in the tree, who allowed the child to climb the tree, whether the tree was known to be occupied by a particular spirit, how the child treated with the tree, whether the child and his/her relatives adhered to respectful behaviour, and so on.

Faipele (Card playing healers)

Again, drawing from Bloomfield (2002) work, Western medical practitioners and Tongan traditional healers represent the two largest groups of practitioners that Tonga people may turn to for help. However, they may also seek out the services of a smaller group of healers called *kau faito'o faipele*. They are named for their practice of explaining misfortunes, divining cures or recommending curative strategies, through card reading. For example, *kau faito'o faipele* may direct a help seeker to a particular herbal remedy or healer, or suggest that certain strategies and relationships be explored. They also sought out to provide answers to more mundane questions, for example, to find objects lost. Not much is written

about *kau faito'o faipele* and while research by Whistler (1992) and Bloomfield (2002) seem to suggest that their contribution is on the wane, more research is need to justify this conclusion.

Fakalotu (Religion)

Prayer, confession, asking forgiveness, having faith in God, using blessed water or oil for spiritual cleansing, worship, are the foundations upon which all pathways to health are pursued by Tongan people (Bloomfield, 2002; McGrath, 1999; Toafa et al., 1999). If it is God's will, there is a cure. Toafa et al (1999, p.165) write:

> *There is the belief and trust in the healing power of God. There is the belief and trust in the healer acting as a vessel for this power. There is the belief and trust in the healer by the patient. There is the belief and trust by the healer that they will be cared for by their community. And there is the belief and trust that for every illness there is a cure for as long as faito'o remains.*

Indeed, the fundamental nature of healing within the Tongan worldview is trust. Trust in the healer. Trust in the faito'o. Trust in God (1999, p.166). This suggests that any wavering of trust could have dire results for the ill and implicates the intrusion of Western trained practitioners who are often cynical and undermining of Tongan healers, people and spiritual and religious systems of faith (Bloomfield, 2002; Toafa et al., 1999; Viliami Toafa et al., 2001).

While the practice of Western medicine has made significant advancements and more recently, seeks to be receptive and understanding of the pluralistic nature of healing and its embeddedness within culture and religious world views (McGrath, 1999; Selin et al., 2003) many Western medical practitioners have yet to take on this view, even though the peoples they treat with are keen to take up Western medical knowledge to complement or perhaps, to substitute for traditional healing. As McGrath (1999) emphasized, Tongan people are interested in achieving wellness and are very pragmatic in this regard. They are likely to be receptive to all available therapies, both traditional and biomedical, until one works. Seeking a cure is a very fluid process (McGrath, 1999).

In the next section, I explore that literature concerning the question: What happens to medications when they enter into the lives and homes of Tongan people in New Zealand?

Medications in New Zealand

New Zealand is a society dominated by biomedicine and biotechnologies that are highly accessible and widely used. The term medication, in a broad sense, is used here to cover the diversity of conventional and complementary forms present in our contemporary society including traditional medicines or *faito'o Tonga.* Medications take a variety of forms; through prescription, pharmacist-only, pharmacy-only, over the counter, and extending to alternative or complementary products such as homeopathic and 'natural remedies' and dietary supplements. Their use is complex and often problematic; many substances are wasted, used for other purposes or given to other people without prescription, medical advice or advice from traditional healers. Overall, in New Zealand, adherence to recommended medication regimes is only around 50% (Haynes, McKibbon, & Kanani, 1996; PHARMAC, 2006) varying according to factors such as type of illness, number of medicines taken, and socio-economic status.

As Van der Geest and Harden (2006, p.1) note "Things acquire meaning, when they enter into the life of people". They carry meanings and shape social relations and constitute identities, moralities, routines, relationships, care, healing and hope (Lefebvre & Nicholson-Smith, 2007; Sointu, 2006; Yanchar, Gantt, & Clay, 2005). These social and symbolic aspects of medications need examination. Currently we know very little about the social practices and symbolic meanings of medications in everyday life, particularly when they are taken home.

The New Zealand Medical Council guidelines advise doctors to be "mindful of their patients' cultural beliefs, mores, and behaviours. Awareness of the traditional medicines patients may be taking alongside their prescribed treatment may play an important role in providing quality care and avoiding adverse interactions" (Poynton, Dowell, Dew, & Egan, 2006, p8; Toafa et al., 1999; Viliami Toafa et al., 2001). When medications are taken home, or prepared in the home, they enter into the social space of the home, into social relationships and

take on social meanings (Toafa et al., 1999). They also enter into the cultural space and system of the home (Hodgetts et al., under review). As reviewed earlier in this chapter, Tongan people have ways of understanding and addressing ill health that vary from that proposed by the Western medical model. Their healing system tends to be holistic, with an associated knowledge base, experts and healing substances (Bloomfield, 2002). Tongan people know who to seek help from, know their cultural models of health care, and continue to source, prepare, store and consume traditional substances for positive health outcomes (Toafa, Moata ane, & Guthrie, 2001).

Tongan people have social relationships that can be understood through significant values important in those cultures. Moreover, acting contrary to important social values and disturbing social relationships is a source of unwellness. Medications, biomedical and traditional, enter into households and such social relationships of *faka'apa'apa* (respect), *talangofua* (obedience), *fakaongoongo* (waiting and listening for instructions), and *'ofa* (love) shown through reciprocal sharing and helping (Lee, 1996). The symbolic meaning of medications exceeds their materiality as things in a physical world. They are invested with history and tradition, and often crystallize connections with people, places, events (Hodgetts et al., under review), the spiritual and with God. The places people dwell in and the things they collect become part of them, and come to form aspects of whom they are, want to be, and show to others (Noble, 2004).

In this study, I seek to explore: how four related Tongan households understand, treat and use medications; and the 'flow' of medications into, around and out of these households.

CHAPTER TWO: METHODOLOGY

Introduction

Medication has become a part of everyday life in Tongan families. However, little is known in the health research literature regarding Tongan families' use of medications. The current thesis aims to explore: how four related Tongan households understand, treat and use medications; and the 'flow' of medications into, around and out of these households. Chapter Two details the mixed method approach taken to achieve these aims.

Ethics

An application for research ethical approval was submitted to and approved by the University of Waikato's Psychology Research and Ethics Committee.

Approach - Broad Ethnography

It is crucial to apply a research strategy and methodology that is able to capture the world of medications for the participating Tongan households. A broad ethnographic approach which is multi-layered, multi-method and multi-centred has been selected as the most effective way to capture such data.

> *"... the richness, diversity and complexity of human cultural life from the perspective of 'insiders' is likely to be reflected in good ethnographic research, and this can generate invaluable insights and contributions to knowledge that would not emerge using any other research method... [It] is particularly valuable in situations in which the phenomenon under investigation is novel, different or unknown..." (Griffin & Benrgy-Howell, 2008, p. 24).*

The utilisation of a broad ethnographic approach allows the participants, in the comfort of their natural settings, the freedom and flexibility to share stories and material (Miller, 1997) which they feel is relevant to medications. These relevant stories and material provide an open window where the density

of medications can be seen and understood, past its physicality, to the role it plays in people's lives in their homes.

Why Focus on Households?

Gieryn (2000) suggests that everything that is researched is emplaced, that is purposefully placed in a specific location. The household, or more specifically the home, is a 'place' (Easthope, 2004) where medications hold meaning in relation to how it is understood, treated and used (Sorensen, Stokes, David, Woodward, & Roberts, 2005). A home transcends its simple physicality (Mallett, 2004) to being a place where various meanings and histories are created for people (Dupuis & Thorns, 1996). Therefore the home becomes an imperative social and psychological space (Easthope, 2004; Saunders & Williams, 1988) where the physical and social meanings of the house intertwine, providing a social organisation particular to that home (Saunders & Williams, 1988). Thus, the household provides a place for investigation where social organisations of every day practices, including the use of medications are present.

Of late, Western countries' health care reforms have moved away from delivering health from institutions, to informal places like the home (Dyck, Kontos, Angus, & McKeever, 2005; Williams, 2002), giving meaning to homes as a therapeutic space (Gesler, 1992; Gesler & Kearns, 2002; Williams, 1998) of care (Gleeson & Kearns, 2001). Similarly, Sahlberg-Blom, Ternstedt and Johansson (1998) argue that home is a place of cure where healing and recovery takes place. Hence, the home is a justified location to explore medications.

Medications are material objects that are used and placed in the home with meaning to that particular household (Miller, 1998). To explore these medications and its related items (first aid kits, contents of medicine cupboards) in the home, reveal practices and meanings (Sorensen et al., 2006) that may range from usage, to social relationships which may seem mundane or taken for granted (Dyck et al., 2005; Noble, 2004). However, it is important to be aware that homes do not have a fixed boundary, rather the practices and meanings within the home stretch beyond that (Massey, 1992), including the flow of medication into, around, and out of the home. Therefore, the home, central to the use and flow of medications, is a

fruitful place to explore the understanding and use of medications.

Participants

The participants for this research come from four Tongan families living in the Auckland area. To maintain the privacy and confidentiality of these families, they each household and their individual members were given pseudonyms. The families are referred to in the research as the Nonu family, Mohokoi family, Heilala family, and the Pua Tonga family. Detailed information regarding the participants is included in the next chapter where each family is introduced and presented in the context of its own household. There were sixteen participants in total; six Tongan males, nine Tongan females and one Samoan female.

Recruitment Criteria

There were two main criteria for selecting participating households. Firstly, the majority of household members had to be of Tongan descent. This was a self-identification process. Secondly, the research attempted to explore Tongan households that had a functioning relationship with each of the other three households. The notion of a functioning relationship extended beyond just blood ties, and included knowing how medications flowed within and between the households.

Recruitment

Households in this study were recruited through my personal family networks. This had benefits in terms of being able to easily identify four households whom were not only related, but also had functioning relationships between them. Furthermore, because the research involved participants' home and families which are very personal, a high degree of trust with the researcher was essential. My family networks ensured the trusting relationship between the researcher and the researched was established prior to the research commencing. With this trust came a responsibility and obligation on my behalf to protect the participants from any negative impact or consequences of, not only the research process, but the research findings.

At this point it is important to note that I am an extended family member of the four related Tongan households. This proved advantageous in terms of

connectedness and creating time to meet and discuss the research. I was able to use family functions and family visits to highlight my research and recruit participants. This relationship network meant that I was able to conduct the household discussions and individual interviews in both the Tongan and English languages.

I was aware that the word 'medication' or the notion of 'medications' has sophisticated connotations attached to it, primarily because of its relationship to Western trained 'doctors' and Western medical jargon which can conflict with traditional Tongan notions or practices around medicines and healing. Because of this, I began my recruitment process by approaching individuals about the study, as opposed to approaching the family as a collective. This targeted approach allowed me to fully explain the study and process of data collection to each member of the household. Furthermore, it provided an intimate and individual space for participants to ask questions and gain clarity about the study. More importantly from my perspective, I wanted to eliminate any difficulty or fear about the perceived complexity of this research so that when data collection commenced, participants felt confident in sharing their views and perspectives.

Methods

The research process included four phases:

Phase 1) Pre-data Collection, which introduced the Tongan households to the study and explained the research aims and objectives.

Phase 2) Initial Household Discussion which involved a general discussion about medications, their meanings and their uses. This phase also required a map of the house be drawn, locating on it the places where medications were stored or kept.

Phase3) Tasks and Individual interviews which required household members to take part in photo elicitation and medication use diaries.

Phase 4) Exit Interview in which participants were provided with an opportunity to reflect on the research experience and add further comments as appropriate.

Table 1 outlines the three phases for each household. This is followed by a detailed explanation of each phase.

Table 1: Overview of Research Phases

Households	Phase 1: Pre-data collection	Phase 2: Initial Household Discussion	Phase 3: Diaries, Photo Elicitation, and Individual Interviews	Phase 4: Exit Interview
Nonu	Introduced participants to the research project and prepared them for Phase 2.	Household Mapping and Household Discussion	(i) Medication Use Diary (ii) General Medications Diary (iii) Photo Elicitation (iv) Individual Interviews	Exit Interview
Mohokoi	Introduction to research and preparation for Phase 2	Household Mapping and Household Discussion	(i) Medication Use Diary (ii) General Medications Diary (iii) Photo Elicitation (iv) Individual Interviews	Exit Interview
Heilala	Introduction to research and preparation for Phase 2	Household Mapping and Household Discussion	(i) Medication Use Diary (ii) General Medications Diary (iii) Photo Elicitation (iv) Individual Interviews	Exit Interview
Pua Tonga	Introduction to research and preparation for Phase 2	Household Mapping and Household Discussion	(i) Medication Use Diary (ii) General Medications Diary (iii) Photo Elicitation (iv) Individual Interviews	Exit Interview

It should be noted that at the end of each encounter with a participant or household, whether it was a meeting, interview or informal chat, personal notes reflecting on that encounter were made. My reflections were based on the nature of the encounter, whether it flowed well, if there were difficulties, emerging themes, issues that needed rectifying for future contact and/ or any unique aspects about the households.

Phase 1: Pre-data collection

Phase One was conducted for two reasons, these being to introduce and inform participants in detail about the research, and to determine a time for the initial household discussion in preparation for Phase Two. This pre-data collection phase was crucial as it informed participants of the research in a time and space comfortable for them. It also reduced anxieties participants may have had with participating in a university based research project. Until recently, these families had limited contact with a 'university'. Therefore, having the current research attached to an 'academic' institution was quite intimidating at first. Failing to recognise this could have lead to the silencing of the participants for fear they might be misunderstood or be 'wrong'.

In addition, some participants were not comfortable or confident speaking in English, so many informal conversations took place in the Tongan language. I discussed the information sheets for each of the tasks included in the data collection, both in English and Tongan where necessary. I took my time with this process as there were a variety of tasks and paper work (information sheets, consent forms) necessary to prepare for Phase Two. I also wanted to reinforce that this research was about what the families understood about medications. Also reinforced was that it was not just about Western health paradigms and Western medications but could also include *faito'o fakatonga*, alternatives and supplements.

During Phase One, a time to meet with each household for Phase Two (Initial Household Discussion) was determined, with this proving difficult at times due to the nature of household lives, study commitments and shift work hours. This challenge was borne out in the rescheduling of interviews on more than one

occasion. However, my close relationship with the households meant participants felt comfortable about rescheduling if necessary.

Phase 2: Initial Household Discussion

Phase Two consisted of a meeting with household participants for two main purposes, these being, to complete the Household Mapping exercise and to complete the Household Discussion tasks. Previous research suggests that household discussions and interviews around practices and artefacts using a system of mapping and photographs have been found to work efficiently (Chamberlain, 2007).

Participants were reminded of the research aims and objectives and asked to complete consent forms prior to the household discussion. I also took the opportunity to discuss the necessity for an Exit Interview and when this might occur. In addition, Phase Two was an opportunity to reconnect with the participants, and gather the information required to provide an enumeration of the household.

Initial Household Discussion materials

Part of Phase Two included providing, or having on hand, materials and tools to help complete the Household Discussion and Household Mapping exercise. They included:

(i) Medications in Everyday Life Information sheet (Appendix A);

(ii) Medications in Everyday Life Consent Form (Appendix B);

(iii) Interview Schedule for the household discussion (Appendix C). Note that this interview schedule did not have fixed questions, but was rather a tool to help guide and prompt the researcher during the household discussion (Breakwell, Hammond, & Fife-Schaw, 2003).

(iv) Three recording devices; a MP3 player and two Dictaphones, including extra batteries for recording devices;

(v) A digital camera to take photographs of medication locations in the households;

(vi) A cell phone with a camera (as a backup for the digital camera); and

(vii) Drawing materials to aid the mapping task (at least five blank sheets of A4 paper, coloured felts and a ruler).

Household Mapping

When I arrived at the home of the participants I asked for two participants to complete the Household Mapping task (for an example of the Household Mapping Exercise, see Appendix D). One participant was asked to draw a simple map of the household, labelling all the rooms. The other participant was asked to photograph all medications (which the participants had consented to photograph) in their respective locations in the household. I also made it clear to the photographer that capturing the exact or normal location of the medication was very important to the research. The participant doing the photography also checked with the household that all medications were accounted for in the photographic catalogue.

When the drawing of the household map and the photographs were completed, the participant responsible for taking the photographs was asked to mark with an 'X' on the household map, the locations where the photographs were taken and to number the 'X's, for example number 1 recorded next to the 'X' representing the location where photograph one was taken, and the number 2 next to the 'X' where photograph two was taken, and so on. This coding helped locate photographed items (medications) on the household map. The Household Mapping was also used as a tool for the Household Discussion as participants were able to refer to the photographs and map to explain why medications were placed in those household locations.

Information sheets and consent forms

The filling out, signing and completion of consent forms did not occur until just prior to the household discussion, that is, after the household mapping exercise and photographing of medications occurred. This allowed for an easier transition for participants from the Household Mapping to the Initial Household Discussion as those participants not involved in either exercise would have had to wait for an unknown length of time, while the Household Mapping and photographing tasks were completed. This practical approach reduced the time some participants had to wait and the potential for some to become disinterested.

Once the Household Mapping task was completed and participants were seated and comfortable, two or more recording devices were turned on. The participants were thanked for their active participation and patience prior to the Initial Household Discussion. I revisited the information sheets highlighting the goal of the research, the tasks involved, rights as participants, rights to withdraw, and the researcher's contact details. I elaborated on each point and gave the participants an opportunity to ask further questions. The participants were taken through the consent process and forms, which they signed.

