What really does it have to do with Osteopathy anyway?
New Zealand osteopath practitioners talk about rural Māori health

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Abstract

This thesis reports findings from a qualitative research project, investigating how New Zealand osteopath practitioners talk about rural Māori health. The primary research question asked, *How can osteopath practitioners contribute to rural Māori well-being (with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand)?* Secondary aims were to ascertain the sources of information used and accessibility of osteopathy health care, the prevalence of musculo-skeletal disorders among rural Māori, as well as identifying the tensions and factors associated with rural osteopathy practice.

The data was collected from semi-structured interviews with eight osteopath practitioners working in Hawke's Bay on the topic of rural Māori health, and subjected to detailed qualitative narrative analysis. This analysis identified critical patterning of particular topics, revealed by practitioners in their interviews, bringing to light themes.

The research findings showed that osteopath practitioners viewed engagement and effective relationship building as vital to their clinical practice with rural Māori. They also exhibited a willingness to acknowledge culture and recognise the Treaty of Waitangi in their daily practice, but often sought clarity on how this could be achieved. The potential for collaboration between Māori health perspectives and the osteopathy scientific tradition was high as they were shown to share a number of philosophical positions.

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Chapter One: Introduction

> We all have a role to play in reducing inequalities of health in New Zealand. Regardless of how we measure health, we find that particular groups are consistently disadvantaged in regard to health. And these inequalities affect us all. (Ministry of Health, 2002, p. vii)

This quote was chosen as it highlights that equity is a key aspect of New Zealand's primary health care sector (King, 2001). The osteopathy profession sits within this sector and has an important role of ensuring practitioners are prepared to meet the challenge of addressing Māori health. Osteopath practitioners in New Zealand work with Māori and the following project will explore this health profession. This chapter introduces the research objectives, rationale (academic and personal) for the research, implications for osteopathy practice and a description of the chapters to follow.

Research objectives

This project aimed to explore the perspectives of non-Māori osteopath practitioners working with rural Māori. In particular, the focus was to look at the interaction between practitioners and their rural Māori patients, regarding the merit of engagement and effective relationship building within this relationship. The primary research question asked how osteopath practitioners can contribute to rural Māori well-being. Secondary aims were to ascertain practitioners sources of information which influenced their osteopathy practice, including the role of the Treaty of Waitangi. Also, the potential for collaboration between Māori health perspectives and the osteopathy scientific tradition was sought, including Māori health models and how osteopathy training and education has influenced practitioners in this regard. Factors identifying the tensions associated with rural osteopathy practice were also explored.

The framework underpinning the methodology of this research was Māori-centred and Māori research. Narrative and thematic qualitative research encouraged subjective thought to be explored, through semi-structured interviews and this corresponded well with a Māori-centred philosophy. Even though this project was about privileging non-Māori voices, it was driven by a set of Māori kaupapa and tikanga,[1] which are consistent with Māori worldviews, to bring greater focus to, and

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[1] Māori Kaupapa refers to Māori focused. Tikanga refers to Māori procedure (correct procedure) and custom.

improve co-ordination of, activity. The activity is aimed towards bringing about population-level health gains for Māori.

Within this project are key features which are consistently evident as issues for the next generation of Māori osteopath practitioners coming through the profession, who may seek new approaches to ongoing issues through their research and methodological approaches. The phenomena described can represent the partnership between Māori and the osteopathy profession to improve Māori health, both partners working together, to gain greater understanding.

Rationale for the research

This study is an important contribution to the existing body of Māori health literature on the evolution of an holistic health care system which is patient centred – osteopathy. Also, the potential that the osteopathy profession may have on Māori health development. More research and study regarding the various aspects of training and practice of osteopath practitioners and their attention to Māori health is needed. Expanded knowledge in this area may influence how osteopathy students are recruited by the sole provider of osteopathy training (Unitec Institute of Technology (Unitec)),[2] what courses are offered to Māori, and how the professional training and philosophy of Māori health and well-being within the osteopathy profession will impact the practice of osteopathy in the future.

This study provides the osteopathy profession with some understanding of why their practitioners choose to train in osteopathy medicine and work in rural areas, how their training has helped them achieve their goals, and how their training and goals influence their practice in terms of their Māori patients' health and well-being.

In New Zealand, musculo-skeletal injury and disorders are the leading cause of disability, affecting one in four adults and accounts for at least 25 percent of the total annual health costs (Bossley & Miles, 2009). The impact of these is expected to increase worldwide with the predicted ageing of the world's population (Pfleger & Woolf, 2003). There has been no osteopathy research undertaken to understand the burden of the potential impact rising musculo-skeletal injury and disorders will have on rural Māori, an overview of the status of Māori in New Zealand and relevant demographic features of the Māori population nationally, including a profile of rural Māori in Hawke's Bay (where this project was conducted) New Zealand is needed.

There has been no research exploring the background of rural osteopathy practice in New Zealand and the specific issues of rural practice in relation to

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[2] Unitec refers to the only New Zealand-based osteopathy programme. Unitec is the only provider of osteopathic education in New Zealand, and one of only four in Australasia.

musculo-skeletal disorders and Māori health and well-being, as described by rural osteopath practitioners themselves. A New Zealand rural health study (Carter & Moritz, 2004) has identified major issues of rural health practice in relation to the rural workforce. This is mainly in relation to a relatively inexperienced practitioner base of rural medical practitioners, with over 57 percent of rural practitioners, having been in rural practice for less than 10 years, although many of these (48 percent) had a rural background (ibid). London (2001) has suggested allied practitioner-led services could provide continuity of service in rural communities, in the face of the loss of General Practitioners (GPs). Similarly, Ross (1998) has suggested that allied practitioners (nurses) in rural areas of New Zealand are already providing what are recognised as advanced primary health care services to the more remote rural communities (ibid). Potentially these findings, open the door to the osteopathy profession to find ways in which they can assist rural communities by bringing about population-level health gains.

Personal rationale

This project is influenced according to my worldview, through which I have analysed the findings. My upbringing and cultural background therefore shape this project and it is within this context that I discuss my rationale for this project. As a child, I was fortunate when my parents made an effort to take us back to Dad's, *home* in Ruatoria and Hicks Bay for holidays. I grew up around Nanny Tepora and Papa Hori whose medicine cabinet was what we as children referred to as, *the bush*.[3] These experiences sparked my imagination and journey into health care and tertiary studies at the London School of Osteopathy and London Academy of Traditional Chinese Medicine and Acupuncture.

Upon my return to New Zealand and commencing private practice, the rationale for this project came about as a result of discussions with Māori health researchers and those working in the area of rural health. We discussed how important it is that health professionals, specifically osteopath practitioners working with Māori may benefit their practice when they understand their distinctive needs. This lead me to question: *what training has influenced osteopath practitioners in their rural Māori practice?*

My attention was drawn to my personal experience of osteopathy training in the United Kingdom, attendance to post-graduate osteopathy cultural competence training, peer group meetings and the curricula of the sole provider of osteopathy

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[3] *The Bush,* refers to Rongoa Māori (traditional Māori medicine) (although this was a term which we never used, the inference is made here).

training in New Zealand (Unitec). I had trouble locating an osteopathy perspective on the principle of Tino Rangatiratanga (self-determination), underpinning aspirations for Māori health and well-being, within the profession, on any level. This promoted me to ask, *how does the Treaty of Waitangi influence osteopath practitioners in practice?*

I worked on District Health Board (DHB) funded projects providing osteopathy to tangata whaiora rangatahi Māori.[4] The primary aim being to assist in the reduction of their stress levels, reduce musculo-skeletal pain and tension, and prevent rangatahi from requiring access to the Inpatient Unit (Mental Health and Addiction Services patient unit). I identified with Māori models of practice and felt at home working within Māori mental health. I also saw the benefit of the medical model. This lead me to question, *what holistic perspectives do osteopath practitioners hold, which are in sync with Māori health and well-being? To what extent do osteopath practitioners utilise Māori health models?*

My clinical work with rangatahi and other Māori, utilising Māori knowledge and the osteopathy scientific tradition together helped. Osteopathy treatment was pivotal for many rangatahi tangata whaiora's recovery and avoidance from admittance to the inpatients unit, through stress reduction and amelioration of their musculo-skeletal pain and disorders. I gained experience and examples in the process of the effect of empowering the patient and working with the whānau as a powerful way of achieving things.[5]

Through my experiences of undertaking the Masters of Health Science, majoring in Māori mental health, I came to understand the impact of dominant discourses. These tended to shape perceptions and perspectives, including my own Māori identity. I became proficient at recognising and articulating structural and systemic failings that impact on Māori. These thoughts and experiences have developed my interest in the objectives of this project in terms of presenting opportunities to help Māori but at the same time ensuring that the osteopathy profession appeals to Māori, as a health care option which is respectful of Māori culture.[6]

My interest in contributing in this way is to make a difference, to reflect on what osteopathy information and care may be helpful, to making the journey for Māori easier. These are some of the questions that led me to the research question for this

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[4] Tangata whaiora refers to mental health consumers, Rangatahi Māori refers to Māori under 25 years.
[5] Whānau refers to family, extended family, friends and community.
[6] Objectives of this project refers to, How does the Treaty of Waitangi influence osteopathic practitioners in practice? What holistic perspectives do osteopathic hold, which are in sync with Māori health and well-being? To what extent do osteopathic utilise Māori health models? What training has influenced osteopathic in their rural Māori practice?

master"s thesis. These relate to social justice, the need to achieve equitable outcomes within osteopathy practice, and, as a stakeholder myself, a wish to find some answers.

Implications for osteopathy practice

The implications for osteopathy practice as a relatively young profession in rural New Zealand is a lack of workforce design. Boddy, Budge & Carryer (2011) have highlighted this as being an issue amongst rural primary care practitioners and the need to strengthen linkages between policy development, scholarship investment, employment creation, funding streams, regulation and overall communication within and throughout the rural health care sector (ibid).

There is value of increased dialogue with the regulatory body, the Osteopath Council of New Zealand, and for Associations to be pro-active. Particularly if osteopath practitioners are to address the specific problems which rural osteopath practitoners may address, in terms of Māori health and well-being. These include debating what are the competencies which are directly related to cultural competency, knowledge, skill and patient safety. As numerous reports (Goodyear-Smith & Janes, 2006; National Health Committee, 2010; New Zealand Institute of Rural Health, 2009) attest to the current and worsening workforce challenges in New Zealand it seems surprising that the implementation of a role such as rural osteopath practitioner has been left largely to chance and goodwill.

In terms of workforce issues, the osteopathy profession's history in rural health care is in its infancy and therefore potentially lacks succession planning. There are no current post-graduate mentoring structures to support osteopath practitioners to and through their rural journey of osteopathy practice. This brings into question the ways in which rural osteopath practitioners prevent burnout and gain support in times of self-doubt. According to Boddy, et al. (2011), where support is formally or informally available in the rural health care setting, it makes a considerable difference to the practitioner's practice and has been noted by practitioners as being, *"invaluable"* (ibid, p. 25). Realistically, a level of flexibility would be required when operating a mentorship programme, due to the small number of rural osteopath practitioners in New Zealand, which means that they are likely to be geographically distant.

Description of each chapter

The first chapter, Chapter One: Introduction, has set the scene for the chapters which follow, by introducing the research question, rationale and justification for the research, including a personal point of view.

Chapter Two: Literature Review, presents the literature review examining relevant research relating to this broad topic area. Research is sourced from a range of areas and key themes identified. This provides a platform and direction that is the foundation of the research.

Chapter Three: Methodology, describes the research design. Certain aspects of Māori centred, Māori Research and the Māori framework which integrates these elements is discussed. Explanation is provided as to how this framework underpins the methodological process. A rationale for using qualitative research and the selection of semi-structured interviews is presented. The results and ethical analysis are presented from a Māori and a university ethics perspective. The participant recruitment criteria and journey is highlighted.

Chapter Four: Results, combines the interview results and discussion. Key themes are highlighted, of the narrative analysis. Participant quotes are provided to support the themes.

Chapter Five: Discussion/Recommendations, explores the themes in further detail. There is comparison and contrast made with the current literature in this field as a summary of the research is provided. This includes key points made, reflections of the research journey, limitations of the research and recommendations for future research.

Conclusion

The purpose of this chapter was to introduce the research question, rationale for this project and structure to the format of this thesis which asks: *How can osteopath practitioners contribute to rural Māori well-being (with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand)?* Background information has been provided in the areas of Māori, including rural Māori, musculo-skeletal disorders, and osteopathy practice. A personal rationale was also presented. The integration of these points was the rationale and foundation for this project.

Chapter Two: Literature review

Musculo-skeletal health of rural Māori

> The impact of musculo-skeletal injury and disorders on individuals and society is expected to increase dramatically … the predicted ageing of the world's population … will markedly increase the number of people affected by these conditions. (Pfleger & Woolf , 2003, p. 653)

Crippling diseases, deformities, and the development of musculo-skeletal disorders are expected to significantly increase throughout the developed world by the year 2020 (Pfleger & Woolf , 2003). The extent of the problem and its burden on society has been shaped by wider societal beliefs and values (ibid). These are thought to have been constrained, due to the public's awareness having been directed away by public health care policy makers around the world and on to acute and infectious illnesses (Henkel, 2008).