Household Discussion

The term 'household discussion' is used here to describe a session where the household participants and I partook in a conversation, guided by the household interview schedule, about medications. Household Discussions for each of the four households began by referring to the household map and examining each photo taken of a medication's location. Conversation around the location of medications identified what and how medications were both used and stored within the household. Furthermore, the 'flow' of each medication through the household was determined, that is, how it arrived, where and why it was located in that specific location, how it was consumed and whether the medication moved beyond the household.

Following the discussion about the photos and the map, I asked each household 'What does the word medications mean to you'? This question allowed for further conversation about the topic of interest. During the discussion about medications, further questions or prompts were added as a result of issues arising from the Household Discussion. These discussions for each household took on average 60 minutes.

Phase 3: Diaries, Photo Elicitation and Individual Interviews

This phase of the data collection process required one person from the household to take *photographs* of anything about medications; one other person in the household to keep a *Medication Use Diary;* and another member of the household to keep a *General Medication Diary*. It was anticipated that by completing these three tasks, a rich set of data regarding the household's world of medications could be collected.

The materials required for this phase of the data collection process included:

(i) Copies of the Medication Use Diary Information Sheet (Appendix E);

(ii) General Medications Diary Information Sheet (Appendix F);

(iii) Photo Elicitation Information Sheet (Appendix G);

(iv) New diaries for each participant conducting the Medication Use and General Medications diary exercise; and

(v) A disposal camera for the participant conducting the Photo Elicitation task.

The participants were taken through the Information Sheet and the requirements of each task were explained. I also reminded them of their rights as participants to withdraw without penalty. A copy of the Information Sheet was left with each participant. At this point, participants were given an opportunity to ask any questions or make comment as appropriate. Participants in the four households agreed to participate in the three required tasks and were subsequently supplied with the diaries. Despite disposable cameras being offered, all participants preferred to use the digital camera from their personal cell phones.

At this point, participants were given a week to complete the diaries and two weeks to complete the photo exercise. It was also explained that upon completion of diaries and photos assignments, an individual interview with them would take place discussing the diaries and photos. They were also reminded that prior to those individual interviews more consent forms, namely the Medication Use Diary Consent Form (Appendix H), General Medications Diary Consent Form (Appendix I) and the Photograph Elicitation Consent Form (Appendix J) were to be signed as part of the research process. The interview schedule used for the individual interviews of Phase Three was the same as that for the Initial Household Discussions (see Appendix C).

In the Mohokoi and Pua Tonga household three different participants each completed a task. However, the Nonu household only had two participants in total. Therefore one participant undertook one task, while the other undertook two of the tasks. Although the Heilala household had a total of four participants, only

two elected to complete the assigned tasks, with one participant volunteering to conduct two tasks, while another participant conducted one task.

The importance of keeping diaries

Diary techniques enable researchers to explore the health behaviours of individuals, their ongoing health routines, and aspects of their daily lives (Johnson & Bytheway, 2001) related to health, and how these proceed over time (Milligan, Bingley, & Gatrell, 2005). They provide a record that demonstrates an individuals understanding of their present and/or past health experiences (Elliot, 1997). Milligan et. al, (2005) further argue that even after long periods of time, diaries can still be useful in

Medication Use Diary: This task required a participant who regularly used medications to complete a 'medications use' diary for one week, exploring health issues. Participants were asked to (i) record their daily use of all types of medication; and (ii) at the end of each day make a comment on a medication experience that day. Although each participant used their new diary, they were also given the option of audio or video recording their notes or using a word file on their computer. At the end of the week, the diaries were used as a focus for individual interviews to discuss their entries, thoughts and reflections.

General Medications Diary: This task required a participant to complete a 'general medications' diary for one week. Participants were instructed to (i) record daily their encounters with medication, that is, anytime medications came to their attention; and (ii) make a detailed entry in relation to one of their medication encounters for that day. Encounters with medications could include medications portrayed inside or outside of the home, in the workplace, and through media; basically anywhere or anything that lead the participant to think of medications. Similar to the medication use diary, the participant could choose a preferred way of recording their entries. Again, all the participants involved in this task utilised the new diaries provided. At the end of the week the diaries were used as a focus for their individual interviews reflecting on their entries.

Photo elicitation

The photo elicitation task required participants to take photographs of their 'world of medications'. This was explained to participants as anything that they thought related to how they understood medications. In the field of social sciences, the use of photo elicitation or what some researchers refer to as 'photo-production' (Mitchell, DeLange, Moletsane, Stuart, & Buthelezi, 2005; Nowell, Berkowitz, Deacon, & Foster-Fishman, 2006; Pink, 2007), as a method, is becoming common. Wang, Yi, Tao and Carovano (1998) and Carlson, Engebreston and Chamberlain (2006) suggest that photo elicitation is an effective research method for carrying out participatory research. Photo elicitation helps to clarify data (Klitzing, 2004), and capture and visualise what may seem unclear (Mitchell et al., 2005), such as mundane events which occur in daily lives (Radley & Taylor, 2003) that may be difficult to articulate (Klitzing, 2004). Photo elicitation is not only about taking photographs of people, objects or places, rather it transcends to providing information, feelings, memories, and uniqueness particular to the photograph's representation (Harper, 2002). Furthermore, this process captures and links people to their contexts (Harper, 2002) demonstrating meaning to people and things (Snell & Hodgetts, 2007). The participants were given two weeks to complete this task and were informed that the photos would then be used as a focus in their individual interview.

Contact with participants

During the diary and photo elicitation tasks, I maintained daily contact with the participants via telephone calls, texting and messages passed on through other members in their family. This was to ensure I could answer questions they may have had and to remind participants of the need to complete their daily diary entries. Once their tasks were close to completion, I arranged a time with participants for individual interviews.

Individual Interviews

The following materials were utilised in the individual interviews:

(i) Medication Use Diary Information Sheet (Appendix E)

(ii) General Medications Diary Information Sheet (Appendix F)

(iii) Photo Elicitation Information Sheet (Appendix G)

(iv) Three recording devices (a MP3 player and two dictaphones)

(v) Back up batteries for recording devices

As explained in earlier sections of the method, the information sheets contained the goals and objectives of the research, the requirements of the task, their right as participants to withdraw at anytime without penalty, and the researcher's contact details, as well as those of my University supervisors. The consent forms were also explained prior to individual interviews, before signing.

All individual interviews were conducted at the home of the participants in a room where it was my participant and I. Each interview lasted approximately forty five minutes.

Diary Interviews: Participants were asked to read out each diary entry. As the participant read out each entry, I asked questions about areas that required clarification and any evolving themes. The participant was then asked to comment further on any aspects of their entries which they found significant.

Photo elicitation interviews: All the photographs were uploaded to a computer and viewed on the computer monitor. The participant reflected on each photograph and how it represented their world of medications. Throughout the interview I asked questions about areas that required clarification and any evolving themes.

Phase Four: Exit Interview

At the end of the entire research, all the households were invited to participate in an Exit Interview. The Exit Interview allowed the household to reflect on the data collection process and add further comments about medications or their research experience. This Exit Interview was intended as an informal discussion that did not require a structured interview schedule. All participants in their respective households did not consider an Exit Interview was necessary and declined the invitation.

Data Analysis

Various approaches to qualitative research data analysis have been discussed and debated by writers such as Crabtree and Miller (1992), Denzin and Lincoln (1994) , Murphy et al (1998), Patton (1990), Robson (1993) and Silverman (1977). Welsh (2002) discusses three approaches that might be broadly labeled 'literal', 'interpretive', and 'reflexive'. A literal approach focuses on the exact use of particular language or grammatical structure; an interpretive approach focuses on sense making and meaning; and a reflexive approach focuses on the researcher's contribution to the data creation and analysis process. The approach I used to analyse data in this research is a thematic analysis, combining elements of both interpretive and reflexive approaches.

A thematic analysis focuses on recognizing emerging themes and patterns from a qualitative data set. Most qualitative research tends to focus on understanding and meaning making, rather than hypothesizing or controlling the variables involved in the research (Nikora, 2007). It tends to be inductive in that "the researcher attempts to make sense of the situation under investigation without imposing pre-existing expectations on the phenomenon or setting under study" (Patton, 1990, p.44). As an analysis procedure, it involves a number of imperative stages, such as transforming, storing, coding, collating, determining, and organizing data. These stages are not necessarily engaged in sequentially, because at times I will move between them, revisiting earlier stages to remind myself and better understand what was performed at any particular stage.

Transforming

Household Discussions and Individual Interviews were conducted both in Tongan and English, and were audio recorded. I transcribed the Tongan recordings first, and then translated the Tongan transcripts into English. The English recordings were transcribed professionally. Although transcribing is a labour intensive process, it provided me with the opportunity to familiarise myself with the data, as well as to further reflect on ideas and themes which had started to emerge.

Storing

Where possible, data was loaded to my computer and stored in files specific to each household. Confidentiality was maintained by ensuring that any of the

collated notes, data and information that could be linked to individual participants was managed only by myself and my supervisors. An additional measure was to ensure all data was identified with pseudonyms. Data was held in a safe and secure location, including being stored safely and securely on the University of Waikato server.

Coding

The coding consisted of a five part process. In the first part, I worked through one transcript at a time identifying and coding all the main ideas that were discussed. In the second part, I went through each transcript again. For each point identified in the first part, a broad theme was identified. For example, discussions around medications being stored were categorized under the broad theme of 'storage'. The third part involved going through each transcript again and checking that all coding was accurate and themes had been correctly identified. As a result of this process, several coding errors were found and corrected. The process of coding was intensive, therefore I had to stand back from time to time to critique my work and make sure that themes were not overlooked or inadvertently manipulated.

Collating

Once themes in the transcripts were identified, I then moved on to the collation stage where I dealt with the data from one household at a time. Data from each household comprised multiple transcripts, reflecting the different data collection methods. A word document was created for each household and data relevant to each theme (as has been previously described above) extracted across the transcripts. Therefore, at the end of the collating stage for each household, there were four documents, each representing one household with data organized according to key themes.

Once the collating stage was completed, I found that I had ended up with a large number of themes. In order to create a more manageable and coherent data set, I went through each household and attempted to refine the key themes further. For example, the theme 'storage' became a sub-theme of the broader theme of *Faito'o fakatonga*' and 'Western medications'. One of the themes 'flow' had a number of sub-themes and a large amount of data, therefore I decided to present the 'flow' data separately, in addition to the four households.

Determining

The thematic analysis showed that the majority of themes were evident across all households. From these common themes, I chose the four themes which were the most closely linked to the research aims and had the richest dataset. I then determined which household best represented each theme. That specific theme was then used to tell the story of that household in relation to how they understood, used and treated medications. Where useful to illustrate a particular point, photographs are also included in household stories.

Organising

As described above, each household is focused around a main theme. Under the main theme, I arranged sub-themes in a logical order. The logical order was constructed in a way that through the lense of the main theme, a story was told regarding how that household understood, treated and used medications. This process was rather difficult as sub-themes had to be constantly moved around and framed in such a way that made the story flow logically. Another difficulty in this stage was while I was making sure that the data flowed well, I had to be careful not to alter the meaning of the data.

CHAPTER THREE: FINDINGS

Overview of Findings

The current thesis aims to: explore how four related Tongan households understand, treat and use medications; as well as to explore the 'flow' of medications into, around and out of these households. As described in the previous chapter, data from each household comprised multiple transcripts, reflecting the mixed method of data collection. A thematic analysis was undertaken on each transcript. From these common themes, I chose the four themes that most closely linked with the research aims. I then determined which household best represented each theme, with that specific theme then used to tell the story of that household in relation to how they understood, used and treated medications. The four key themes presented in relation to each household are:

1. Nonu Household: Western and Traditional Medication Use
2. Mohokoi Household: Faito'o fakatonga
3. Heilala Household: Use of Western Medication
4. Pua Tonga Household: Prayer, Faith and Medications

Chapter Three concludes with the presentation of findings as they relate to the flow of medications into, around and out of the households. The five key themes presented in relation to the flow of medications are:

(i) Flow of medication
(ii) Flow of trust
(iii) Flow of care
(iv) Flow of knowledge
(v) Lifestyle flow

Nonu Household: Western & Traditional Medication Use

This section presents the findings from the Nonu household. Firstly each family member is introduced, and a summary provided of their living situation, health status and relationship to the other three households. Following this, the findings are presented according to key themes which emerged from the household discussion and individual interviews. The Nonu household explores the primary theme of Western and traditional medication use. The sub-themes that emerged

from the Nonu household in relation to Western and traditional medication use were:

(i) Preference for Western Medications
(ii) Interaction between Traditional and Western
(iii) Recognition of Traditional Medications

The Nonu Household

The Nonu family home is located in a West Auckland suburb which, according to Statistics New Zealand's Social Deprivation Index (2006), has a rating of 3.[1] Their home is the bottom storey of a three storey home and consists of two bedrooms, a bathroom, a laundry, a lounge and a kitchen. The top two storeys are occupied by the Pua Tonga family.

Peni is a 29 year old Tongan male who is a Detective Constable in the New Zealand Police, and Tori is a 35 year old Samoan female who is a Constable in the New Zealand Police. Both Peni and Tori are New Zealand born. They have been married for just under two years and have a one year old baby girl, Vienna.

Peni is generally healthy and is not on any regular medications. Tori is also generally healthy, with the exception of having a mild form of eczema, for which she frequently applies a prescribed Locoid cream (cream used to treat skin inflammation). She applies this cream approximately once or twice a week, but in summer uses it approximately three or four times a week as the heat tends to escalate the irritation of her skin. Vienna is also healthy, but has recently shown signs of having eczema too.

Other medications found in the household which were used on rare occasions of minor ailments such as headaches included Ibuprofen or 'Panadol'[2] (pain killers). Medications for treating the symptoms of cold and flu (nasal drops, cough mixture) were also found, likely reflecting the season in which data collection was conducted. In Vienna's case, Peni and Tori would administer 'Pamol' (medicine

[1] The Social Deprivation Index scale ranges from 1 to 10; with 1 representing the areas with the least deprivation, and 10 the areas with the most deprivation (Statistics New Zealand, 2006).
[2] The GlaxoSmithKline trade name for the pharmaceutical paracetamol (INN) or acetaminophen which is an over the counter analgesic (pain reliever) and antipyretic (fever reducer). Includes 'Pamol' which is appropriate for babies and young children.

for babies to reduce fever) when she ran a fever and during the winter days she is rubbed down with *lolo tonga* (Tongan coconut oil) mixed in with 'Vicks'[3] to keep her warm and prevent or treat the symptoms of a cold.

As shown in Figure 2 below, the Nonu household is closely related to the other three households. Peni is the son of 'Olivia from Pua Tonga family, and is a nephew to Tu'ipulotu and 'Ana from the Heilala family, and to Lepeka from the Mohokoi family.

The red arrow shows that Katalina is part of the Pua Tonga household, but she has been separated in the diagram to demonstrate a clearer understanding of the kin ties between the four households.

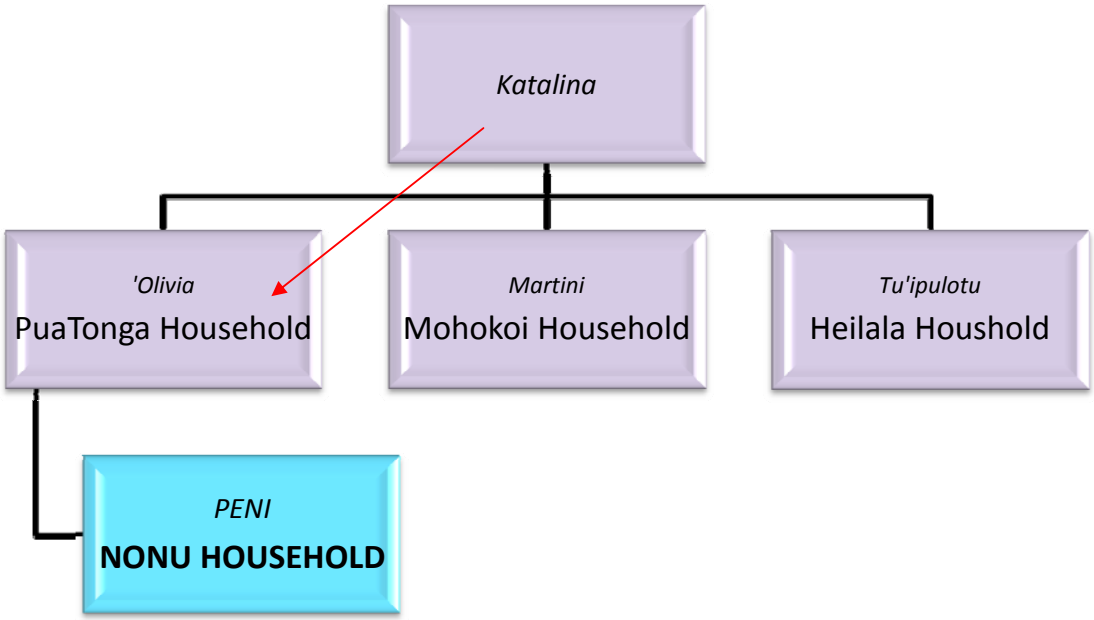

Figure 2. Relationship between Nonu household and other households.

Preference for Western Medications

The Nonu family displayed a preference for Western health systems and medications. It is interesting to note that while the Nonu family have this preference, it is influenced by a number of factors, such as accessibility and trust.

[3] Range of over the counter products designed to relieve symptoms associated with the common cold and to relieve minor aches and pains associated with aching muscles.

Accessibility

The Nonu household identified accessibility as a contributing factor when deciding which health system and medications to utilise. They reported Western trained medical doctors as being more accessible, primarily in relation to location, as compared with traditional Tongan healers. This is illustrated in the following extract.