To understand the burden of the potential impact rising musculo-skeletal injury and disorders will have on rural Māori, an overview of the status of Māori in New Zealand is presented. This will show relevant demographic features of the Māori population nationally, including a profile of rural Māori in Hawke's Bay, New Zealand. This chapter also provides basic definitions and classifications of musculo-skeletal conditions as used in the literature, followed by a discussion of musculo-skeletal health in relation to rural Māori health and well-being. Further to this, an outline of the societal impact of musculo-skeletal conditions and future trends is presented. These relate to the impact of musculo-skeletal injury and disorders to give an indication of potential areas for intervention. Access to, and appropriateness of osteopathy health care services for rural Māori, including Māori health initiatives are also discussed. The literature pertains to musculo-skeletal injury and disorders, and in particular osteopathy as an intervention, where available.

Osteopathy practice

Osteopathy is a hands on therapy and uses a range of techniques which aim to restore a person's abnormal physical conditions (Trowbridge, 1991). Osteopath practitioners are front line health professionals who work with other registered health professionals including general practitioners, specialists and radiologists to provide the best service to their patients (Osteopath Council of New Zealand, 2011a).

Osteopathy may be defined as a patient centred health care system (D'Alonzo et al., 2002) which can make a person's life more comfortable (Still, 1899).

Patient centred as a concept is discussed by Hera (2011) which potentially, as a stance, fits cultural safety (focuses on the attitude of practitioner than knowing about other cultures) versus cultural competence which focuses on skills (Wepa, 2005). Hera's (2011) reasoning is that although cultural competence and cultural safety are similar, in terms of concerning the relationship between practitioner-patient, that cultural competence is frequently outlined as being more centred on the practitioner's experience as opposed to cultural safety which centres on the experiences of the patient (ibid, 2011).

Regardless of these definitions, it would appear that these two terms are closely aligned as they strive for ensuring culturally appropriate and respectful professional relationships as occurring in the osteopathy encounter. In this thesis, a definition of patient centred is that the patient can and should determine what is culturally important to their needs. In this context there is space for the patient-practitioner to make the connection as full partners in the health care interaction. In practice the patient is an active party and the process is one, which places the safety of the patient as paramount.

Musculo-skeletal conditions

The term musculo-skeletal diseases and disorders encompasses a diverse group, (see Figure 1, p.21) which are linked together by their reference to, *"pain and impaired physical function"*, these range from disorders which are self-limiting and of short duration (less than 24 hours) to those which are debilitating and lifelong disorders (Pfleger & Woolf , 2003, p. 646).

Classifications of nearly 150 different musculo-skeletal diseases and disorders has changed over time and continue to be debated, making it difficult to determine the availability and reliability of information of certain musculo-skeletal conditions (De Groot, & Samson, 1994). Out of these many diseases and disorders, arthritis is the most common and most prevalent (Harris, Ruddy & Sledge, 1998) (see Table 1, p. 17). Differences in musculo-skeletal disease such as osteoarthritis and osteoporisis are due to the risk factors which are related to lifestyle factors, these differences are reflected in the lifestyles between urban and rural areas.

Table 1. Common musculo-skeletal conditions

Arthritis	Characterised by inflammation of the joints, often resulting in pain, stiffness, disability and deformity (Harris et al., 1998). Arthritis may not be confined to being a singular condition as there are many different types of arthritis (Canadian Arthritis Society, 2004).
Osteoarthritis	Commonly referred to as wear and tear arthritis or degenerative joint condition which tends to affect the weight-bearing joints such as the hips, knees and ankles as well as the hands and spine (Canadian Arthritis Society, 2004). While it is thought to be mainly hereditary, having a history of sustaining injury and other risk factors for osteoarthritis include injuries, repetitive strain and obesity (Watt, 1997).
Rheumatoid arthritis	An auto-immune disease causes chronic inflammation of the joints. It most commonly affects the hand joints and can lead to deformities of the hands (Harris et al., 1998).[7] Alcaraz et al., 1996) found urban regions had a higher diagnosis of osteoarthritis than rural residents. Doebbeling et al., 1998) found that rheumatoid arthritis was more likely to be diagnosed in rural areas (ibid).
Osteoporosis	A bone condition where there is a progressive loss of bone density and decrease in the strength of the skeleton with a resultant risk of fracture (Harris, et al., 1998). Chronic back pain can be attributed to numerous causes including muscle strain or the displacement of an intervertebral disc (ibid). Risk factors for osteoporosis are related to immobility, heavy alcohol use, long-term corticosteroid use, smoking, physical inactivity and low calcium intake (Hochberg & Scott, 1998).

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[7] Autoimmune diseases refers to an immune response of the body where the immune system attacks healthy cells (Riihimaki, 1991).

The impact of musculo-skeletal conditions

The United Nations and World Health Organisation (WHO) has recognised musculo-skeletal conditions as being highly prevalent and a major burden around the world. With their endorsement of Bone and Joint Decade 2000 - 2010 (Woolf, 2000), an estimated 30 percent of American adults are affected by joint pain, swelling or limitation of movement at any one time (Pfleger & Woolf, 2003).[8] They are a major public health concern as the national public expenditure on musculo-skeletal conditions can be substantial (WHO, 2000).

The effects of musculo-skeletal disease on rural communities is scarce in the literature. Epidemiological research demonstrates the prevalence and incidence of musculo-skeletal injury and disorders varies widely between countries, as well as urban and rural populations (Metts, 2000). This tends to reflect different social, political, cultural, economic factors, access to appropriate treatment and lifestyle factors (ibid). Of the literature which is available, most of it focuses on arthritis. One study indicates arthritis is reported most often among residents of rural areas (Alcaraz et al., 1996).

Palmer & Walker-Bone (2002) found in their review of musculo-skeletal injury and disorders in farmers and farm workers in the United Kingdom, that rural farm workers were exposed to a variety of physical hazards and more likely as a group to have a high risk of accidental injury and certain categories of musculo-skeletal injury and disorders such as osteoarthritis of the hip, knee and Low back pain than workers in less physically demanding work. Tractor drivers, in particular, seemed to have more back pain (ibid).

Another study (Doebbeling et al., 1998) found urban residents more likely to have been diagnosed with osteoarthritis but rural residents more likely to be diagnosed with rheumatoid arthritis. Understanding the effect of arthritis in rural communities is dependent on understanding the lifestyle factors related to arthritis and how such factors are distributed in rural populations. Therefore, living in an urban or rural setting can influence a persons exposure to environmental circumstances which might influence the development of musculo-skeletal conditions (ibid). The reported incidence is even higher in indigenous populations (Esdaile & Peschken, 1999).

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[8] Bone and Joint Decade 2000-2010 refers to the establishment of a world-wide awareness campaign which aims to raise awareness of the suffering and cost to society associated with musculo-skeletal disorders on the individual, health care systems and the society.