> *Peni: I'd go to the doctor ... I think it just depends on your circumstances. It's readily available and it's, like, down the road. You know exactly where to go.*
> *Tori: Yeah....I reckon it's whoever's available. If there was one [traditional healer] that was right there, maybe I would go*
> *Interviewer (I): So, it's accessibility?*
> *Tori: Yeah.*
> *I: Doctors are easier to access?*
> *Tori: Yeah, I wouldn't go all the way from West Auckland to South Auckland, to Otara, to a special place because I know that's where he[traditional healer] lives... Fakahela" (too much hassle)*

Using traditional medications would, for the Nonu household, in the first instance require locating a traditional healer through their social networks. It is likely that accessing a traditional healer would mean driving approximately 40 minutes from their home in West Auckland, as exemplified below.

> *Tori: Oh I'll give you an example, when I had a real bad infection sort of thing and my mother was telling me, "Go see this lady," because my aunty had told her that she's really good for this sort of thing. But it meant me going to some house out south, meeting up with another aunty who knew where she lived and it felt like a headache, and when you're in pain and stuff you just want to go to the doctor.*

Trust

The concept of trust and a preference for Western health systems and medications was a central theme to emerge out of the Nonu household. Of importance were the findings which emerged in relation to the components which created this trust, such as a sense of familiarity and legitimacy.

Familiarity

According to the Nonu household, the repeated use of a reliable and seemingly effective health system (i.e. the Western health system) created a sense of familiarity and trust in that system. This in turn nurtured and motivated the continued use of medication sourced from within that system. The relationship between familiarity and trust is illustrated in the following extract, where the

Nonu household identify the consequence of being familiar with using medical doctors, a pattern which has been embedded from an early age.

I: *So, if you were to get sick and wanted treatment, would your first reaction be to book an appointment at the doctors or would you go to a family member to ask about getting traditional medication?*
Peni: *I'd go to the doctor.*
Tori: *I was brought up with the Western way of dealing with being sick so I'm used to going to a doctor...*
Peni: *You stick to what you know.*

The Nonu household's familiarity and trust in the Western health system and its medication was also due in part to their unfamiliarity with traditional Tongan medications. Illustrating this, Peni and Tori identified situations in which fear of the unknown prevented their use of traditional medications. This is described in the following extract where Tori experienced a certain illness for the first time. Although Tori places trust in her mother with regards to her advice, it is Tori's unfamiliarity with traditional medications which lead her to overlook this advice.

Tori: *Yet I had probably seen about three different doctors for this and, you know, it wasn't healed straight away and each time my Mum would be saying, "I told you, if you just went the first time blah blah.". I still would be saying, "No, no, I'll go to this doctor first, you know." So, I could see where she was coming from but...because I actually haven't gone anywhere here in New Zealand for anything like that, like, traditional medicine. I have for, like, you know, like massage or something for a sprained ankle or something, but I haven't for any sort of illness. But it was getting to the point where I was thinking maybe it might work because the Western, you know, the doctors weren't giving me the right stuff. But I still wouldn't go! I'd go, "Ok, try a different doctor." Until I got some help. But, yeah, even under extreme pain I still wouldn't go the traditional way. I'd just go to doctor after doctor after doctor. So, yeah, I think it's kind of weird. I think there was a bit of fear there.*
I: *Fear of what?*
Tori: *The unknown. I didn't know what they were going to do.*

Legitimacy

The trust the Nonu household placed in Western health systems also partially stemmed from the perceived legitimacy of that system. For example, in the extract below Tori identifies that she places her trust in doctors because they are medically trained and have received medical qualifications.

Tori: *I think it's like, for me I trust the doctors; they have got degrees and stuff. Whereas to get traditional medicine from traditional healers, I'm a bit hesitant, I haven't had many dealings with getting remedies and stuff from them*

The nature of the ailment also impacted on the levels of trust placed in differing health systems. Again, related to perceptions of legitimacy, Peni identified that the medical technologies available in Western health systems impacted on the choices he made regarding the type of practitioner he would access.

Peni: *[For] joints and muscles and that I wouldn't mind going to the Tongan people [kau faito'o fakatonga]. But for internal stuff, I don't think they've got x-rays and stuff. The Western doctors can see right through you, they've got x-rays and stuff but they [kau faito'o fakatonga] can't feel your stomach and say, "Oh, I think you've got..."*

Tori: *Some can.*

Peni: *I don't believe that. I want to see a picture.*

I: *Oh, ok. So, a bit of medical technology plays into it and it all contributes to what choice you make?*

Tori: *Cause my husband won't walk away with an x-ray from a traditional [curer]*

Peni: *Yeah, I won't get an x-ray from them [kau faito'o fakatonga curer].*

Tori: *And won't get a print out of what is wrong.*

Lack of Recognition of Traditional Medications

Despite the technological advances of Western medicine and the advantages that provides, Peni still believes traditional Tongan healing practices can be useful.

Peni: *Like, when I dislocated my shoulder I kind of went down the Western way but then since had two operations on my shoulder ... I dislocated my elbow in Tonga and I had, "Faito'o fakatonga". My elbow [has] never had any problems after that.*

However this acknowledgement of traditional Tongan practices is tempered by the demands of the workplace.

I: *So, if any injuries happened again you would you go back to a doctor or would you go back to the Faito'o fakatonga?*

Peni: *No, I'll go to the Western...The Western one, you can get ACC (Accident Compensation Corporation)! ... [Kau faito'o fakatonga curers] won't cover ACC or give me a letter. Can you imagine going with a letter to work from a Tongan [kau faito'o fakatonga].*

I: *You wouldn't be getting a Medical Certificate?*

Tori: *Yeah.*

Peni: *That's what I'm talking about, yeah.*

Under the Holidays Act 2003, a standard requirement in most jobs in New Zealand is the presentation of a medical certificate when a person is absent from work due to sickness (Department of Labour, 2003). Only a medical practitioner registered in New Zealand with a current Annual Practising Certificate can

complete a medical certificate (Work and Income, 2010). Also accidents at work can be compensated through ACC with an accident report signed by a registered medical practitioner. The point made above by Peni indicates that the illness or ill health, whether for work purposes or to access funding such as ACC, can only be validated by a Western trained and registered medical practitioner. This is a key factor in determining the type of medical care accessed by the Nonu family.

The discussions with the Nonu family included commentary on the legitimacy of traditional medications and healers in a Western society. Tori advocates for the recognition of traditional healers, but admits this will be difficult.

Tori: *That's kind of wrong, though, aye? They [New Zealand] should [recognise Traditional curers].*
Peni: *No. They're [Traditional curers] not medically qualified.*
Tori: *It doesn't matter. They shouldn't have to be medically, I mean, that's a Westernised sort of thought that they have to be qualified. Like, the thousands of years they've been doing that sort of thing*
I: *So you think they should be recognised?*
Tori: *I reckon.*
Peni: *No... Everyone will be a doctor then.*
Tori: *Traditional healers are real onto it [effective]. But because we live in a Westernised society*
I: *It doesn't recognise it, aye?*
Tori: *It's not going to work, no.*

Interaction between Traditional and Western

Although the Nonu Household preferred Western health systems and Western medications, they were not blind to the limitations of its use and further acknowledge the role and effectiveness traditional medications and practices can have.

Tori: *Like, for my Mum and Dad and that [older Samoan people] they'll swear by certain things, you know, traditional medicines and that. Like, traditional massage and that, I reckon that can be really good because I have had firsthand experience, for example, when I was playing volleyball and I sort of went over on my ankle, I knew straight away that that type of injury because I've had before, that my ankle has gone. I knew it would be weeks to get better and stuff but then there's this guy from our church, he was there and he's known to be a traditional curer and he just sort of what we call "si'i" which is kind of like' jerk' it in a certain way. And then it was fine and I could play and I was quite freaked out, that it had healed so fast.*
I: *So, it healed on that day?*
Tori: *Yeah. So, I wasn't limping.*
I: *Like, a couple of minutes later?*
Tori: *Yeah, like, he did something to it and it fixed it straight away.*

I: *It had no pain? And you could walk on it?*

Tori: *Yeah, I could still walk with it and stuff. And I've heard and I've seen people in the same way of injuries way better than going to the physio [physiotherapist] and going to the doctor.*

It would seem that Tori in particular is torn between the effectiveness of traditional healing practices, and her preferred use of Western health systems and medications. This suggests that while the Nonu household may display a preference for Western medications, this is not to the total exclusion of traditional medications. Supporting this, the extract below identifies another situation where trust is placed in the efficacy of traditional medications, even if in some cases it does appear to be as a 'last resort'.

Tori: *Like, I had a cousin from Samoa come here because he had cancer in his leg and they were going to doctors and everything and then they got so desperate they were going traditional meds. When it's someone close to you and you're desperate you just do anything.*

Summary

Although the Nonu household demonstrate a preference for the use of Western medications, the findings show this preference has developed as a result of a multifaceted process which incorporates themes of accessibility, trust, familiarity and legitimacy. Medications needed to be easy to access, with familiarity with the Western health system creating a sense of the trust in the solutions that system is able to offer. That the members of the Nonu household did not have the same level of familiarity with traditional medications appears to encourage an even greater sense of trust in the Western health system and its outcomes. The Western health system is perceived to be valid and legitimate, primarily due to the processes of accreditation which must be followed in order to practice in this system, for example, being a trained and qualified medical practitioner. Although the Nonu household did show a preference for Western health systems, they also discussed situations where traditional and Western systems interacted, as well as where traditional medications showed greater efficacy than Western medications. This reinforces the notion that although there was a preference for Western medications in the Nonu household, the development of this preference was a complex process, influenced by a variety of factors. It also suggests that despite this preference, where circumstances allow, traditional medications still play an important role in the lives of the Nonu household.

Mohokoi Household: Faito'o fakatonga

This section presents the findings from the Mohokoi family. It begins with a brief background of the Mohokoi family, introducing each family member, a summary of their living situation, health status and relationship with the other three households. Following this, the findings are presented according to key themes which emerged from household discussion and individual interviews. The Mohokoi household explores the primary theme of *faito'o fakatonga.* The sub-themes that emerged from the Mohokoi household in relation to *faito'o fakatonga* were:

(i) Knowledge Base
(ii) Storage of *Faito'o fakatonga*
(iii) Flow of *Faito'o fakatonga*
(iv) Safety: Storage and Expiration of *Faito'o fakatonga*

The Mohokoi Household

The Mohokoi family home is located in a West Auckland suburb which, according to Statistics New Zealand's (2006) Social Deprivation Index has a rating of 8. The structure of the house is one storey, with four bedrooms, one bathroom, two lounges, and a sleep out. Ten people dwell in this household; four adults and six children.

All but one of the Mohokoi family were born in New Zealand. Lesieli was born in Tonga and migrated to New Zealand in the 1980's. Lesieli is a 47 year old Tongan mother with nine children. A full-time mother, Lesieli is also a seasonal field worker in the vineyards. Lesieli's children include: 'Otile a 22 year old Tongan female tertiary student; Sione a 21 year old Tongan male who works in warehousing full-time; Tiffany a 20 year old Tongan female who is a tertiary student; Lepeka, a 17 year old Tongan female; and Kelela, a 15 year old Tongan female. Lepeka and Kelela both attend the same High School. Lesieli's four other children include three daughters and a son, whose ages range from two to 12 years old. These four younger children did not participate in the research.

Lesieli is the primary caregiver for the Mohokoi family. She is separated from her husband, Matini. Matini is a 48 year old Tongan male who is self-employed and

lives in Tonga. He operates a Kava business and returns to Auckland regularly throughout the year to visit his children. Matini was in Tonga during this research and did not participate.

The Mohokoi family is generally a healthy household and rarely use medications. When they do use medications this tends to be when they have a cold or flu, at which time the adults will share 'Panadol', 'Vicks', 'Lemsip'[4] sachets and *Vai Kita*[5]. 'Otile has hay fever which escalates during spring season, at which time she will take medication for this. 'Otile more often than others in the household gets ulcers and therefore uses 'Bonjela'[6] or *Vai Angoango*. Other than that, if someone is sick, it is normally the younger children, who would be administered some form of Paracetamol to alleviate pain and reduce fever. If the fever or pain is believed to be caused by mouth ulcers from eating too many sugary foods, then they are administered *Kihikihi* or 'Bonjela'. The baby in the Mohokoi family is treated with zinc and castor oil ointment for infrequent nappy rash. During the winter, the younger children are rubbed down with *lolo tonga* (Tongan coconut oil), either alone or mixed in with 'Vicks' to keep them warm and prevent or treat them from a cold. The children are also treated with 'Derbac M'[7] if head lice are suspected.

The Mohokoi household contained two medications which were no longer used but had been in the home for many months. Lesieli had previously used 'Goji', an alternative remedy for generally keeping healthy, but has stopped using it some time ago and believes she will not use it again in the future. A Swedish bitter liquid medication bottle, designed to be of benefit to the digestive system was also found, however no one in the Mohokoi family reported using it or could recall how it entered into the home.

As shown in Figure 3, the Mohokoi family is closely related to the other three households. Lesieli, through her husband Martini, is a sister-in-law to both Tu'ipulotu from the Heilala family, and 'Olivia from the Pua Tonga family. Lesieli is also an aunty to Peni from the Nonu family.

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[4] Over the counter remedy used to treat the symptoms of cold and flu.
[5] Liquid medication, used generally by adults when feeling unwell; also used for strengthening
[6] Over the counter oral gel, aimed to relieve the pain of mouth ulcers and denture sores.
[7] Over the counter head lice treatment

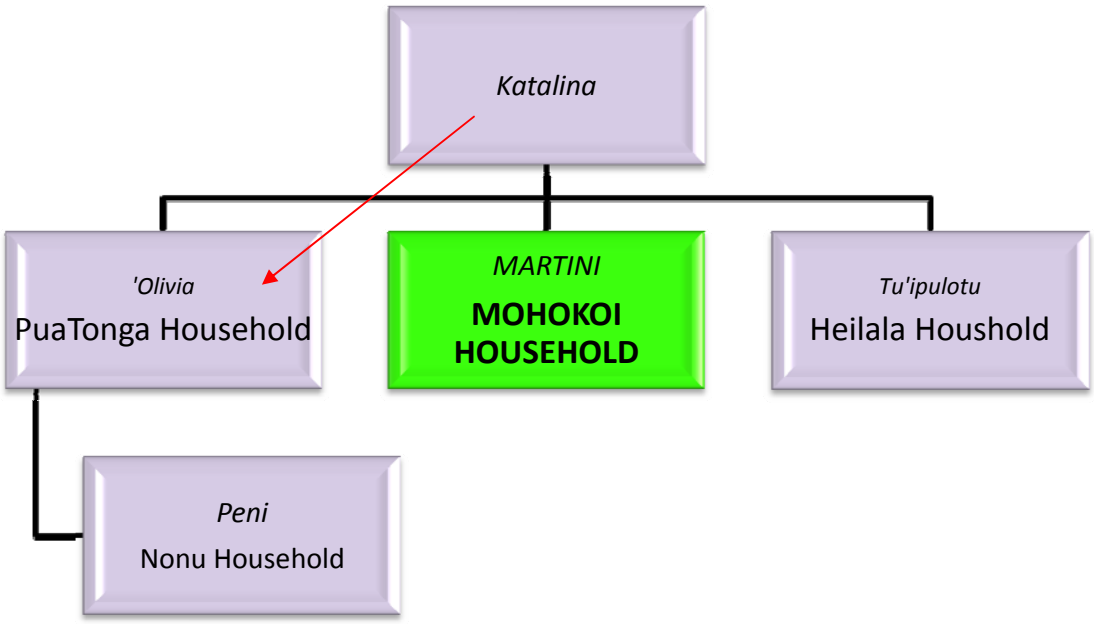

Figure 3. Relationship between Mohokoi household and other households.

Knowledge Base

The main *Faito'o fakatonga* used by the Mohokoi household is *Vai*. The Mohokoi household, with an exception of Sione, all displayed a vast knowledge of *Faito'o fakatonga* when they reported on their use of *Vai*, a general term for Tongan medication in liquid form, primarily discussing *Kihikihi, Vai Angoango,* and *Vai Kita.* For example, the Mohokoi household use *Kihikihi* as a treatment when their younger children are ill. The following extract illustrates the knowledge which is associated with *Kihikihi.*

I: *And what is it used for?*
Lesieli: *For 'Pala'(ulcers)*
'Otile: *Ulcers*
Lesieli: *Ulcers, yeah in the kid's mouth, Oh, it's for babies*
Kelela: *Pala*
'Otile: *Not just babies*
Lesieli: *Little kids*
I: *Not the older ones?*
'Otile: *I take it.*
Lesieli: *Well, sometimes older ones have ulcers in their mouth and we drink it.*

In addition to the knowledge Lesieli holds in relation to *Kihikihi,* she is also knowledgeable about the *Vai* itself, including methods of formulation. The following extract illustrates Lesieli's knowledge base and how this knowledge is

shared with her daughters when discussing *Vai Kihikihi.* It is interesting to notice how Lesieli and her daughters all contribute to identifying the use and elements of *Kihikihi,* although the daughters do not practice making *Kihikihi.*

Lesieli: Yeah, I make them Vai Kihikihi from outside
I: How is that?
Lesieli: It's a Kihikihi, it grows outside it's like grass. It's that thingy grass
Lesieli: Yeah like grass
Lepeka: The flower thing
Tiffany: With three petals. It looks like a clover
Lesieli: Yeah, it looks like a clover. But it's got purple flowers and it's called in Tongan "Kihikihi". Use the whole thing, but not the flowers just the leaves and the stem.

Similarly, when discussing *Vai Angoango,* the Mohokoi family exhibited rich knowledge. However, in this case it appeared that only 'Otile and Lesieli held knowledge specific to this type of *Vai*. In the following extract 'Otile and Lesieli demonstrate their knowledge by identifying the function of *Vai Angoango.* Although it may not be clear from the extract, when 'Otile spoke about *Angoango* she displayed confidence and familiarity with the use of *Vai Angoango.*

Lesieli: That's 'Angoango'
'Otile: That's for big peeps! (Adults)
I: What do you take Vai Angoango for?
'Otile: Because sometimes when I brush my teeth I sometimes hit the side of my gum and then the next day it starts up an ulcer and then one time I decided to just go try ... like, two days in a row and then the third day it just started to go away.
Lesieli: Well, they mix Vai Angoango with other stuff in Tonga for; I don't know how it's called in Palangi but its called Kahi in Tonga
I: Oh. What's Kahi? Like, I mean for what? Is Kahi like a
Lesieli: It's sore
I: When you're constipated?
Lesieli: Yeah, when you can't go to the toilet properly
'Otile: Oh, yeah, it is.

Vai Angoango and *Kihikihi* have been shown by the Mohokoi family to have similar functions. However the Mohokoi family use *Kihikihi* generally for their younger children, and the *Vai Angoango* for adults. Lesieli was also knowledgeable about *Vai Kita* and comfortable in using the *faito'o fakatonga (Vai Kita)* and Western medication simultaneously, as suggested below.

Tiffany: Vai Kita, it's like sort of made out of the Eucalyptus[8]

[8] Eucalyptus tree

Lesieli: *It smells like Vicks. You drink it if you feel sick and sometimes drink it with your Panadols or with your tablets [Western Medication] and makes you feel better faster.*

I: *Just for like a headache or feeling drowsy or something like, just not feeling 100%?*

Lesieli: *Yeah. Sometimes you use it for fever.*

What is of particular note is the extent of traditional Tongan healing knowledge held by the entire Mohokoi family. This reflects an active transmission of knowledge within the household and through the generations. Because of this, when the younger children are sick, the older children have the responsibility of administering their medication. The family is also confident in its use as they have seen Lesieli safely administer the *faito'o fakatonga* to the younger children, as well as having taken it themselves. For example, 'Otile uses *Kihikihi* for her ulcers even though it's primarily a medication for the children.

Otile: *Because I've seen my Mum, like, give it to the little kids and she would always say it's for ulcers and stuff, you know, from eating too much sweets and stuff. So, I thought to myself, "I should just try it," and then I did.*

Storage of Faito'o fakatonga

When discussing *faito'o fakatonga*, the Mohokoi household were the only ones to comment on how they stored their *Vai.* They identified two methods of storage, in the refrigerator and kitchen cupboard. The Mohokoi household refrigerate *Kihikihi* and *Vai Angoango*, (shown in Figure 4 below) and they leave out the *Vai Kita,* storing it anywhere in the household where it was last used such as the kitchen or lounge.

Figure 4. *Faito'o fakatonga* (two bottles on the right) stored in the refrigerator.

The Mohokoi Household also had a high kitchen cupboard which they dedicated to storing all their medication, except those that required refrigeration. However, in practice, the Mohokoi family tended to leave their *faito'o fakatonga* in the location where it was last used, without returning it to the cupboard. Figure 5 below captures this practice, showing the kitchen cupboard dedicated to storing the medication, with no *faito'o fakatonga* in sight.

Figure 5. Kitchen cupboard allocated for medication storage.

The older Mohokoi household members did not consider storing *faito'o fakatonga,* in areas accessible by young children was harmful as they believed the children could identify bottles which were *faito'o fakatonga* and that the

unpleasant taste was enough to deter the children from ingesting the *faito'o fakatonga*.

Flow of Faito'o fakatonga

The Mohokoi household also made reference to sharing as a way of obtaining their *faito'o fakatonga*. If *faito'o fakatonga* is not shared, then it is purchased, but this is less common. The Mohokoi Household obtain their *Vai Kita* and *Angoango* through sharing with family and friends in New Zealand, or it is sent from Tonga. *Kihikihi* tends to be self made. This movement of medicines reinforces the notion of sharing and relates to the flow of medication through other households. This is discussed in more depth in the 'Flows' section.

Safety: Storage and Expiration of *Faito'o fakatonga*

The Mohokoi family believe that the expiry of *faito'o fakatonga* occurs when its colour changes. Also, when the colour changes, the *faito'o fakatonga* is tasted and if the taste is different to how they believe it should taste, then they are certain the *Vai* has expired. Lesieli believes that *faito'o fakatonga* should last for around six months. Another way of checking its expiry is when the liquid gets, as they describe it "all yucky inside".

The Mohokoi family did not identify the expiration of *faito'o fakatonga* as an issue relating to any risk. When asked about the side effects of consuming expired *faito'o fakatonga,* they reported there were no harmful side effects. A possible reason that the Mohokoi household do not see the storage or expiry of *faito'o fakatonga* as a risk was because the *faito'o fakatonga* is made of natural substances. Being an organically based medicine provided family members with a sense of confidence and safety if *faito'o fakatonga* happened to be inadvertently consumed.

Summary

The Mohokoi family hold quite extensive knowledge about common *faito'o fakatonga,* with Lesieli in particular being knowledgeable in relation to methods of preparation and formulation. Lesieli's vast knowledge and practice of *faito'o fakatonga* is shared by some of her children. The older children assisting their mother with parenting roles allows for knowledge transmission around *faito'o*

fakatonga to occur. Although Lesieli's daughters do not assist in the preparation, they are able to identify relevant ingredients, absorbing knowledge through observing and listening to their mother. The sharing of traditional medicines with other related households is a common way of accessing *faito'o fakatonga.* The Mohokoi family believe that the *faito'o fakatonga* is safe, and even though a third of their family are young children, they feel the *faito'o fakatonga* is harmless should the children consume it accidently.

Heilala Household: Use of Western Medications

This section presents the findings from the Heilala household. Firstly each family member is introduced, and a summary provided of their living situation, health status and relationship to the other three households. Following this, the findings are presented according to key themes which emerged from the household discussion and individual interviews.

The Heilala household explores the primary theme of Western medication use. The sub-themes that emerged from the Heilala household in relation to its use of Western medication were:

(i) Storage: accessibility and visibility
(ii) Medication consumption
(iii) Economics
(iv) Western medications and *Faito'o fakatonga*
(v) Risk

The Heilala Household

The Heilala family home is located in a West Auckland suburb which, according to Statistics New Zealand's (2006) Social Deprivation Index has a rating of 4. The structure of their home is a one storey, three bedroom house. A married couple, Tu'ipulotu and 'Ana, and their daughters Melina and 'Asilika, are the occupants of this household.

Tu'ipulotu is a 46 year old Tongan-born male who is an accountant. 'Ana is a 43 year old Tongan-born female who is an early childhood caregiver. Melina is an 18 year old New Zealand-born Tongan female who is a full time tertiary student.

‘Asilika is an 11 year old New Zealand-born Tongan female who attends primary school. ‘Asilika did not participate in the research.

Tu’ipulotu wears prescription glasses and at the time of the interview was experiencing a temporary eye complication for which he was taking antibiotics tablets and eye drops three times a day. ‘Ana has had an operation to remove a blood clot in her head nearly twenty years ago. Since then she occasionally suffers from migraines for which she takes ‘Panadol’. Melina takes ‘Synflex’, over the counter pain killers to alleviate menstrual related pains. At the time of the research, Melina was also using ‘Vicks’ at night to prevent or alleviate the symptoms of a cold. ‘Asilika is generally healthy and is not on any medications. Traditional Tongan medications used were *Vai Tale* (cough medicine), *Vai Kete* (medicine for upset stomach), *Vai Kita* (used for general unwell feeling), *Vai Kahi* (used to detoxify the body), and *Fo’i ‘akau Niumonia* (used for general unwell feeling).

As shown in Figure 6, the Heilala family is closely related to the other three families. Tu’ipulotu is the brother of ‘Olivia, from the Pua Tonga family and Martini, from the Mohokoi family. Tu’ipulotu is also the uncle to Peni from the Nonu family.

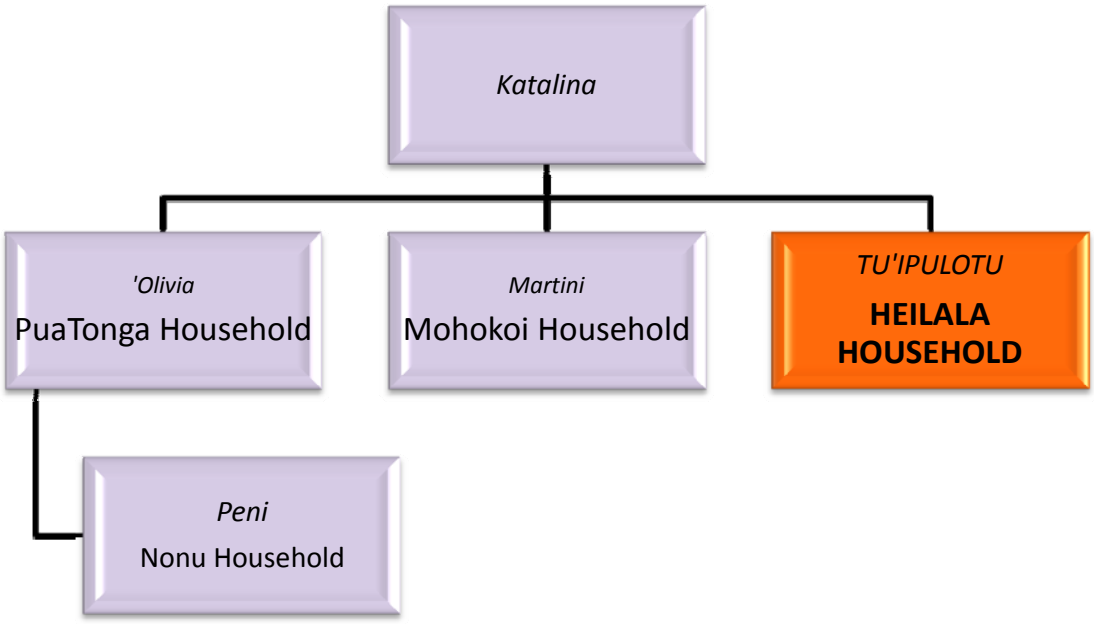

Figure 6. Relationship between Nonu household and other households.

Storage: Accessibility & Visibility

The Heilala household highlighted two factors which were central to determining how their medications were stored; accessibility and visibility. The Heilala family had a high cupboard in the kitchen which was dedicated to the storage of their medication (see Figure 7 below). This location was selected for two reasons, firstly because they wanted to have one place where they would know their medications could be found, and secondly, because they wanted to keep the medications out of reach of children.

Figure 7. Kitchen cupboard used to store medications in the Heilala family home.

Despite this admirable intention, it became clear during the discussion that the high kitchen cupboard only held some of the household medications, not all. The interview revealed that the realities of day to day life meant medications would not be returned to the kitchen cupboard, but instead left around the house.

Melina: *No we just leave it anywhere after we use it. It's not like there is a certain place where we put it. After we use it we never put it back to where we got it from.*

'Ana: *It should have been put up there but Tu'ipulotu used it on Sunday and he had not put it away*

Ana was not happy at this situation, stating:

'Ana: *You should've pre warned us so we can get the medications organised.*

Figure 8. Medication stored next to bed for easy access at night.

The medications which are not returned to the high kitchen cupboard are stored in other locations based on accessibility and visibility. For example, as shown in the photograph above, Melina's tub of 'Vicks' is stored in her bedroom next to her bed. This is because she mostly uses this medication at night.

Tu'ipulotu has a first aid kit in his fishing bag which includes a packet of 'Panadol'. His fishing bag then sits in the laundry ready to be taken when he goes out on his fishing trips. Tu'ipulotu reports that he packs his 'Panadol' so that he has access to the medication if he has a headache while he is out on his fishing trip. Melina also carries her pain killers (tablets) in her bag during her menstrual period for ease of access during times of need.

The Heilala household also have medications on their wall unit in the lounge where they are both visible and accessible. The following extract by Tu'ipulotu describes how he places his medication in a certain location where it is visible to him. Visibly seeing his medication reminds him that he needs to take it in the morning, as well as to take it with him to work during the day.

Tu'ipulotu:	*Its drops for my eyes and medication.*
I:	*And so why is it put on your desk?*
Tu'ipulotu:	*So I can remember to take it with me to work in case I forget.*
I:	*So you are always passing your desk?*
Tu'ipulotu:	*Yes, before I leave for work I check my desk. That's the last place I'm at before I leave the house for work*

Medication Consumption

Daily Routines

The Heilala household's understanding of what their medication actually does has an important influence on how they take their medication. The Heilala family's primary understanding of medications is that they relieve pain and cure and prevent illnesses. As a result, medications have a relatively high priority within their household because of the role they play in maintaining their health and wellbeing. Thus, a degree of dependency and commitment to medications has generated a daily routine or lifestyle around medication usage. For example, Tu'ipulotu has developed a routine that can encompass the frequency with which he needs to take his medications, whether he is at home or work. The following extract depicts some of Tu'ipulotu's routine, that is, taking his medication in the morning then packing it into his work bag so the he can take it at work, and taking it out of his work bag in the evening so he can take it and place it back on his desk to remind himself to take it the following morning.

I:	*So do you take it in and out of your bag every day?*
Tu'ipulotu:	*Yeah*
I:	*how many times do you apply it a day?*
Tu'ipulotu:	*3 times*
I:	*So it has to be in the night - so you have to take it out*
Tu'ipulotu:	*Yes*
I:	*So what is it? It's an eye drop and tablets?*
Tu'ipulotu:	*Antibiotics, yeah*

Commitment

Commitment to medications emerged as a theme in the Heilala family. Commitment in this context related to whether medications were taken as and when instructed by the doctor, and also how medications were maintained, for example, checking expiry dates. Melina highlighted the risks of not taking her medication. If she does not commit to her medication regime, her pain can be so extreme it causes her to lose consciousness, as noted below.

I:	*Ok. ... do you have any risk issues or safety issues with your medication?*
Melina:	*Mine is if I don't take mine I could faint*
I:	*So do you do a lot to prevent that from happening?*
Melina:	*I take my medication, that's why...And as soon as I take it then it reduces the risk of fainting*
I:	*So you think that's the reason that keeps you [from fainting], is your medication?*
Melina:	*Yeah*

Although the Heilala household demonstrated a relatively high level of commitment to those medications taken routinely and on which they were dependant for their ongoing health and wellbeing, this same level of commitment did not apply to those medications they used irregularly or infrequently. For example, with medications which are only occasionally used, the Heilala family did not have a system to manage those medications, including for example, checking expiry dates as highlighted below:

I:	*Who keeps an eye on the medication cupboard?*
'Ana:	*Whoever uses the medication*
I:	*Is there a person who keeps an eye on things like the expiry dates?*
Melina:	*We only check it out when we go to use it*
I:	*So medication stays in there and only checked when it is needed?*
All:	*Yeah*

Safety of Visitors

The Heilala family believe that certain medications can be harmful for children. Although they do not have young children themselves, they do feel responsible for the safety of children who visit their home. Because of this, the Heilala household try to store medications in locations which are inaccessible to children.

I:	*Why are they stored in that cupboard? Is that where you store your medication*
'Ana & *Tu'ipulotu:*	*Yes*
'Ana:	*And to keep out of reach from the children*

Economics

The Heilala home is well stocked with 'Panadol' because of 'Ana's occasional migraines and because she has been advised by her doctor that this is the only medication she can take. Another major factor in stockpiling 'Panadol' in the Heilala home relates to the high cost of visiting a doctor. When 'Ana and Tu'ipulotu feel unwell, their first medicinal treatment is 'Panadol' to avoid the high cost of visiting the doctor

'Ana:	*If I get a migraine I know that taking a Panadol would be my first reaction and then I'll give it about 4 to 6 hours to work before I take some more Panadol. If by then my head is still sore I will then go to the doctors.*

As depicted in the following extract, Tu'ipulotu exhibited a similar pattern:

Tu'ipulotu: I'm the same. Plus seeking the doctor's help comes second because of money issues. The charge to go see the doctors is very, very, very expensive. You can't afford to run to the doctors every time you ache, every time something happens you run to the doctors, you can't afford to do that. So what you do is you first start off with the Panadol in case it can solve the problem for the time being, and if it gets worse or worse comes to worse than you would go to the doctors

Western Medications and *Faito'o fakatonga*

In addition to his common practice of taking 'Panadol', Tu'ipulotu also regularly takes his 'Panadol' with *Vai Kita*. The extract below reflects on how Tu'ipulotu uses both Western medications alongside the *faito'o fakatonga.*

Tu'ipulotu: First day was Monday 21st September around 9ish pm I felt crook and sort of losing strength, maybe tiredness because of the day's activities that I'd been involved with. And I felt like drinking the island medicine called Vai Kita with a Panadol. That's how we normally use it when I get tired and feel aching and what have you. And, yeah, I took it at night then and after that went to bed.

When Tu'ipulotu was asked whether his mixing of Western based medicines with traditional Tongan medicines was supported by his doctor, Tu'ipulotu explained that he was too shy to ask his doctor, because his doctor does not know about *Vai Kita.* Tu'ipulotu himself believed he had insufficient knowledge about *Vai Kita* to inform his doctor about what he was doing.