The prevalence of specific forms of inflammatory arthritis are high in American Indian, Alaska Native and First Nations populations (Janz, Seto & Turner, 2009). Specifically Canada's, Métis face several inequalities, Métis adults were more likely to report being diagnosed with arthritis and/or rheumatism, compared to the total Canadian population (ibid).[9]

In North American Native Blackfoot Indians, Pima Indians and Alaska Eskimos were found to have twice the rate of osteoarthritis of the hands than non-aboriginal populations during the 1960s (Esdaile & Peschken, 1999). In the Kakadu Aboriginal tribe of Northern Australia, gender specific prevalence of osteoarthritis was noted as predominantly affecting the joints of upper and lower limbs (Roberts & Roberts-Thomson, 1999). In Canada, the rates of arthritis for First Nations Inuit peoples, are nearly double that of the general Canadian population (First Nations Centre, 2005) with Inuit adults presenting with the most chronic arthritic conditions (Badley et al., 2003). As the disorders tend to become more prevalent with increasing age, the impact on Inuit peoples is expected to rise as the population continues to age (First Nations Centre, 2005).

Disparate impact of arthritis is also seen between Aboriginal Australian's and the general Australian population (Roberts & Roberts-Thomson, 1999). The situation is comparable in New Zealand with Māori reported to have higher rates of musculo-skeletal injury and disorders than non-Māori (Baker et al., 2007). The inequitable burden among indigenous and minority groups requires further investigation to develop targeted interventions and reduce health disparities (Newbold, 1998).

Current trends in New Zealand

In New Zealand, musculo-skeletal injury and disorders are the leading cause of disability and affect one in four adults and accounts for at least 25 percent of the total annual health costs (Bossley & Miles, 2009). The costs involve treatment, including osteopathy and pharmaceuticals, surgery, medications and pain management, work-related compensation, and specific disability payments, diagnostic (x-rays, scans and laboratory tests), capitation subsidies and direct costs for general practitioner (GP) visits. Table 2 (p. 20) provides an overview of the annual financial impact of a range of musculo-skeletal injury and disorders. It is clear that

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[9] Arthritis refers to joint inflammation, and is a form of joint disorder which involves inflammation of one or more joints. There are over 100 different forms of arthritis with the most common being osteoarthritis (degenerative joint disease), is a result of trauma to the joint, infection of the joint, or age. Other arthritis forms are rheumatoid arthritis, psoriatic arthritis and related autoimmune diseases and septic arthritis which is caused by joint infection (Crutchlow, Dudac, MacAvoy & Madara, 2002). Rheumatism refers to any disease marked by inflammation and pain in the joints, muscles, or fibrous tissue, esp. rheumatoid arthritis (ibid).

these disorders are a burden for the people they affect, and for New Zealand society as a whole (ibid).

Table 2. The annual costs of musculo-skeletal disorders in New Zealand

Disorders/Benefits paid	Annual cost ($ million)	Approx number of people affected annually
Arthritis	2,089	497,000
Osteoporosis (diagnosed)	1,133	123,000
Injuries (ACC)	1,556	1,264,000
Sickness benefits	320	30,850
Physiotherapy (ACC)	127	34,000 visits
Chronic pain	N/A	$28,100
Joint replacement (hip & knee)	191	11,575
Pharmaceuticals (arthritis, osteoporosis)	61	
GP visits	26	441,504
Pathology (arthritis)	19	
Imaging (arthritis)	49	
TOTAL:	**$5,571 million**	
Note: 1. The above figures have been taken from Bossley & Miles (2009, p.5), but there will be overlaps between different categories of musculoskeletal disorder, e.g., arthritis patients having physiotherapy treatments. 2. There will also be costs in patients having imaging and pathology tests for musculoskeletal disorders other than arthritis. As these costs are not available, the above figures are likely to be underestimated. 3. No attempt has been made to assess the psychosocial costs associated with musculoskeletal disorders, except where these have been independently quantified. 4. DALY's (disability adjusted life years, i.e. years of productive life lost due to disability) and QALY's (quality adjusted life years, i.e., a measure of disease burden) have not been used in this study.		

Source*:* Bossley & Miles (2009, p. 5).

According to Rankin & St. John (2009), approximately, 21 percent of all sickness and invalid benefit payments are provided for bone and joint disorders with over 30,000 people receiving a benefit for musculo-skeletal injury and disorders, the annual amount paid is estimated to be $320 million (ibid). Accident Compensation

Corporation (ACC) injury statistics show that at least $1.5 billion (approximately) was spent on injury claims for musculo-skeletal injury for the year 2006/7 (ACC, 2011).

In addition, over 15 percent of the population aged 15 years or over will be diagnosed with arthritis, which is the equivalent to over 500,000 people in New Zealand (Ministry of Health (MOH), 2008). In the MOH's (2008) key results of the 2006/7 Health survey, there were at least one in seven people whose general practitioners told them that they had arthritis, the estimated annual cost being over $2 million (Access Economics, 2005). It is estimated that 120,000 people suffer from osteoporosis (MOH, 2008) although it is thought that the prevalence is under-diagnosed, due to a lack of investigations (ibid). In addition to under-diagnosis, the costs of non-diagnosis means that the problem may be underestimated (Bossley & Miles, 2009). The areas of the body most commonly affected by musculo-skeletal injury and disorders, are the lower back, neck and shoulder (see Figure 1). In addition to the physical aspects of these disorders there is a psychosocial aspect which is difficult to quantify in dollar terms (ibid).
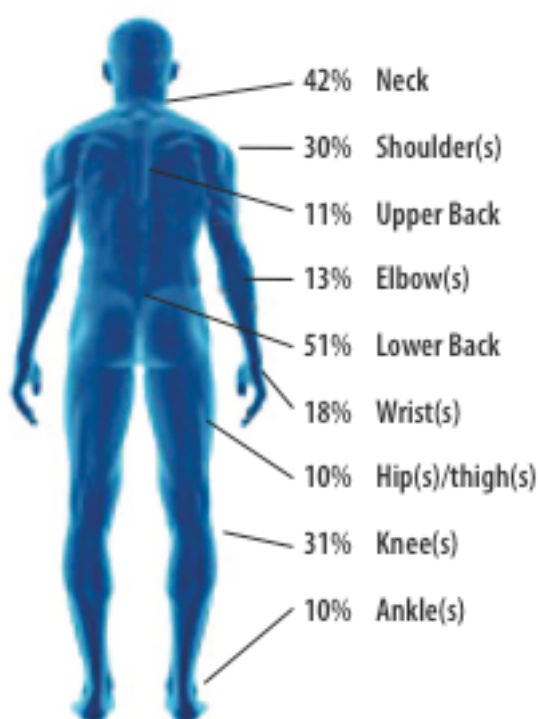
Figure 1. Areas most commonly affected by musculo-skeletal disorders on an annual basis Source: Bossley & Miles (2009, p. 1).

Musculo-skeletal injury and disorders are expected to worsen, particularly with New Zealand's demographic, as the number of people over the age of 65 years are expected to double in the next 20 years (Statistics New Zealand, 2004). This has lead

to calls for this group of disorders to be recognised as a key health priority by the Ministry of Health (Bossley & Miles, 2009). Despite the worrying statistics of musculo-skeletal injury and disorders in New Zealand, this group is often overlooked, mainly because they can be relatively invisible (such as chronic cases) and are often seen as an inevitable consequence of ageing (ibid). To address this, an effective strategy to treat those affected and minimise the impacts on society is required. The strategy should focus on better access and awareness by the New Zealand public, in particular the vulnerable and people who have poor access to health care.