Risk

The Heilala family identified a number of risks relating to medications. These are described below.

Medications and Church

Melina considered elderly people who are dependent on medication to be at risk when they are sitting through long Tongan church services. In doing so thinks of her grandmother, a diabetic, who attends church all the time.

Melina: Our church normally takes long; you're never sure what time it'll finish. It starts at one and normally finishes between three and four. ... Medication came to my attention when I was looking at the elderly who sit in front, I was thinking about how long they'd been sitting in church and normally elderly people are quite sick and so I thought of my Nana who's a diabetic and I was, like, "Normally Nana would leave at this time for, like,

five minutes to go take her afternoon snack and her diabetic pills.".

I: *So, do you think it [has] a negative effect [on] ... any age group that go to a church service for that long?*

Melina: *Yes, ever since I've gone to church some things have happened. Like old men or old ladies they collapse because they've skipped a meal because they were in a rush to get to church.*

I: *Are these Tongan church services?*

Melina: *Yeah, the elderly sometimes think it's rude to get up and leave during church time. ... They think it's disrespectful to the person whose leading the service...*

I: *So, what do you think should happen with regards to people's health?*

Melina: *For people leading the service to consider the elderly people who are sick and because they're the ones who are in charge of time they could cut down the amount of time they take to deliver the service because some elderly people they stay home because it's too long. Like, I know my two great-grandmothers in Tonga who are still alive, they don't go to church anymore because they've both collapsed in church. And I know how much they want to go to church. And that happens here in New Zealand, too. Yeah, that's the only thing.*

I: *Has people's health ever become an issue in church?*

Melina: *Yes, a few weeks ago, we had this combined church with all the seventeen congregations where have to get up and sing and they announced to please consider the elderly people. But then there was tea and coffee and, like, refreshments down stairs for sick people ...So, if they were feeling ... drained then they could go downstairs. They would be excused.*

I: *Does that normally happen?*

Melina: *It's happened the last time, last couple of years I've been going ...I noticed that the elderly do consider [it]. It was suggested of them to, like, make use of the refreshments to excuse them from feeling too disrespectful to get up and leave in the middle of the programme.*

Misinformation

The final concern that the Heilala household had about medication use was not about the medication itself, but rather the misinformation and rumours spread by people in the community. These stories claimed some alternative medical therapies and medication, including some *faito'o fakatonga* as more effective than Western based medicines. Tu'ipulotu and 'Ana claimed that ill people, especially

those with a terminal illness, hear rumours and stories, creating false hope that these alternative therapies may provide them with a cure. As a result some people seek out and spend significant amounts of money on these alternative therapies and medications, only to be disillusioned with the results. Tu'ipulotu believes that those pushing alternative therapies and medicines are motivated by financial gain by preying on the sick and vulnerable. These stories are noted by the Heilala family to have become more common today.

Summary

The Heilala household have a location where ideally they would like their medications to be stored. However, in practice, there are multiple storage locations within their home, these being influenced by factors such as accessibility and visibility. The Heilala family consider medications relieve, cure and prevent illness and ailments, with this having a strong influence on their developing routines and the level of commitment they display in relation to the consumption of their medications. Economic factors also play a role in the type of medications used, with non-prescription medication such as 'Panadol' initially utilised in the hope it will save the cost of seeking medical attention. In addition, the Heilala family regularly mix western and traditional medications, for example taking 'Panadol' with *Vai Kita,* however such practices are not disclosed to medical professionals they engage with

Pua Tonga Household: Prayer, Faith and Medication

This section presents the findings from the Pua Tonga household. Firstly each family member is introduced and a summary provided of their living situation, health status and relationship to the other three households. Following this, the findings are presented according to key themes which emerged from the household discussion and individual interviews. The Pua Tonga household explores the primary theme of prayer, faith and medication. The sub-themes that emerged from the Pua Tonga household in relation to this major theme were:

(i) Faith, prayer and medication
(ii) Faith and prayer
(iii) Medication alone

The Pua Tonga Household

The Pua Tonga family home is located in a West Auckland suburb which according to Statistics New Zealand's (2006) Social Deprivation Index has a rating of 3. The structure of the house is three storeys, however this household only uses the top two stories to live in, particularly the second floor. The second floor is the main living area, with three bedrooms, two lounges, a toilet, a bathroom, a laundry, a kitchen and a dining room. On the top floor is an ensuite bedroom which is used by a daughter who lives and studies away from home and returns over the summer months. Excluding the daughter who is studying, there are a total of six people, spread across three generations, living in the Pua Tonga household. This includes a grandmother, Katalina; a married couple, 'Osai and 'Olivia; and their three sons, Tevita, Terry and 'Elisi.

Katalina is a 75-year-old Tongan-born female widow, who prefers to spend most of her time at home. She has seven children, five of whom live in Auckland, New Zealand and two who live in Tonga. Katalina has spent most of her living life in Tonga, making frequent visits to her children in New Zealand. She moved to New Zealand permanently in 2008 but makes regular trips back to Tonga to visit her mother. Katalina speaks very little English but is mobile and independent. Katalina always prefers to have someone at home with her in case there is an emergency. If no one is able to be keep her company at home she will visit her children or her sister.

'Olivia is the eldest of Katalina's children. She is a 50+ year old Tongan-born female and a full time Community Support Worker. 'Olivia migrated to New Zealand in the mid 1970's, where she married 'Osai. Olivia is a mother of six children, and a grandmother of three.

Tevita is a 19-year-old New Zealand-born male currently studying a tertiary level sports and recreation programme. He is also a competitive bodybuilder. Terry is 17-years-old and 'Elisi is 15-years-old. Both are New Zealand born Tongan males, attend secondary school and are heavily involved in sports such as volleyball, rugby and basketball.

‘Osai, a 50+ year old Tongan born male who is a taxi driver, did not participate in the discussions as he was overseas.

Both Katalina and ‘Olivia have high blood pressure. Katalina uses medication to control her condition, with this organised in a blister pack and taken three times a day. Katalina was able to provide the specific names of her medication. Katalina also takes *Vai Kita* with ‘Panadol’ almost daily. ‘Olivia as well having high blood pressure, is also diabetic. Olivia takes medication daily for both these medical conditions. Her high blood pressure medication was ‘Accupril’[9] however Olivia was not able to name her diabetes medication. Olivia would also take *Vai Kita* and ‘Panadol’ mixed together.

As a result of participating in the sport of body building, Tevita used a variety of protein powders and sports supplements for muscle recovery and muscle growth. These were also shared with Terry and ‘Elisi. Other medications used periodically by Tevita, Terry and ‘Elisi included ‘Betadine’[10] and ‘Panadol’.

‘Osai is not on any medications but on the rare occasion he was feeling unwell he would also take *Vai Kita* and ‘Panadol’.

The Pua Tonga family is closely related to the other three households. Katalina is the mother to Tu’ipulotu from the Heilala family, and she is also the mother-in-law to Lesieli from the Mohokoi family, and the grandmother to Peni from the Nonu family.

[9] Accupril is used in the treatment of hypertension and congestive heart failure (http://en.wikipedia.org/wiki/Quinapril).
[10] Over the counter topical antiseptic used for cleaning minor wounds.

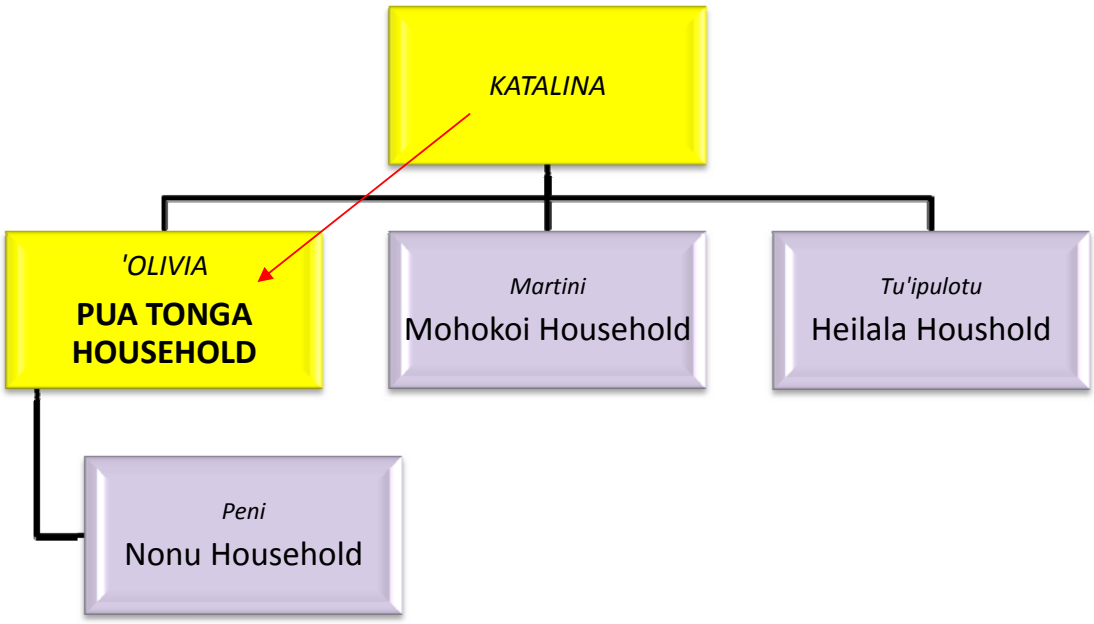

Figure 9. Relationship between Pua Tonga household and other households.

Faith, Prayer, and Medication

The Pua Tonga family perceived medication as something which cured, managed, and relieved illnesses and pains. They also viewed medication as being preventative; preventing illnesses and pains in order to achieve good health and wellbeing. However, medications were not viewed in isolation, with faith and prayer being closely intertwined. The following extract demonstrates how the topic of prayer was introduced into the discussion. More importantly, the extract shows the immediate position the Pua Tonga household take in relation to prayer and medications; and how assertively that position was taken.

Olivia: *There is also another thing, like Tevita said, when you have medication you know that it benefits you in certain ways but then there are risks. There are many times when I am confused about whether I should or should not take certain medications*
I: *What do you do then?*
Olivia: *Yeah that is what I mean, that is why I'm saying this to you. You don't know what else is left to do*
Tevita: *Prayer. It's a proven thing*
Olivia: *That's obviously clear*
I: *What is clear?*
Olivia: *Like Tevita said, for you to pray. Prayer is something that is obviously clear [works]*

The Pua Tonga family were then asked to elaborate on the theme of faith, prayer and medications. The discussions that followed showed the family held a holistic

approach to health and wellbeing, where faith and prayer were extremely important. For example, Katalina believed that medication and its function are provided by God to help heal people and this interrelationship is shared below.

I: *So we have many Tongans who are Christian right?*
'Olivia: *Yes*
I: *According to your understanding is there a relationship between medication and Christianity?*
'Olivia: *There is a relationship*
Katalina: *There is a relationship there because we take the medication and have faith that God is helping us. We have unwavering faith that it is God who heals, because when we receive the medication and consume it that is him working his healing through to our bodies, our pain, and our illnesses*

Olivia reasserts the point by stating...

'Olivia: *That they [praying and being proactive with medication] go together.*

'Olivia stresses this point with the following pragmatism.

'Olivia: *There is also another thing, we are told to pray and work, like for example, like the wheel chair that got stuck in the mud, you won't just pray and the wheel chair loosens up from the mud, we will pray and push the wheel chair.*
Katalina: *And to try as well.*
'Olivia: *We pray and work so that we live. See, there is the story in the Bible, there are many stories about Jesus' healings. The people took the ill with them, they didn't just leave those people behind, they took the ill with them and tried to get to Jesus, roofs were torn off just to reach Him. They worked. Prayer and work. If Elisi fell right here, we wouldn't just kneel and pray, we would not only pray but also grab him to take to the hospital to be treated so that he can recover*

Tevita uses protein supplements daily as part of his regular body building regime. He also believes the supplements are useful in sustaining and encouraging good health and wellbeing. However, as the following extract suggests, faith and prayer are significant contributors to one's health.

Tevita: *I reckon if we pray, eat properly, exercise, try our hardest and don't give up so easily He will bless you, for real he will. You see some people in the Bible who go to Jail for many years but still have faith in God that there will be better days to come. Our faith is weak compared to them, so I reckon if you believe that you will get well, like really believe and don't give up, you'll get healed ...*

But if God see's someone that's just praying and does nothing about it and he see's someone that's going [working] their hardest and believing he's gonna get well, who do you think God is going

to bless? The person that's working. So you got to really have faith that you are going to get well and try your best.

Faith and Prayer

While the Pua Tonga household appear certain that faith, prayer and medication work together to produce good health and wellbeing, they were asked about the possibility of faith and prayer being effective on its own. For Katalina this was a possibility.

I: *Are there times when you fall sick that you do not choose to have medication but choose to just pray?*

Katalina: *Yes there are times that you just have faith and you don't take medication, you just live through God's love*

But generally speaking, the Pua Tonga Household could not comprehend separating faith and prayer from active medication use.

Summary

The Pua Tonga family were very clear that faith, prayer and medication were integral to good health and wellbeing. This came from the belief that medications were an instrument of God, to be used proactively, alongside faith and prayer for the benefit of good health. While the Pua Tonga family considered that faith and prayer alone may work alone, or taking medications without prayer could also be effective, these were not perceived to be as effective as faith, prayer and medication combined.

Flows

This section of the findings explores the flow of medications into, around and out of the households. The five key themes to emerge were:

(i) Flow of medication
(ii) Flow of trust
(iii) Flow of care
(iv) Flow of knowledge
(v) Lifestyle flow

It is important to note that this section focuses on the flow of medication, as opposed to the specific medication itself. Unless otherwise specified, no distinction is made between Western and traditional medications. The flow of medicines takes into account migratory patterns of participants between New

Zealand and Tonga (transnational households) and the interrelationship of my research households. The Mohokoi, Heilala and Pua Tonga households can be referred to as Tongan transnational households. While the Nonu household are New Zealand born, it finds its roots in the transnational movement of parents to New Zealand from the Pacific Islands.

Family Tree: Kinship Relationships

Figure 10 presents a family tree highlighting the interrelating family structure of my participating households. The interrelatedness provides an insight to how the 'flow' of medicines could occur between households. It shows Katalina Tuipulotu, 'Olivia, Matini and Peni as representatives of their families in their respective households. While Katalina and 'Oliva are from the Pua Tonga family household, they have been separated in the family tree diagram to highlight generational differences within and between households. Katalina is the mother to Tu'ipulotu, 'Olivia and Matini, and a grandmother to Peni, through her daughter 'Olivia

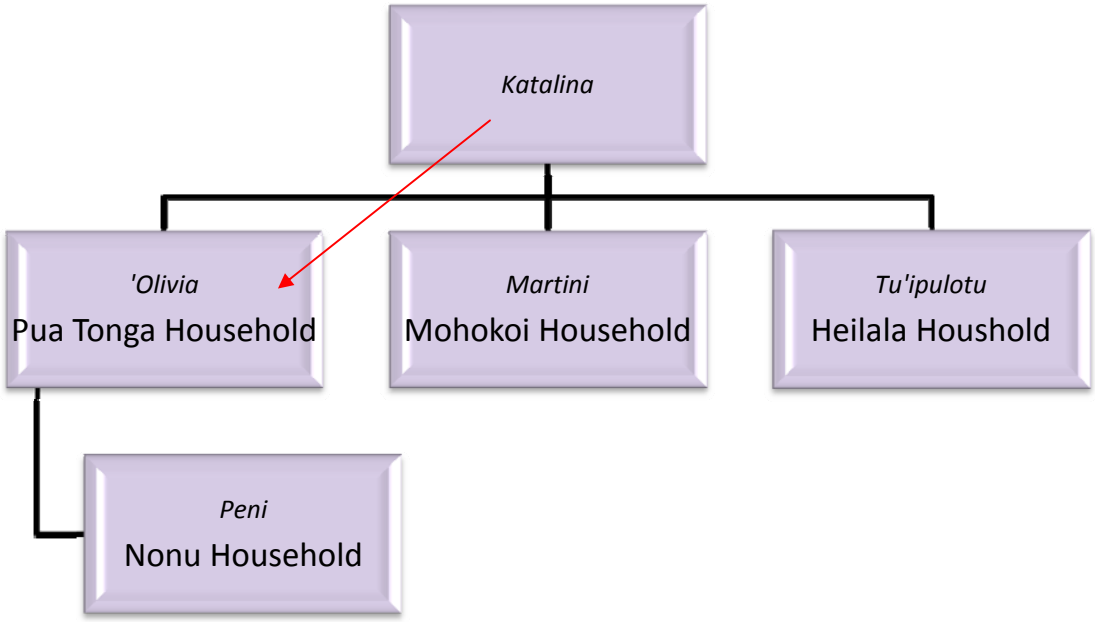

Figure 10. Overview of kin relationships between households.

Flow of medications

This section will briefly explore how medication initially enters into a household. Next, the flow of medications between nations is explored, followed by the flow of medications between and within households.

Medications initially entering household

It is important to look at how medications are initially attained in the four households in order to fully understand how medications flow in, out and around the households. For all four households, Western medicines were initially obtained and/or purchased from the pharmacy, supermarket, or sometimes supplied by a medical practitioner. However, purchasing was the least common way of obtaining *faito'o fakatonga*, with the households tending to share their *faito'o fakatonga* freely or give it as a gifts. Tu'ipulotu (Mohokoi family) illustrates the notion of not purchasing *faito'o fakatonga* but rather sharing it, in the following extract:

I: *Did you buy it [Vai Kita] off them [family] or is it sharing between family?*
Tu'ipulotu: *It's mainly sharing with the family...*

Another form of obtaining medication is shown in the Pua Tonga family where Tevita would win supplements from bodybuilding competitions and share them with his brothers. '

The importation of medications

In relation to flow, Tonga was the main country from which the participants had medications flowing to and from New Zealand, with this being prevalent in all four households. he medicines were mostly transported through household members, family or friends who were travelling to or from Tonga. If there was an urgent need for a certain medication from New Zealand or Tonga, family and friends would be contacted to find out if anyone was travelling. Another common strategy was for people to simply arrive at the airport in the hope that they will see someone they know who is travelling to Tonga or New Zealand and be able to ask them for assistance in transporting the medications.

I: *And how often do you get it [Angoango] from Tonga?*
'Ana: *It depends, whenever someone goes to Tonga they come back with it and that's like twice a year or something.*
I: *And how do you get a hold of the Niumonia [tablets] if the Niumonia tablets are not sold in New Zealand?*
Tu'ipulotu: *It is brought in from Tonga. Just ask for them to be brought in*
I: *Ask who?*
Tu'ipulotu: *Friend and relatives*
'Ana: *To the doctor, someone asks the doctor to prescribe some or the nurse to get some*
I: *So you know some people in Tonga who can do that for you?*
Tu'ipulotu: *Yes, contact*

I: *And they just go out and get it*
Tu'ipulotu: *Yeah*
I: *And they send it over?*
Tu'ipulotu: *Yeah*
'Ana: *It's brought over with someone travelling from Tonga*
Tu'ipulotu: *Or you would go yourself when you go Tonga…See my sister, she calls me and asks for a bottle of Vai because she knew our guests came with some Vai bottles, so a Vai bottle was given to her*

Even when there is no immediate or urgent need for the medication, someone travelling to or from Tonga is seen as an opportunity to transport medication. Once that medication arrives in New Zealand, it can be stockpiled for future use and shared accordingly.

I: *Ok, so if your sister's household or your brother's household calls and asks for it [medication] you will give them some?*
Tu'ipulotu: *Yes...Yes when they call from those households and ask do you have any fo'i 'akau Niumonia there? Yes either come and pick it up or I'll come drop some off. Whoever is sick tell me so I can give some. We share it like that.*
I: *Do you guys share it out when you get medication from Tonga?*
Lesieli: *Yes, yeah if I've cousins they ask if you've got Angoango or thing and then you give it to them.*

In one case, the Mohokoi family had medication brought over from America. When Lepeka and her father were in America she discovered an effective medication unavailable in New Zealand. Upon her return to New Zealand Lepeka asked her father to purchase some on his return home from his holiday in America.

Sharing between households

The flow and sharing of medication between households is an important part of their relationship. However the households were hesitant at first in sharing this fact and suggested only 'Panadol' moved between households.

I: *Does sharing happen between your children's home?*
'Olivia: *Just Panadol if there is a need for it*
Peni: *I think it's just, you know, if you're sick and you tend to ask around for some Panadol or if you've got some and someone asks you for some Panadol and you give it to them. I think that's the only flow of medication.*
I: *Do you guys share it with other households?*
Tu'ipulotu: *Yes*
Melina: *Vai Kita you do*
I: *Are there any other medication that you share between the households?*
Tu'ipulotu: *No just Panadol*

However, upon further inquiry, the list of medicines flowing between households increased, as shown in the extract below.

Melina: *How about the, what's it called? The one that you call Aunty for, what's that called?*
Tu'ipulotu: *Niumonia, Niumonia tablets ...*
Ana: *There's Panadol and Vai Kita*
Melina: *So it's only Niumonia, Vai Kita and Panadol*
Ana: *And Vai Kahi and Vai Tonga*
Tu'ipulotu: *And we share Vai Tonga*
Melina: *All Vai Tonga*

When in need of medicines, participants would first contact other households. A fairly typical practice in all the households, families would, instead of booking an appointment with the doctor, going to the supermarket or seeing the traditional healer or medicine maker, call each other's households first.

I: *So would you check around your family first before you'll call for medication?*
Tu'ipulotu: *Yes.*
I: *Do you have families call here and ask if you've got that medication?*
Tu'ipulotu: *Yeah.*

Sharing medications also saved time and money and, although traditional medications could be difficult to obtain, selling it for profit was not considered.

I: *Even though it's hard to get used to, you're still willing to share it.*
Tu'ipulotu: *Yeah, yeah.*
I: *Do people sell it here?*
Tu'ipulotu: *No, they don't sell it.*
I: *Why do you think they don't sell it?*
Tu'ipulotu *…as I said it's hard to get. It's only a certain part of the island that you can get it from.*
I: *Have you ever thought of selling it yourself?*
Tu'ipulotu: *No. Because it's not that many and it's hard to get so that's why...*

Sharing within households

As can be seen in the findings for each household, all households had a practice of sharing medications *within* their households, with the main medications shared being 'Panadol' and *faito'o fakatonga*.

I: *So, like, does one person buy it [medication] then everyone shares it or does everyone just buy their own medication and your Mum buys it for the younger ones?*
Tiffany: *Yeah. Like, my Mum buys and everybody else will buy and everyone will use it for everyone. Like, I've never, I haven't been to the doctors in years.*

Sione: *Well, I would use it [Panadol], like, I'll probably take two or four and then after that other people [others in his household] come and use it.*
I: *So, you share it around?*
Sione: *So, share it around then it's gone.*

The use of *Vai Kita* is similar to that of 'Panadol' where it is used to improve the general feeling of someone who is not feeling fully fit.

Ana: *The Vai Kita is good in the winter or like when you go to work and you come home your body feels tired and run down it is good to drink some Vai Kita and sleep it off overnight*

As shown earlier in the findings, *Vai Kita* and 'Panadol' are sometimes consumed together.

Tu'ipulotu: *First day was Monday 21st September around 9ish pm I felt crook and sort of losing strength, maybe tiredness because of the day's activities that I'd been involved with. And I felt like drinking the island medicine called Vai Kita with a Panadol. That's how we normally use it when I get tired and feel aching and what have you. And, yeah, I took it at night then and after that went to bed.*
Lesieli: *You drink it if you feel sick and sometimes drink it with your Panadols or with your tablets and make it easier to feel better.*

Flow of Trust

The notion of trust was repeatedly mentioned throughout the discussions with the four households. In this section, trust is seen through four different lenses: family; general health practitioners; medication; and faith.

Family Members

Two participants spoke about the relationship between trust in family members and medications. For example, in the Nonu household, Tori spoke about the trust she had in both of Vienna's grandmothers with regards to the medications they advised she administer to her daughter. Sione's extract below also shows that his mother is his first point of contact for advice on medicines.

Sione: *At first I would always ask Mum.*
I: *Why would you ask Mum first?*
Sione: *Because she's always been there... I trust her advice.*

Health Professionals

All four households had family members who talked about the level of trust they had in their local General Practitioner (GP). It appeared that of those who trusted their GPs, GPs were the first point of contact when they first identified symptoms of an unfamiliar illness, irrespective of how trivial or severe their concern might be.

Peni: *I trust my family for advice on medication but I think I'd trust [doctors] more*

Peni: *If you're sick I think that it's better to go and see a doctor when it's readily available to you. I think it would be quite silly for you to get advice concerning medicine from a person … just because it's a family member doesn't mean that that person will know better than a doctor.*

Despite the technological advancements of Western medicines, traditional Tongan remedies were not dismissed, particularly when Western medications proved ineffective. This is by Tu'ipulotu, when Western trained doctors failed to properly diagnose his mother, Katalina.

Tu'ipulotu: *You would trust the doctors …but then when you reach a stage, for example, like Katalina, when she is taken to the doctors they do not know what is wrong with her, even the specialist. They make suggestions but the same thing repeatedly happens, so then alternative options are considered. Where ever there is talk of medication she [Katalina] goes because of this reason [of no diagnosis]*

Otile Mohokoi places a certain level of trust in those working in a Pharmacy. She seeks advice there for her 'hay fever'. Without consulting first with a doctor, Otile trusts that the Pharmacist has chosen the correct medication for her.

Otile: *Nah, it's just one of those, I don't need to go see a doctor about it [Hay fever]. I can just go purchase something from the pharmacy and just take it once a day and it goes away. It only takes about a week then it goes away*

I: *So, like, do you walk into the pharmacy knowing what medication you're going to buy?*

Otile: *Yeah, yeah*

I: *And how do you know?*

Otile: *Because before I purchased it the lady at the counter – I asked her about, I told her my symptoms kind of thing. She said it wasn't bad. And so she just gave me something that I could just take for a week then it would go away.*

Medication

When a medication has been successful in alleviating symptoms or curing a condition once, this appears to build a degree of trust that the specific medication

will continue to be successful in the future. ‘Ana talks about her use and trust in ‘Panadol’.

I: *So you trust your, like …*
‘Ana: *Panadol*
I: *Yes, you trust your own diagnosis before you go and seek the doctor’s advice?*
‘Ana: *Because it is my understanding that Panadols help when any part of your body is aching*

‘Ana’s understanding of how ‘Panadol’ works suggests that it has worked for her in this way before. This creates a certain degree of trust in the medication.

Melina: *But there is so much Panadol in our house cause of Mum*
I: *Why?*
Melina: *Cause whenever she has a headache she can [take the Panadol]*

Flow of Care

The notion of care is another facet related to medications that was found to flow between the four households. Care is discussed at three different levels. In the Mohokoi family there is care within the household; in the Nonu and the Pua Tonga family there is care between households; and between all four households there is care for grandma Katalina.

Care within the household: Mohokoi siblings

The Mohokoi family are a single parent household. The older children help out their mother (Lesieli) by taking responsibility for their younger siblings which includes administering their medication.

Otile: *If I’m looking after the two little ones and if they look like they’re coming down with a fever I usually just give a spoon (of Pamol) to them and every four hours just give it to them…*

From the above extract, it is evident how caring for the younger Mohokoi children flows between Lesieli and her older children. Ótile is able to recognise when the younger siblings most need their ‘Pamol’. In the general medication use diary interview, Tiffany, the third eldest child reflected on the various types of medications for babies and their effectiveness.

Tiffany: *This next photo is castor oil ointment, zinc and castor oil ointment…. that was taken in my Mum’s room…And that's used for, like, if babies get red ...Rashes, yeah, red rashes on their bottoms Mum will put that on and it works… It’s really good. I’ve got heaps of little sisters and I’ve changed their nappies heaps of*

times and if you leave the nappy on while it's wet and it gets damp then that's where the rashes come from. And sometimes it gets really bad, like, it bleeds… So, what we do is clean it up and then put that on it and, like, by the next two diaper changes or the next day you would see it improving…I think it's really good medication for babies.

Care between households: Baby Vienna

Caring relationships between households was evident. Peni and Tori comment on the support they receive from the Ólivia and Katalina of the Pua Tonga family, especially when Vienna is sick.

Tori: *Yeah. Like, with Grandma and her [Vienna], she always has her oil and I think when she's sick, you know, she [Katalina] always gives me advice on what things keep her [Vienna] warm and stuff like that. Say if someone's sick upstairs then I don't really want to take her upstairs ... and even with [Ólivia| and that, like, if they know she's sick they'll always come down and monitor how she's doing and if she's better.*

Care between households: Grandma Katalina

Katalina is generally able to care for herself, and with the help of blister packs, is able to monitor her own medication daily.

I: *Any of you know anything about her medication or do you do anything to make sure that she takes her medication?*

Otile: *She's pretty good with her medicine, with her medication, I mean. Now she's got that new system (Blister packs), you know the one where you can, they've got the days written on the*

However, Katalina does need assistance with certain tasks at times, for example, driving her to her doctor's appointments, translating for her at the doctor's and assisting in getting her prescriptions. All four households contribute to helping. There is no system for taking care of Katalina; rather it is who is free and available at the time she needs help. If no one is readily available, then someone's schedule will change to meet her needs. However, there is always someone available as the four households consist of shift workers, tertiary students and parents with young babies, meaning someone was usually home and at times

Melina: *They take turns*

Tu'ipulotu: *Whoever goes to see her or she will call me and sometimes she prefers to call me for us to go see the doctor*

Tori: *And my husband has taken her to appointments.*

I: *Why did you have to take her to her appointment?*

Peni: *Because she needed a ride first off. But then she wanted someone to translate what the doctor was saying.*

Regardless of Katalina's independence she does not like being alone and always wants someone to be with her, either an adult or her grandchildren. Not wanting to be alone is due mainly to Katalina being anxious about answering the phone or dealing with visitors who cannot speak Tongan. She also prefers someone to be with her in the case there are other emergencies. The grandchildren being with Katalina are not necessarily seen to be 'caring' for their grandma. Rather it is an opportunity where grandma and grandchildren are able to spend time together. Some of the time appeared to be a win-win situation where Katalina has company, and in turn her children have a sitter for their children.

I: *Does Grandma sometimes come to your house?*
Tori: *Yeah*
I: *And you guys care for her when she comes?*
Tori: *When she comes down, yeah, she'll come down. She usually comes down if there's no-one upstairs…Then she'll come down and she'll stay down here and she'll have a nap down here.*
I: *So, you share the responsibility of caring for her?*
Peni: *She can care for herself. It's not like we care for her, just keep her company.*
Tori: *We've always in the back of our mind that as long as someone is there with her. If she's by herself then we'll make sure that she comes down or we go up or we know if she's going to go to someone's house or something. Because we know that she doesn't like to be by herself and she doesn't, she's not confident to be by herself.*

Flow of Knowledge

Tongan history has, until recently, been mostly oral, where knowledge is passed down from generation to generation through spoken language. The flow of knowledge between my participating households was orally transmitted and passed on, or flowed from various sources between family, friends, traditional healers, health practitioners and the media.

Family and friends

Knowledge regarding medications flowed between the four households and was reciprocated whenever possible. This knowledge flowed within the households, between households and outside of the households. Katalina as the oldest generation in this family passed the information she acquired from her ancestors on to her children and her grandchildren, with her knowledge flowing both across generations and households.

I: *Who recommends it?*

Tu'ipulotu: *My Mum ...She knows the thing very well!*

I: *Do you take any other advice from her about other medication or do you...*

Tu'ipulotu: *Oh, yeah. The Vai Kita I get the advice from her because that's one of the most important medicines that they used back in the island [Tonga] with regarding to the women giving birth to their children. Yeah, especially in the early age of giving birth that they said that it's important to for those women to have that Vai Kita on hand*

Katalina: *That bottle of Vai just helps for when I take my Panadol. I use the Vai to take with the Panadol*

I: *How did you know to do that?*

Katalina: *It usually helps you feel better faster*

I: *Where did you get that information from?*

Katalina: *It's a Vai that has been around for a very long time and it is commonly used in Tonga*

I: *It's Vai, and so how did you know how to use it?*

Katalina: *We grew up around people who have been using it for a long time and so that knowledge of how to use it was passed down right until now*

Knowledge flows happened in a variety of situations and locations. For example, the extract below highlights a conversation Peni (Nonu family) had with his uncle Tu'ipulotu (Heilala family) while on their way to work one morning.

Peni: *I spoke to, like, another Uncle, because I think he's a little bit sick at the moment and he was talking to me about Vai Kita…Which is a Tongan medicine or medicine that they use in Tonga. He was kind of telling me, you know, the, what they can use the medication for and it seems like that it's a blanket medication that covers everything. And it was, and then I asked him who mixes the medication and he gave me a name of a person that kind of I know from the family but hasn't kind of got any medical type background. And then the volume was measured into, like, a Sprite bottle – a 1.5 litre Sprite bottle. So, that's one form of medication that I've kind of spoken with someone.*

I: *What was the purpose of the conversation – did you want to find a cure for something or what was it?*

Peni: *No, we spoke about it because he was sick. He was starting to feel sick and he had a bottle of this medication and he was taking it with him to work. And I was just querying with him the medication and the, you know, the amount of medication or the volume of medication and he told me it was $20 for, like, a bottle – 1.5.*

I: *Where did you learn about taking Vai Kita with Panadol?*

Tu'ipulotu: *Sharing from the family and relatives and friends that Panadol also helps with the Vai Kita*

Tevita from the Pua Tonga household spoke about 'supplements' as a topic of discussion with his friends.

Tevita: *I just was talking with my friend about his diet and figuring out his daily protein intake.*
I: *Ok. And what was it about his diet that you were talking about or how did this make you think about medication?*
Tevita: *He was asking me about taking pills and stuff like that, all these different supplements and it brought medication to my attention.*

Knowledge is passed through family and friends, and recycled through those same families. This is in contrast to the flow of knowledge from traditional healers, health professionals, and the media. This information is flows from the one direction, with household members being the recipients.

Traditional healers

Similar to General Practitioners informing their patients on medication use, traditional healers also informed their patients on the use of traditional medicines. Tu'ipulotu and 'Ana Heilala share their experience of receiving information in the extract below.

I: *Oh ok. So it's concentrated and it's only when you need to use it that it is diluted?*
'Ana & Tu'ipulotu: Yes
Tu'ipulotu: *That is the reason*
'Ana: *Because you use warm water to dilute the medication*
I: *How do you know this?*
Tu'ipulotu: *Know what?*
I: *Like, I can see in the photos that there are no instructions [the Faito'o fakatonga] on how to dilute the medication ...The bottle in the fridge has a label with English writing and the other bottle in the cupboard has no labels*
Tu'ipulotu: *There are no labels on the bottles in the cupboard because I have already been informed on how to mix the medication*
I: *Who told you?*
Tu'ipulotu: *The person that made the Vai*
'Ana: *The person that made the Vai*

Health Professionals

Household members identified knowledge acquired from health professionals as important. This is exemplified by Tori and Peni (Nonu household).