As musculo-skeletal rates continue to rise (Pfleger & Woolf, 2003), the outlook for Māori communities is devastating, terms conveying a distressed state such as, *"gutted"*, *"buggered"* and, *"shattered"* were found to be commonly used by Māori in reference to the negative impact that musculo-skeletal pain was having on their life (Fennell & Magnusson 2011, p. 38). A higher, *"proportion of the Māori population that experiences disability during prime working age is high and increases with age"* (Price Waterhouse Coopers, 2008, p. xxiii).

The Māori population is projected to increase within the next two decades and are expected to have a younger age structure (Statistics New Zealand, n.d., c) and as such they will become increasingly important in the workforce. The call for further research to investigate these issues for New Zealand and particularly Māori (World Health Organisation, 2007) needs to be pursued without further delay to inform public health messages and develop targeted interventions.

Psychosocial considerations in musculo-skeletal disorders

Researchers have noted health ramifications of the obesity epidemic and an increasing volume of obesity related problems, which include musculo-skeletal disorders (Moore & Lunt, 2000). Ahmadi et al. (2006) have made strong links between the impending epidemic in New Zealand to Pacific and Māori populations.[10] Other researchers question the link of these health conditions to ethnic differences and explain that they are due in part to socio-economic status, lifestyle factors, poverty and deprivation, genetic variants and their effect of altering dopamine availability (ibid) and self-esteem (Kaplan & Wadden, 1986). Regardless of these, it appears that psychosocial (for instance stress) and physiological (for instance poor physical functioning) factors are contributory influences (Chen, Yu & Wong, 2005).

Brown (1993) described stress as an, *"adverse circumstance"* interrupting, *"physiological or psychological functioning on an individual"* (p.3091). While

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[10] Pacific population refers to peoples of Samoan, Tongan, Niuean, and Cook Islands origin (Lunt & Moore, 2000).

physiologist, Hans Selye defined stress as a, *"non-specific response"* to any demand put upon the body (Jones, 2001, p. 90). Stress is commonly described negatively and positively in different situations depending on how people respond to it (ibid). However, it appears that a prolonged response leads to a cascade response of hormonal pathways, resulting in the release of cortisol from the adrenal cortex (of the kidney) (Bjorntorp et al., 2002). Cortisol is a steroid which regulates energy by selecting the correct amount required by the body to meet the physiological demands placed upon it (ibid). The problem is that at a tissue level cortisol has been shown to affect fat storage and lead to weight gain in stressed individuals (Jones, 2001). Furthermore, studies have shown cortisol to be associated with increased appetite, sugar cravings and weight gain (ibid) and other related problems, including musculo-skeletal disorders and arthritis (Lunt & Moore, 2000).

Risk and adaptation

Risk has been defined as an individuals lack of being able to interact with their environment or engage in processes which promote well-being or protect them against the overwhelming influence of adversity (Werner, 1982). There is a great amount of literature relating the risk factors of a range of musculo-skeletal conditions, including a sedentary lifestyle, anxiety, depression, ethnicity, socio-economic positioning (Ezzati, Jamison, Lopez, Mathers & Murray, 2006; National Institute of Arthritis, Musculo-skeletal and Skin Diseases, 2009). Although there has been more of a movement towards looking at the factors which facilitate and enable people to look at risky behaviours. According to Charansonney & Després (2010) another focus has been to assist people's adaptation of adversity by promoting coping factors (ibid).

There are ways which people mitigate the adversity and negative events of their lives which may lead to poor health (Masten & Obradovic, 2006). Negative stereotyping and representations by the media of Māori and the constant and continual reinforcement from wider society is argued by Borell (2005) as being markers for Māori identity and powerful actors in terms of threats to promoting Māori health and development (ibid). It may not just be down to a patients family or peer structures in terms of influence of their choices towards healthy behaviours but could be seen to be the responsibility of the patients' health providers, peers and a variety of networks which Māori engage with.

Sources of musculo-skeletal knowledge

Recent research suggests that many Māori are lacking parts of information or hold erroneous knowledge about the range of musculo-skeletal services, which are available to them (Mauri Ora Associates, 2010). However, information and advice on health including musculo-skeletal health is needed by Māori to support them to engage in health services (Bacal et al., 2008).

There is an abundance of information which is available on musculo-skeletal health and osteopathy, yet its appropriateness and accessibility to Māori has not been explored. In order to make recommendations which are helpful for health promotion,[11] consideration needs to be given to the influence which the wider environment may have on Māori knowledge and the decisions made in relation to safe behaviour.

Hodgetts, Masters, & Robertson's (2004) review, suggest that Māori commonly access health promotion and prevention resources from peers, television and the internet. There is evidence that strategies to address access to services, particularly culturally competent services, is worthwhile, as a major determinant of health (ibid). The Mental Foundation of New Zealand (2006) has identified four pre-requisites of information when developing resources for Māori as needing to reflect, *"Tikanga-based values and knowledge, integrated socio-cultural health models, a secure cultural identity and Māori-specific risk factors"* (p. 7). Lacking from the data was a practitioner focus on developing culturally appropriate health education materials for rural contexts.

Access to services

Access to health services according to the Institute of Medicine (1993) is a:
shorthand term used for a broad set of concerns that centre on the degree to which individuals and groups are able to obtain needed services from the medical care system … many who lack coverage or live in areas that appear to have shortages of health care facilities do, indeed, receive services. Perhaps the most extensive effort to sort out the meanings of access and the related concept of equity. (p.227)

There are a range of factors which have a bearing on a person's capability to access health services. These are thought to function at a health system, health process and patient perspective (Goddard & Smith, 2001; Litchfield, 2002; MOH,

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[11] Health promotion acknowledges the importance of the inter-relationships between social, cultural, environmental, behavioural and biological factors that influence health (Hodgetts, Masters, & Robertson, 2004). It is a process where people are enabled to increase control over the determinants of their lives to improve their health (ibid).

2002a; Rameka, 2006; WHO, 2007). High rates of musculo-skeletal disorders among people can be in part due to problems relating to access at any of these levels and a number of barriers have been highlighted as reducing a person's health seeking behaviour. [12]

Bacal et al. (2008) details Māori avoiding health care, despite care being available. This is discussed as being associated with health care processes. These are linked to patients perceptions of bias and attitudes of health providers, peers, family members who appear to be, *"unwelcoming"* (p. 24) (Barwick, 2000). When reviewing the primary health care literature a number of factors are frequently mentioned in relation to health care services (Cram & Smith, 2003). These concern the time and distance of travel to health care, such as appointment suitability and availability, the lack of Māori practitioners, and previous poor experiences. For instance, a lack of response to complaints or recommendations by the patient of the health care service (ibid).