Tori: *Yeah, with Pamol that's kind of been a debate in the past. Prior to having Baby we were sort of taught not to rely on Pamol too much as it can – what is it?*
Peni: *It just masks the symptoms and just brings down the temperature.*
Tori: *It can mask something serious like meningitis, aye?*
Peni: *Yeah.*

Tori: *Because it makes them so drowsy and you wouldn't, it's sort of, it could stop them from trying to beat the virus themselves. It doesn't build up their immune system as good. But we've used it quite a lot because, I don't know. It works.*

Peni: *But that information was from attending ante-natal classes prior to Baby's birth.*

Katalina had this to say.

Katalina: *I take it when I need it. When any part of my body is sore or starts aching, I then take Panadol. This is what the doctor has instructed me to do.*

Knowledge gained from nurses and secondary school health classes also flowed through these households. High school students Kelela (Mohokoi household) and Élisi (Pua Tonga household) made brief comments regarding some of their knowledge about medications being obtained from school.

Tongan Radio stations as a source of information

The hHilala household regarded Tongan radio stations as being an important source of knowledge about medications, although this was not the case for the other three households. The Heilala family share their experiences.

Melina: *That's cause you heard that thing from the Tongan doctor on the radio*

Tu'ipulotu: *Of course. It is because of that new understanding*

I: *So Melina you get mediation information from media as well?*

Melina: *Yeah. The Tongan radio*

I: *So what do they talk about? What do they discuss on the Tongan radio?*

Tu'ipulotu: *They help, like the Ministry of Health speaking in Tongan so to inform people about this kind of information, so they can advise the people about the correct way of using medication and stuff. So when they say to take the 30 tablets that have been given then you must take all the tablets until they are finished. It is important to take all the tablets because of that reason.*

I: *Do you feel that that information is like...*

Tu'ipulotu: *That's right, it's very helpful*

I: *So who organises this radio segment?*

Tu'ipulotu: *A lot of people, they sometimes include Ministry of Health segments, Langimalie and other Tongan clinics ...They include things like doctors who advise people on the likes of medication. The radio's morning shows include doctors where they advise on things like diabetes and how to manage it. They use a lot of that now where they make information available through media especially on the radio during the Tongan shows*

I: *More so now than before?*

Melina: *Yeah*

Tu'ipulotu: *Yes, a lot more now*

However, the Tongan radio station does not discuss traditional Tongan medications.

I: *Have you ever heard them talk about Tongan medications?*
Tu'ipulotu: *No.*
I: *Are they always talking about the mainstream health system and medication?*
Tu'ipulotu: *Yeah, yes.*

Lifestyle Flow

As shown in the household findings, the Nonu, Heilala and Pua Tonga households each reported having to keep their medications in certain places so as to not disrupt the flow of their lifestyle. For the purposes of this study, the flow of lifestyle refers to someone being able to carry out their daily routines; routines which include taking their medication daily. For these people, not taking their daily medication would have consequences which would further disrupt the flow of their daily lifestyle. For example, Olivia (Pua Tonga household) finds that when she is late taking her Accupril tablets in the morning, she will feel weak and tired later on in the day. Tu'ipulotu (Heilala household) has a daily routine with his medication so that he can remember to take it three times a day.

The specific locations where participants stored their medications acted as cue reminders to take their medication. Ólivia Pua Tonga stored her Accupril, which she takes in the morning, in her suitcase, because she is always using her suitcase in the morning. Tori Nonu practices a different approach, having obtained two identical medicines solely for the purpose of keeping one in her bedroom for her to administer to Vienna at night, and the other in the main living area to administer to Vienna during the day.

Summary

Medications entered households in a variety of ways. Western based medicines were usually purchased over the counter, unlike *faito'o fakatonga* which was often shared between households. Medications also entered households from overseas, with a flow of medications occurring primarily between Tonga and New Zealand. A variety of strategies were used to facilitate this flow, often based on utilising the travel plans of contacts and wider networks. In this way medications could be stockpiled for future use. In addition to *faito'o fakatonga*, other

medications were shared between households, such as 'Panadol', with families often attempting to access medications from other family members prior to making an appointment with a medical professional, or purchasing the medication themselves.

The findings also showed that there was a flow of trust between household, with this being important when considering medication use and understanding. It was particularly evident that family members had trust in their mothers, in regards to the types of medications which should be administered to their children. Household members also placed trust in a Western system which had access to qualified health professionals and advanced medical technologies. Often, trust in Western medications developed in response to them been effective in the past. However, traditional medications were also trusted, although this did tend to be after western medications had been tried first.

A further element of flow related to the concept of care. Care flowed in a variety of ways: within the household; between the households; and for Grandma Katalina, in particular. Care within the households often revolved around caring for siblings, while care between households could be seen in the advice provided to help baby Vienna. All households played a role in caring for Grandma Katalina, although in many cases this is not perceived as providing formal care, but simply spending time together. Linked to the flow of care, is the flow of knowledge, with intergenerational knowledge flowing within the households, between households and outside of the households. Various sources and means of knowledge transmission were utilised including family, friends, traditional healers, health practitioners and Tongan radio stations.

Finally, lifestyle flow or those routines of daily life that enable one to maintain a particular lifestyle were considered. For some household members, failure to take their medications would result in lifestyle disruptions. Knowledge of this and of the consequences was an important motivator for some household members to take their medications as instructed, leading them to develop daily medication routines.

CHAPTER 4: DISCUSSION

Medications are used to treat minor and major ailments, prevent illness, and enhance functioning as well as to give certainty in the face of illness (Hodgetts et al., under review). These substances are diverse and are used by people in ways that transcend the categorisation of medications as 'prescription drugs', 'over the counter drug's and 'traditional medications'. Research examining lay accounts of medicines reveals ambivalence, faith and suspicion about medicines (Doran, Robertson, & Henry, 2005). Different meanings given to medications are important for explaining variations in medication use (Shoemaker & de Oliveira, 2008).

Existing research into medication use and lay understandings is primarily conducted from within a Western inspired cultural lens and it is mostly from this perspective that the scholarly world has come to understand the use and misuse of medications. To date no research has explored the everyday experiences and use of medications in Tongan households. This research documents how medications are embedded in complex cultural, familial, social and health care relations. My findings foreground the centrality of Tongan cultural practices and relationships within which medications are embedded and take on meaning. Even biomedical substances become cultural objects through their use and exchange among family and community members. This study adds to research on medication use by highlighting the importance of culture to extending existing understandings of the everyday practices through which people use and share medications.

Recent work in ethnography emphasizes the relevance of participant perspectives and cultural frames (Groot, Hodgetts, Nikora, & Leggatt-Cook, in press). If scholarly understandings are to reflect the lived realities and identities of people, then research should be informed by the very concepts germane to groups participating in research (Pe-Pua, 2006). Indigenous scholars (cf Toafa et al., 1999; Viliami Toafa et al., 2001) have promoted the use of indigenous cultural concepts to develop research strategies and to inform analyses of the lived realities of indigenous peoples (Groot et al., in press; Nikora, 2007; Pe-Pua,

2006). Briefly, using Tongan cultural concepts as the conceptual basis for understanding the daily realities of my participants provides a useful vantage point for explaining the practices surrounding their use of medications.

This chapter explores the relationship between *anga fakatonga* (Tongan customary practices) and both *Faito'o fakatonga* (Tongan traditional medicine) and Western medication. In doing so I shed further light on how medications are invested with history and tradition, and often crystallize connections with people, places and events. These substances come to have enculturated lives as well as pharmacological purposes and are used in ways that exceed their medicinal purposes (van der Geest & Hardon, 2006). Medications are implicated in the hopes, imaginings and desires of Tongan householders. Medications also have multiple existences; once in the hands of sick people they represent relief from suffering, maintenance of health, but they also constitute identities, moralities, routines, relationships, care, healing and home-making (Doran et al., 2005; Pound et al., 2005; Shoemaker & de Oliveira, 2008); both within and beyond the house, spanning across international borders to Tonga. Tongan people have a pluralistic attitude towards health care (McGrath, 1999) where the effective treatment is central. The profound epistemological discrepancy between Western medication and *Faito'o fakatonga* are often overlooked although this is being challenged by a few lone voices (McGrath, 1999; Toafa et al., 1999; Viliami Toafa et al., 2001).

Tongan culture, home-making and medication use

Medications are integrated into the cultural practices through which Tongan people make a home for themselves in New Zealand, in turn, linking their lives and health care practices back in Tonga. Scholars have questioned what constitutes a home and the normative assumptions that limit home to a domiciled dwelling and nuclear family (Massey, 1992; Robinson, 2005). Home-making can span different settings and levels from domestic dwellings to neighbourhoods to nation states. A sense of home is often associated with affiliations with others, intimacy, respite and support (Mallet, 2004; Massey, 1992). A home is a key site where people work at creating a sense of continuity in self and life (Rivlin & Moore, 2001; Robinson, 2005). Such a sense of place, connection and home is central to what it means to be Tongan. My analysis suggests that the placement

and use of medications in the places associated with home-making reflects the functional nature of the home (Mallet, 2004; Massey, 1992) as a space for care (Hodgetts et al., under review). My findings suggest that we also need to look beyond the physical architecture of the house to understanding Tongan home-making and health care practices. As is the case for other cultural groups, for Tongan people, home is a physical, social and familial space, produced now and over time though human action and interaction, and through the accumulation of inanimate and animate 'things' within everyday life (Mallet, 2004). Medications become woven into people's everyday lives and for Tongan people these extend beyond a single household to the village or suburb, beyond islands, and internationally between New Zealand and Tonga.

Medications become objects with some social currency in terms of cementing in or enacting relationships and for people to reinforce their connections with one another. Sharing medications also allows for a person to demonstrate care for another person and allows Tongan people to do something together to address illness. As my analysis demonstrates, this can involve trial and error, but through such processes of offering advice and sharing substances a shared commitment to each other and for addressing illness emerges. In this way, as cultural objects, medications, whether traditional or biomedical, become central to familial ties and supports. Routine practices around the sourcing and use of medications also cement cultural ties and a shared identity as Tongan people.

While Tongan households in New Zealand contain Western medications, they also contain *faito'o fakatonga.* Studies have found that Tongan people utilise both western and *faito'o fakatonga* health systems (Bassett & Holt, 2002; Bloomfield, 2002; McGrath, 1999; Toafa et al., 1999; Viliami Toafa et al., 2001) which is evidence to Tongan people's pluralistic attitude to healing (McGrath, 1999). Although, Tongan people in some cases have a clear preference for either traditional or biomedical treatments, when the need arises many behave pragmatically and will test out or utilise a variety of medicines until they discover an effective treatment (Bassett & Holt, 2002; McGrath, 1999).

Tongan households secure medications from various sources. Western medications are typically sourced, on prescription, from pharmacies. However, this is not the only source for Western medications. As seen in the Pua Tonga household, western medication can be obtained through competitions. *Faito'o fakatonga* used to alleviate 'ordinary' or mundane ailments are prepared by householders themselves when resources are accessible and sufficient knowledge available. This was apparent in the Mohokoi household. However, for more severe ailments, the *kau faito'o fakatonga* are visited to formulate and supply treatments.

Tongan households in this study also treat medications by distributing them to family and friends both within and outside of New Zealand. Sharing is a common means of obtaining medications (Bloomfield, 2002) but applies mostly to *faito'o fakatonga* rather than Western medications. In this context, the distribution of medication signifies the culture value of *'ofa* (love). Sharing material things are one of the actions Tongan people use to express *'ofa* for their friends and family (Bloomfield, 2002). This process of sharing replicates traditional social relationship within families and communities not only in New Zealand but also in Tonga. Although Tongan people have migrated to New Zealand, they continue to nurture their attachments to Tonga through the practice of *anga fakatonga* (Lee, 2003; O Ka'ili, 2005). Medications flow into these relationships and come to symbolise both the relationship and the values and customs related to being a 'good' relation. Of the four households, the Mohokoi householders were the most frequent users and had the most knowledge of *faito'o fakatonga.* It may be suggested that with a household with many children, using *faito'o fakatonga* is less costly than making a visit to a Western doctor and having to pay for Western medication.

Family and friends are the principal transporters of medications which track social relationships within the home and beyond. Using friends and family for the flow of medication is not only efficient in terms of security and fast transporting but it also reflects financial issues, especially in the situation where medications flow between New Zealand and Tonga. The existence of medication use and sharing or flow which transcends the boundaries of a single domestic dwelling, and extends

to a network of households in New Zealand and back to Tonga; signifies that Tongan people live their lives and experience home across household and in both New Zealand and Tonga. Medications become part of their home-making practices that span various locales. Tongan people live homed lives and conduct their relationships across domestic dwellings and internationally across New Zealand and Tonga and therefore home making is complex and not necessarily linked to one domestic setting (Hodgetts et al., under review).

In a Tongan context, medication is linked to home making and so understanding this is central to appreciating the significance of my findings relating to the flow of medication. Regardless of physical locale, home-making encompasses the 'construction' of a physical, emotional and social setting that exhibits the social relationships maintained by Tongan people. For Tongans, home is a domestic space, but it is also a network of dwellings, within a Tongan village, or across the suburbs of South Auckland. It is a space which facilitates people's daily practices, including those relating to care where routine and familiarity is gained and safety maintained (Mallet, 2004). People actually build routines in their use of medications in turn, serving to make a home. Medication gives an assurance about illness and those functions of care at home ties medications in to be a part of that.

Medications are social objects which through discussion, came to symbolise memories about place and social relationships. Morgan and Pritchard (2005) note that "…conversation about souvenirs inevitably becomes talk about place and sense memory and evolves into narratives of self identity" (p.31). This occurs for my participants in relation to talk about the sourcing and sharing of medications. These memories are evidence to home making carried out through relationships spanning from neighbours to abroad (Morgan and Pritchard, 2005). This is the rationale underpinning the importance of flows as Tongan home making is far from static. Medications as sourced and subsumed within relationships that span a single dwelling, cluster of houses and between New Zealand and Tonga. The sharing of advice and substances becomes an enactment of cultural patterned relationships between my participants.

There were households in my study that were multi-generational, where residents are both Tongan and New Zealand born. Social relationships with Tongan and Western worlds occur at varying degrees, primarily, through school, work and church (Lee, 2003). The extent to which Tongan people directly or indirectly interact with these two worlds influences their use and understanding of each respective health system and related technologies. Where a Tongan person has modest experiences of the Western and Tongan health systems, they are more likely to take direction on health from someone they trust, and in accord with hierarchical structures reviewed in Chapter One.

Medications are stockpiled by Tongan householders in two ways; one is simple and the other is dynamic. If medication requires refrigerating then it is stored in the refrigerator. If medication does not require refrigeration then participants in this study stored their medication in places compatible with their daily routines. Medication was placed in locations where it allowed people to move along with their daily business. Medication, then, can be read as a mundane and unremarkable part of their daily lives, irrespective of whether they are Western medication or *faito'o fakatonga.*

Accessibility is a key notion when considering Tongan people and their use of medication. The utilisation of western medication and *faito'o fakatonga* both have demands on its users. Tongan people sort through factors such as the cost of the treatment, travel distance to where the treatment can be receive, whether or not the patient will understand the language spoken by the curer, the attitude of the curer towards them, and the degree of privacy that is offered by the health system. All these factors contribute to decision-making processes. This implies that Tongan people's decision of which medication to utilise is a complex, rather than a straight forward process.

Ailments are not the only factor which play a role in determining which medications Tonga people use (Bloomfield, 2002), rather it is the context in which it primarily affects, such as work or family. Western medication is preferred as its services are recognised by the society in which New Zealand operates. Legitimising absences from work due to illness dictates which health system is

used. Therefore, in the case where Tongan people vouch for the effectiveness of *faito'o fakatonga* for an illness, this becomes secondary to what society recognises. In other words, living in New Zealand for Tongan people automatically dictates the use of Western medication in some situations.

As mentioned earlier, which health system is utilised becomes less important to using a particular treatment that is effective (McGrath, 1999). This directly applies to when an ailment inhibits the practice of the affected person's role and *fatongia* (duty). Or in other words, *fatongia* is subsumed when treatments is required. The role of a mother or a father in a family can be common among other families and cultures. However in the Tongan context, a certain person may hold a particular role within the family or the community which may be determined by birth rights, and so that role cannot easily be replaced by another. Therefore, when a person cannot provide for his family or community, the most effective treatment is sorted to eliminate the ailment as quickly as possible (Bloomfield, 2002).

While Tongan people appear to immediately resort to medications for treatment, they also understand medication as only one aspect to which health is maintained. There is more than one aspect to maintaining or improving a Tongan person's health. *Tapu* in social relationships must be maintained or, when reduced or violated, restored as quickly as possible (Bloomfield, 2002). The notion of understanding medication is similar to that of a *vaka* (vessel) where God's love and healing for his people is communicated through medications (Bloomfield, 2002). It is fair to say that Tongan people have many pathways to health not only through western and *faito'o fakatonga* but also through maintaining social relationships and through faith and prayer (Bloomfield, 2002).

As previously discussed, although other cultures may frown upon the sharing of medications, Tongan people understand it as a means to maintaining and nurturing their social relationships. Furthermore we can conclude that Tongan people are not only accepting of medications as a pathway to health but also accept the effectiveness of western medication and *faito'o fakatonga* both independently and in association with each other.