Overview of New Zealand's health system

This section is a brief overview of the New Zealand health and disability system, how osteopathy is funded, and the tensions facing osteopathy practice. The MOH (2001) defines primary health care as, *"the first level of contact with our health system"* (p.1). The Primary Health care Strategy (Strategy) mentions osteopathy as, *"first-level service for certain conditions",* Osteopathy is grouped in with other modalities, *"…or those using particular therapies (such as osteopathy services, traditional healers and alternative healers)" (*p. 1). The Ministry of Health is responsible for policy formulation, funding, monitoring, regulation and evaluation of the health care system (Vote Health, 2010).

The New Zealand health and disability system's statutory framework is made up of over 20 pieces of legislation (Vote Health, 2010). According to the Ministry of Disability Issues (2001), health professionals must learn to work more effectively to meet the needs of their communities. Participatory health care is promoted, for instance valuing the involvement of rural communities, associated organisations, groups and informal carers. The health care professional is mentioned along with an ever increasing scope of practice. The drivers being professional collaboration and focussed efforts towards population-based strategies, which prioritise integrated primary care as the main form of health care delivery (ibid).

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[12] Health seeking behaviour refers to all of the things patients may do to prevent diseases and to detect diseases in asymptomatic stages (WHO, 2007).

The Health Practitioners Competence Assurance Act 2003 (HPCA Act), is to protect the health and safety of members of the public (Osteopath Council of New Zealand, 2011b). It provides the mechanisms to ensure that Osteopath practitioners are competent and fit to practise. The Osteopathic Council (Council) of New Zealand is the regulatory authority for osteopathy practitioners. The Council operates under the Health Practitioners Competence Assurance Act 2003 (HPCA Act). The Act was passed on 18 September 2003, with much of the provisions coming into effect on 18 September 2004. The HPCA Act replaces the profession-specific legislation that was in force before this date. This requires the Osteopathic Council to set standards of competence (cultural and clinical), and ethical conduct to be observed by the profession (ibid).

In relation to the key contextual inputs which inform the health sector in Hawke's Bay, Figure 2 (p.27), details policies, frameworks and annual plans (right column) (Hawke's Bay District Health Board (HB DHB, 2011, p. 10). These inform the Health Sector, from the Minister of Health through to Non-Governmental Organisations (ibid). He Korowai Oranga (the Māori Health Strategy) (MOH, 2002a) outlines governmental commitments to the Treaty of Waitangi and highlights the importance of working with people in a social context (as a collective) and individuals (Minister of Health & Associate Minister of Health, 2006). The focus is to affirm Māori models of wellness, while highlighting the need for Māori to manage their own health services (ibid).

Primary Health care Organisations (PHOs) are the local structures established under the Primary Health care Strategy, and are funded through DHBs (MOH, 2005). PHOs provide and/or fund a set of essential primary health care services to a defined population, including at least first-level general practice services, some health promotion services, services specifically to improve access for groups known to be in most need, and the management of prescribing and laboratory test use (HB DHB, 2011; MOH, 2005).

Health Sector	
Minister of Health	
Ministry of Health	He Korowai Oranga, Whakatātaka Tuarua, Public Health Workforce Plan, Rāranga Tupuake
District Health Board New Zealand	Career Development Framework
Hawke's Bay District Health Board	Tū Mai, District Annual Plan
DHB Provider Arm / NGO/PHOs / Māori Providers	Provider Workforce Development Plans
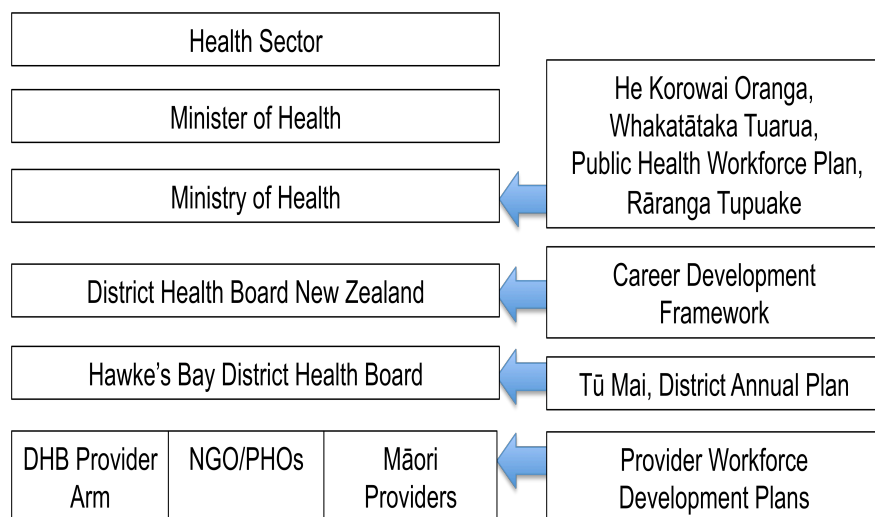
Figure 2. Key inputs which inform Hawke's Bay DHB's Māori health workforce

Source: Adapted from Hawke's Bay District Health Board (2011, p. 10).

How osteopathy is funded

The Ministry of Health is responsible for allocating funding to the District Health Boards and other statutory corporations in the health sector of New Zealand (Vote Health, 2010). For example, Figure 3 (p.28) shows the financing and delivery system of health care services in New Zealand (ibid). The health system is a complex arrangement, which the osteopathy profession sits slightly outside of in terms of funding (ACC, 2007). Funding is by way of private payments or part-payment subsidy by the Accident Compensation Corporation (ACC), a statutory organisation set up in 1974 (Fahy, 1984). ACC purchases services from health care providers for injured people across all districts (ACC, 2007).
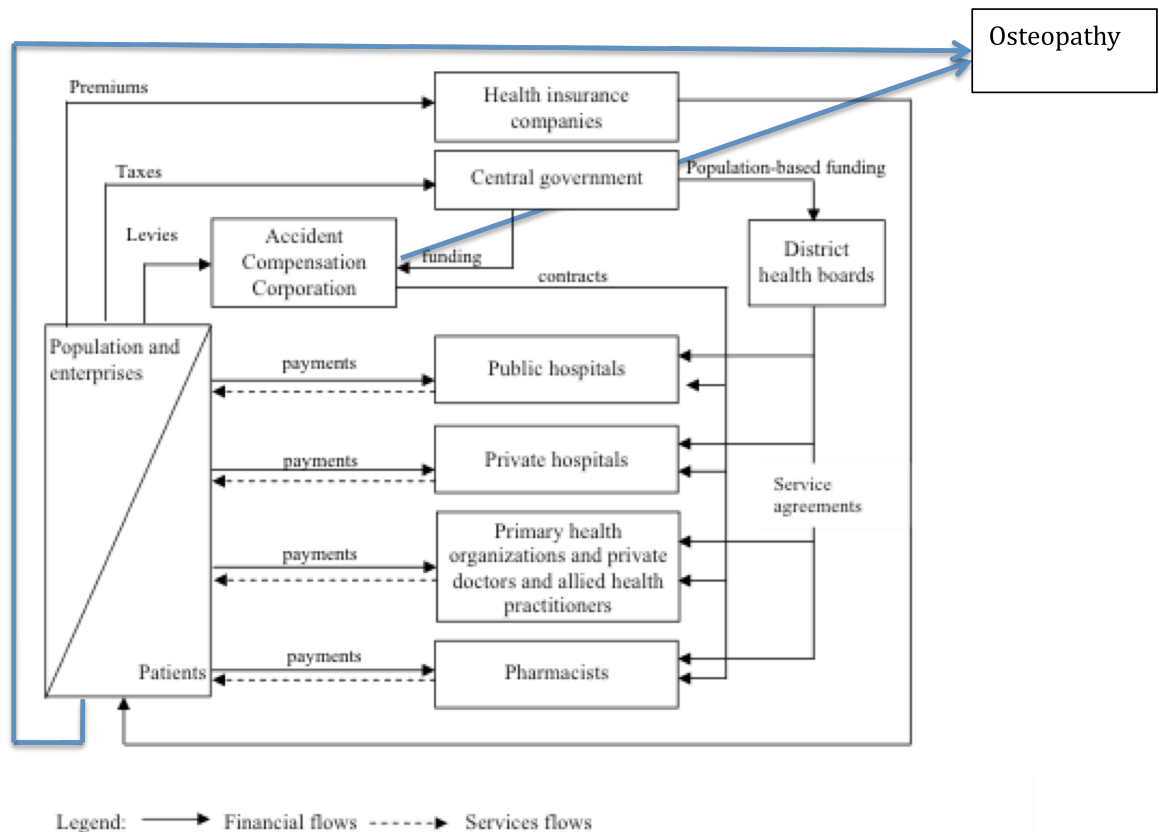
Figure 3. The financing and delivery system of health care services in New Zealand

Source: Adapted from Li (2006, p. 27).

New Zealand's health care system is free for hospital treatment and a range of care (Emigrate New Zealand, 2011). Otherwise health care is subsidised, but not free in the case of visits to osteopath practitioners, prescription items, general practitioners and ambulance services, to name a few (ibid). From a patient's perspective, the options for purchasing osteopathy services are by way of three options. For example, in Figure 4 (p.29), Option 3, covers public sector and compensation sector applications. The Patient has a role in determining the amount of osteopathy treatment consumption, in all of the options, because they fund part of the treatment. Therefore the patient can decide to cease osteopathy service expenditure, based on their willingness to continue to purchase treatment. Currently osteopath practitioners do not have the option of being funded by the mainstream health care system, other than ACC.
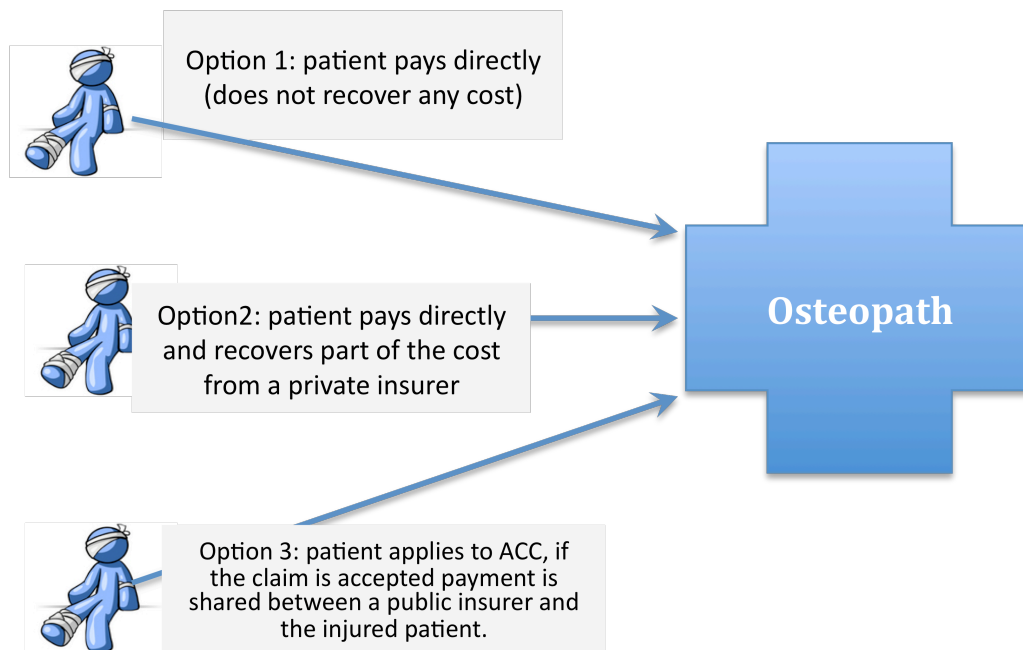
Figure 4. The funding of osteopathy practice from the patients' perspective

Tensions facing osteopathy practice

The MOH (2007) has recognised the growing strains on the public health system and signalled a drive towards breaking down barriers and silos across traditional health care boundaries. The *Whakatātaka Tuarua: Māori Health Action Plan* (MOH, 2006b) challenged the focus on the individual and moved towards the promotion of whānau wellness as a population-based approach (ibid).

Bolton & Segal (2009), identify major challenges to the health workforce of the future in Australia. These include a major demographic shift towards an older population; a focus on chronic disease prevention; greater demand for health professionals with expertise to support lifestyle change, educators and the possible role for new specialisations; changes in technology affecting both how services will be delivered but also health status and disease profile; and the potential mismatch between health workforce supply and demand (defined by need) (ibid).

The MOH (2001) has conveyed a desire from the New Zealand government of health organisations to work together strategically to promote health workforce development (ibid). However, there appears to be a lack of clarity among osteopathy professional bodies, due to there being *"no formula for determining workforce needs"* (Australian Osteopathic Association, 2011, p.2). The extent to which the existing osteopathy workforce is able to evolve and meet the challenges of the future will

determine how assertive its supporting structures and other measures, aimed at promoting change, will need to be.

Māori initiatives

The health needs of Māori differ greatly from non-Māori in terms of health status and health need (John Fraser Health Services Research Centre, 2006). There is increasing moves towards connecting Māori with health care, through specific services which are aimed to enhance their access (ibid). Involving Māori in service planning and monitoring has been found to assist their recognition and acceptance of services, particularly when their opinions on cultural values and beliefs are sought (Barnett & Brabyn, 2004; Litchfield, 2002).

Māori provider services focus on the provision of service hubs, where families can go to address a range of issues across health and social supports. According to The Hawke's Bay & East Coast Community Response Forum (2011), in the Hawke's Bay and East Coast this has been brought about as a reaction to health care access issues. In particular the lack of musculo-skeletal health care services for the elderly and for stroke patients in particular has been highlighted. Within the recommendations, collaboration is noted as strengthening health care service relationships with families with a call for there to be more, *"pockets of energy with well trained people"* to cut across health care access issues which is propelled by local leadership (ibid).