Medications, also become objects of ritual, and ritualised objects. They come to form part of morning routines, bathing routines, eating routines, night time and prayer routines. They permit people to exit the space of the home, facilitating work, recreation, social and worship encounters away from the dwelling space. As ritualised objects, they become objects of faith and trust, and instruments of God for which the recipient and their carers must focus their thoughts through prayer, forgiveness and right actions. Medications, as ritualised objects, in this way, take on a meditational quality between the individual, the household and God.

Research limitations and future directions

The current research was limited by the lack of previous research into the everyday use of medications that attends to the complexity of cultural differences. This made it difficult to interpret findings in relation to an established body of knowledge. To a certain degree, this study and the findings, must navigate its way in uncharted waters. This highlights the need for more research in this area.

Inevitably, working across languages and cultural paradigms, something will get lost in translation. While writing in English about non-English ideas has its limitation, the minority researcher must find some way of communicating and promoting and understanding of Tongan life ways, worldviews and traditional practices. English is a second language to both the researcher and participants. The information for the research and conducting the research in itself was translated to some participants in Tongan; and as seen in Chapter Two the data was then translated back into English, and now, produced as a report in English. Between Tongan and English languages, there are many words, phrases and expressions that do not have the exact or even a similar translation. he process of translation, although intended to encourage understanding, risks losing meaning and context. If the study was to be replicated and these limitations overcome, then the information sheets should be in Tongan, data collection conducted in Tongan, the final report presented in Tongan, and the work read in Tongan. While this would result in a valuable document accessible to Tongan readers and of interest to them, the reality is that the work would remain inaccessible to New Zealand health professionals and policy makers, the very groups of people with the power

to bring about changes implied in this study. The minority researcher is therefore lodged in a space dominated by a monolinguistic readership.

Having family members as participants, presents both advantages and disadvantages. The advantages, as presented in Chapter Two, are that: trust and relationships already exist between researcher and participant; and the participants are largely accessible. However, as an 'insider' there were risks of the researcher making assumptions of the participants' understanding; and vice versa, where the participants unconsciously assumed that some ideas do not require discussion or elaboration as the researcher is already aware.

There are areas which this study has highlighted as possibilities for future research. The need for research on the use and flow of *fo'i 'akau niumonia* between Tongan people in New Zealand, and between Tonga and New Zealand, is one possible area of inquiry. While many Western medications brought in from Tonga are also prescribed in New Zealand, people visiting Tonga can more easily access medication in Tonga, even when they are well. How *fo'i 'akau niumonia* is used in New Zealand, who it is used by, who it is shared with, what symptoms dictate the use of *fo'i 'akau niumonia,* are all possible areas for future inquiry.

I found very little research that explored the efficacy of *Faito'o fakatonga*. Moreover, there was no research that investigated possible interactions between Western medications and *faito'o fakatonga.* While participants in this study were of the opinion that the simultaneous use of Western medication and *faito'o fakatonga* did not pose any risks, both substances have chemical compositions that potentially could interact with the possibility of negative outcomes.

To conclude, in this study I set out to explore the social lives of medications in Tongan households in New Zealand. I found members of households getting on with the task of home making and engaging in their ordinary daily lives as Tongan people. Their lives were structured around Tongan customary relationships, obligations to respect and care, and to have faith that resolutions would be found to any ailments or illnesses suffered by household members. Members clearly had a respect and regard for Western medications and trust in Western practitioners

but were sometimes frustrated by the dominance of this model. The same was mostly true of Tongan medicine and associated healers. Some household members went as far as using both in conjunction with each other. However, across most households, there was the presence of a firm belief that a resolution of health issues required more than medication. Good health was a product of rightful relationships and faith and trust, in medications, health practitioners and God.

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Appendix A: Medications in Everyday Life Information Sheet

Medications in everyday life

Information Sheet

What is this research about?

Medications are widely available and commonly used by many people in New Zealand today. However, we know very little about how medications are understood by people, and how they are used in people's homes. This research aims to investigate popular understandings of medications and their uses. It is concerned with medications of all sorts – prescription medicines, over-the-counter medicines, alternative medicines and dietary supplements. It is important to note that we are not interested in any form of illegal drugs. The research is being undertaken by a team from Massey, Waikato, Otago and Victoria universities and is currently funded by grants from the Health Research Council and the Royal Society of New Zealand.

What is involved?

We are seeking to work with Pacific households of least three people, including an adult (16 or older). We have a number of tasks, outlined below, that we would like to complete in each household, although it may not be possible to do every one of these in any particular household. Which of these we complete in each household can be decided by the household members involved. The specific components of the research are:

Initial household discussion

First, we will hold a household discussion with all members of your household who are interested to participate. This will take place in your home, and involve a general discussion about medications, their meanings and what you do with them. We will also ask you about all the medications in your home, and to draw a rough plan of your house and locate on it the places where you keep medications. We would also like to photograph these settings and link them to the plan, but we will only do this with your permission. We would also like to see the range of medications, and related things like pill organisers and inhalers, that you have in the house, but only those things you are willing to show us. The discussion will be digitally recorded and transcribed so that the research team can complete their analyses. This meeting should last around two to two-and-a-half hours altogether.

Then we have three different projects that we would like different people within the household to complete. Anyone who is 12 years of age or more could do these, and it is not essential that we do all of them – it depends on how many people are present and who is interested to do each.

a) Carrying out a photo project

One person from the household will be asked to take photos of anything about medications – photos that show us "the world of medications". We will provide detailed information on what is involved in this process. Photographs can be taken on your own digital camera or we can give you a disposable camera. These photographs will be printed and discussed in a recorded interview with the person who took them. The person will have two weeks to take the photographs, and the interview to discuss the photos will take about one hour.

b) Keeping a medication use diary

One other person in the household, will be asked to keep a medication diary. This involves keeping a daily record of any medications taken each day for a week, and writing brief notes about that at the end of each day. We will provide detailed information on what is involved to this person. The person will then discuss the diary content with us in an interview after the week is over. This should take no more than three hours altogether, including the interview of about one hour, which will be recorded for analysis.

c) Keeping a general medication diary

Another person in the household will be asked to keep a diary for one week, noting any time that medications of any sort come to attention in any way (while watching television, reading magazines, shopping, and so on – wherever medications come to attention). At the end of each day, this person will select one issue and write a little about it. Again, we will provide detailed information on what is involved to this person. After the week is over, we will have a meeting with that person to discuss the diary entries. This should take no more than 3 hours altogether, including the one hour interview which will be recorded for analysis.

Finally, after these tasks are completed, we will have a closing household discussion with everyone involved to review the project and to gather reactions and comments from household members. This discussion will take less than 2 hours, and will also be recorded for analysis. Your household will be given a $100 voucher after the closing discussion as compensation for all the time this will involve.

How can you participate?

You are invited to take part in this study if your Pacific household includes at least three people, one of whom is 16 or over. If this is the case, please discuss the project with members of your household and then contact [Researcher Name] from [University Name] to discuss your participation. [His/Her] contact information is given below. [He/She] will answer any questions you have and make a time to come and meet with the members of your household who are interested to participate.

What are your rights if you decide to participate?

If your household is willing to take part in this research, you should know that all the information you provide during the study will be kept completely confidential. All the data will be stored in a secure place, and no one other than the researchers will have access to it without your consent. Your names will not be used to identify the materials, or used in any reports that come out of the research. Any personal or identifying features that are mentioned will be altered to make sure that everyone remains anonymous. The materials collected in the study will be used in the analysis for the research, and brief extracts from the interviews or diaries may be used in publications and presentations arising from the research. However, we will take care to ensure that these will not identify

you in any way. We may also use the house plan and photographs in publications and presentations from the research, but these would have all identifying features masked.

You should also know that you have the following rights:

- Members of your household do not have to take part in this study at all, or in any specific component of it; anyone is free to decline.
- Members of your household can ask questions about the research before agreeing to take part, and anyone who agrees to take part can ask questions about the research in general, or any specific component of it, at any time during the study.
- Anyone taking part in the research can decline to talk about any issues, during any of our discussions.
- Anyone taking part in the research can ask for the recorder to be turned off at any time during discussions.
- Your household can withdraw completely from the study up to two weeks after our closing discussion. If you do, all recordings, transcripts, your house plan, and any photographs taken will be destroyed.
- You can request a summary of the findings to be sent to your household when the study is concluded.

How can you contact us?

Dr Linda Waimarie Nikora
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Ph 07 856 2889 ext 8200
Email: psyc2046@waikato.ac.nz

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Mrs Helen Madden
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Private Bag 102904
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Ph: 09 414 0800 ext 41220
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If I have any concerns about this project, I may contact the convenor of the Research and Ethics Committee (Dr Robert Isler, phone: 838 4466 ext. 8401, e-mail r.isler@waikato.ac.nz)

Appendix B: Medications in Everyday Life Consent Form

Massey University

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Research reference:

Medications in everyday life

Consent Form

We have read the Information Sheet and have had the details of the study explained to me. Our questions have been answered to our satisfaction, and we understand that we may ask further questions at any time.

We agree to participate in this study under the conditions set out in the Information Sheet.

We also consent for data from this project, with all identifying features removed, to be archived for further research projects and teaching purposes Yes ☐ No ☐

Date: _____

Signature: _____ Signature: _____

Full name (printed): _____ Full name (printed): _____

Signature: _____ Signature: _____

Full name (printed): _____ Full name (printed): _____

Signature: _____ Signature: _____

Full name (printed). _____ Full name (printed). _____

Which $100 voucher would you like to be sent to you (please tick):

Pak 'n' Save ☐ Countdown ☐ Foodtown ☐ Warehouse ☐ Petrol voucher ☐

Would you like to receive a summary of the results? Yes ☐ No ☐

Name: _____

Email address: _____

or

Postal Address: _____

_____

_____

If I have any concerns about this project, I may contact the convenor of the Research and Ethics Committee (Dr Robert Isler, phone: 838 4466 ext. 8401, e-mail r.isler@waikato.ac.nz)

Appendix C: Initial Household Discussion Interview Topics

The following list of topics are to be covered by the researcher during the initial household discussion:

- The meanings of medications (our primary focus)
- Personal medication use, including the use of alternative medications and supplements, and storage (who in the household takes medications, what medications are taken, where and how are they taken, what are they used for, where are they stored in the home)
- The flow of medications through the household and beyond (how the medications arrived, if and how medications move beyond the house, how are medications disposed of)
- What material objects in the home are related to medication use (e.g., first aid kits, glucose meters, asthma inhalers, storage containers)
- Availability of medications in society today
- Uses beyond the prescribed
- Medications beyond prescription (supplements, pharmacy only, OTC, alternative – include inhalers, topical creams)
- Issus of prevention/promotion/maintenance/cure (relation between)
- Morality – good/bad – Why? How?
- Risk – safety, adherence, responsibility
- Personal approach to medications (resisting/passive or active acceptance, etc)
- Relationships involving medications (sharing, caring, taking, nagging)
- Consumerism – DTC marketing/pharma/regulation, etc

Appendix D: Example of a Household Mapping Exercise

Appendix E: Medication Use Diary Information Sheet

Medication Use Diary Information Sheet

What is this part of the research about?

You have already agreed to be the person in your household who will take part in the medication use diary project for the research. In this part of the research we would like you to keep a diary recording all the medications you take or give to others in the household each day for a week. This includes medications of any type – prescription medicines, over-the-counter medicines, alternative medicines, dietary supplements, health care remedies. Also, at the end of each day, we would like you to think about one episode of medication use from that day and write brief notes or comments on that episode. We will give you a diary to record the daily medications use and you can use this to write your brief daily comment if you wish. Alternatively you could keep your comments on an audio recording or typed onto your computer, as you chose. This diary will then be the focus for a personal interview at the end of the week, where the meanings of your diary entries will be discussed. The interview will be conducted by [Local Researcher], will take about one hour, and will be recorded and transcribed for analysis.

What are your rights if you decide to participate?

The information you provide in the diary and the interview will be kept completely confidential, and any personal or identifying features will be altered to ensure anonymity. All the data will be stored in a secure place, and no one other than the researchers will have access to it without your consent. Your name will not be used to identify the materials or in any reports that come out of the research. The materials collected in the study will be used in the analysis for the research, and brief extracts from the diary and interview may be used in publications and presentations arising from the research.

You should also know that you have the following rights:

- You are under no obligation to take part in this project.
- You can ask questions about the research before agreeing to take part, and about the project at any time during the study.
- You can decline to talk about any issues during our discussion.
- You can ask for the recorder to be turned off at any time during the discussion.
- You may withdraw from the project up to two weeks after our discussion. If you do, the recording of our discussion and your diary will be destroyed.

How can you contact us?

Dr Linda Waimarie Nikora
Maori & Psychology Research Unit
Faculty of Arts and Social Sciences
University of Waikato

Ph 07 856 2889 ext 8200
Email: psyc2046@waikato.ac.nz

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Ph 07 856 2889 ext 6456
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Professor Kerry Chamberlain
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Mrs Helen Madden
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If I have any concerns about this project, I may contact the convenor of the Research and Ethics Committee (Dr Robert Isler, phone: 838 4466 ext. 8401, e-mail r.isler@waikato.ac.nz)

Appendix F: General Medications Diary Information Sheet

General Medications Diary Information Sheet

What is this part of the research about?

You have already agreed to be the person in your household who will take part in keeping a general medications diary for the research. In this part of the research we would like you to keep a diary recording any time that medications of any sort come to attention in any way (while watching television, reading magazines, shopping, and so on – wherever medications come to attention). This can include medications of all types – prescription medicines, over-the-counter medicines, alternative medicines, dietary supplements, health care remedies. Also, at the end of each day, we would like you to think about one episode when medications came to your attention that day and write brief notes or comments on that episode. We will give you a diary to record these daily medications episodes and you can use this to write your brief daily comment if you wish. Alternatively you could keep your comments on an audio recording or typed onto your computer, as you chose. This diary will then be the focus for a personal interview at the end of the week, where the meanings of your diary entries will be discussed. The interview will be conducted by [Local Researcher], will take about one hour, and will be recorded and transcribed for analysis.

What are your rights if you decide to participate?

The information you provide in the diary and the interview will be kept completely confidential, and any personal or identifying features will be altered to ensure anonymity. All the data will be stored in a secure place, and no one other than the researchers will have access to it without your consent. Your name will not be used to identify the materials or in any reports that come out of the research. The materials collected in the study will be used in the analysis for the research, and brief extracts from the diary and interview may be used in publications and presentations arising from the research.

You should also know that you have the following rights:

- You are under no obligation to take part in this project.
- You can ask questions about the research before agreeing to take part, and about the project at any time during the study.
- You can decline to talk about any issues during our discussion.
- You can ask for the recorder to be turned off at any time during the discussion.
- You may withdraw from the project up to two weeks after our discussion. If you do, the recording of our discussion and your diary will be destroyed.

How can you contact us?

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Appendix G: Photo Elicitation Information Sheet

Photo Information Sheet

What is this part of the research about?

You have already agreed to be the person in your household who will take part in the photo project for the research. In this part of the research we would like you to take photos of anything about medications – photos that show us how you see "the world of medications". These photographs may be about any aspect of medications that you want to show – we do not have any specific expectations about the nature or type of photographs you might take, only that they will involve medications in some way.

The photographs can be taken on your own digital camera or we can give you a disposable camera. You should take the photographs over the next two weeks. Please note that you may take photos of people in public places, but you must obtain their consent to take photographs of them when they are not in public places. Once you have taken around 15-25 photographs, please get in touch with me, [Local Researcher], and let me know you have completed the project. I will then make a time that is convenient to discuss your photos with me. This discussion will cover the meanings of the photos and what you consider they show about medications. It will take us about one hour and will be recorded and transcribed for analysis.

What are your rights if you decide to participate?

If the photographs you take involve identifiable people we will mask their features to ensure that they cannot be identified. The information you provide during the interview will be kept completely confidential, and any personal or identifying features will be altered to ensure anonymity. All the data will be stored in a secure place, and no one other than the researchers will have access to it without your consent. Your name will not be used to identify the materials or in any reports that come out of the research. The materials collected in the study will be used in the analysis for the research, and brief extracts from the interview and some photographs (with identifying features masked) may be used in publications and presentations arising from the research.

You should also know that you have the following rights:

- You are under no obligation to take part in this project.
- You can ask questions about the research before agreeing to take part, and about the project at any time during the study.
- You can decline to talk about any issues during our discussion.
- You can ask for the recorder to be turned off at any time during the discussion.
- You may withdraw from the project up to two weeks after our discussion. If you do, the recording of our discussion and your photographs will be destroyed.

How can you contact us?

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Appendix H: Medication Use Diary Consent Form

Research reference:

Medications in everyday life

Consent Form

Medication Use Diary

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet

Signature: _____ Date: _____

Full Name – printed _____

If I have any concerns about this project, I may contact the convenor of the Research and Ethics Committee (Dr Robert Isler, phone: 838 4466 ext. 8401, e-mail r.isler@waikato.ac.nz)

Appendix I: General Medications Diary Consent Form

Massey University

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Research reference:

Medications in everyday life

Consent Form

General Medications Diary

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet

Signature: _____ Date: _____

Full Name – printed _____

If I have any concerns about this project, I may contact the convenor of the Research and Ethics

Committee (Dr Robert Isler, phone: 838 4466 ext. 8401, e-mail r.isler@waikato.ac.nz)

Appendix J: Photo Elicitation consent form

Research reference:

Medications in everyday life

Consent Form

Photographs

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet

Signature: _____ Date: _____

Full Name – printed _____

If I have any concerns about this project, I may contact the convenor of the Research and Ethics

Committee (Dr Robert Isler, phone: 838 4466 ext. 8401, e-mail r.isler@waikato.ac.nz)