Within the context of Māori culture improving relations between Māori users of osteopathy and osteopath practitioners, it is imperative that recognition and acceptance is paid towards understanding Māori (Accident Compensation Corporation, 2004). This includes their lifestyles, ensuring information and services are accessible and developed as part of a comprehensive solution to reduce musculo-skeletal disease rates, because Māori are not a homogenous group (ibid).

Rural-based health hubs are emerging across the country gradually (Litchfield, 2002). These have grown out of a realisation that rural health needs are not always being met by primary health care, and this even more so for Māori (ibid). The Ministry of Health has funded a range of initiatives to assess and provide guidelines to encourage the clinical placement of Māori tertiary students (Te Rau Matatini, 2006) and policies which take a public health perspective. The aim is for health professionals to work with and improve overall health outcomes for Māori (Collings & Ellis, 1997; MOH, 2005).

There is also a growing regional rural and urban network of, *"one-stop"* shop health services which are the result of an interagency initiative led and operated by the Ministry of Social Development (MSD) (MSD, 2004, p.4).[13]   These are being based inside communities, providing a range of services which surround the patient (ibid).   In surveys carried out of New Zealand's rural GPs (Dawson, 2000a) and nurses (ibid), General Practitioners and nurses specifically identify that having a one-stop shop or practitioners located close to one another was contributing favourably and successfully to rural communities and the health care practice experience was being well received (ibid; Dawson, 2000b).

The Ministry of Social Development's (n.d.) website, currently lists hubs which are providing one-stop shop health services rurally. These are locally owned in the Waimakariki and an organisation called Heartland Services Centres. A one-stop shop in the Northland, sponsors five Community Response Forums in the North Island. These are listed on the Ministry's website page as including services ranging from health and well-being to people living in rural and provincial areas, as well as urban centres. There are recreational programmes and a range of other health care services which may be accessed via these centres (ibid). While there is massive potential for rural community health services to connect Māori with health care services, there is an imminent need for funding allocation to maintain and grow these types of services (WHO, 2005).

Māori health

According to the New Zealand Injury Prevention Strategy (Strategy) (Dyson, 2003), rates of musculo-skeletal injury and disorders among Māori must be considered within the wider context of Māori health. The Strategy references the special relationship between Māori and the Crown, under the Treaty of Waitangi and urges activity across the public health sector which acknowledges this (ibid). It is within this context that the following section provides a brief background of New Zealand's colonial history and its impact on Māori health. It also explores the issues relating to health inequalities, including the broader determinants of health and Māori concepts of health, in relation to musculo-skeletal health. Ethnicity issues involved in the processes of data collection are presented, as well as the influence of public policy on Māori health status.

The Treaty of Waitangi (the Treaty) and its signing in 1840 laid the foundation for the British (Crown) to formally settle in New Zealand (Durie, 1994; Orange, 1987).

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[13] Growing number refers to at least 28 rural centres which had been established around around New Zealand at 2004 (MSD, 2004).

The Treaty was a formal agreement between Māori hapū (sub-tribe leaders) and the Crown (ibid). It guaranteed Crown protection of Māori interests in resources and control of those resources, confirmed Māori the right to tino rangatiratanga (self-determination) and guaranteed equity between Māori and other New Zealand citizens (Durie, 1994; Te Rōpū Rangahau Hauora a Eru Pomare, 2000). Yet ensuing decisions and actions made by the New Zealand government have disregarded the provisions of the Treaty, unfavourably affecting Māori, including the health status of Māori (ibid).

Despite the significance of the Treaty of Waitangi as a founding document of New Zealand as a nation and in the political system, organisations referring directly to the Treaty are scarce, instead they tend to apply the principles of the Treaty (James, 2000). These are said to make sense of the purpose and spirit of the Treaty arising from the different interpretations of the English and Māori texts (Durie, 1998a).

The Minister of Health, health sector and other Governmental organisations have adopted some of the main principles which include participation, partnership, and active protection to be responsive to the Treaty. The guiding documents in the health system, The NZ Health Strategy, Primary Health Strategy (King, 2001) and He Korowai Oranga Māori Health Strategy (MOH, 2002a) acknowledges the special relationship between Māori and the Crown as a Treaty partner and the important role each has in the development and implementation of strategies for Māori health.

The right to good health for Māori is inherent under the Treaty of Waitangi (Tapsell, 2009) and health inequalities between Māori and non-Māori which are considered a breach of the Treaty (Carlisle, 2001; Abel et al., 2011) The right to good musculo-skeletal health is a fundamental aspect to the health and well-being of Māori and attention to reducing inequitable rates of muscular disorders for Māori is an area in which the government, and health professions through their health and education agencies must give urgent attention (ibid).

Ritchie (n.d.) in her paper on, *Bicultural Development within an Early Childhood Teacher Education Programme* recommends attendance to Treaty of Waitangi workshops as encouraging and, *"generating a heartfelt commitment"* (p.2), by attendees towards receptivity of incorporating the Treaty into practice (ibid). This is something which the osteopathy profession could analyse as a means to assisting the profession towards forming and/or building on partnership and respectful relationships with Māori.

Health inequalities

Over the past century, in particular the last couple of decades, there has been some improvement in the health status of Māori in areas, including the growth in range and volume of services delivered by Māori health providers. In addition there has been increased life expectancy and a reduction in morbidity and mortality in some disease categories (Ajwani et al., 2003; Human Rights Commission, n.d.). Although, the wide disparities persist between Māori and non-Māori health status, including musculo-skeletal health disparities and in particular the prevalence and incidence of arthritis, fibromyalgia, gout and osteoporosis (HB DHB, 2010c). As outlined in the section describing osteopathy practice and the section on rural Hawke's Bay Māori health (see, *"Hawke's Bay region"*, p. 61),[14] figures show that Māori rates of disease are disproportionate to non-Māori (ibid).

Determinants of health

Persistent ethnic differences in health outcomes can be attributed more directly to broader health determinants and environmental influences such as social, political, cultural, and economic factors (Howden-Chapman & Tobias, 2000; Kawachi & Woodward, 1998; World Bank, 2003; World Health Organisation, 2000). Therefore the social environment has significant implications for health outcomes. Figure 5 (p.34) shows structural and societal environments in which Hawke's Bay Māori live that are linked to healthy outcomes (ibid). In Hawke's Bay, these include family and whānau, peers, clean healthy environment, affordable education and health services, economic and safer communities, which are effected by societal influences and the wider environment (HB DHB, 2011, p. 25).

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[14] Fibromyalgia refers to a chronic condition characterised by widespread muscle pain and fatigue. Gout refers to a painful form of arthritis (inflammation of the joints). The most common place for gout to develop is the ball of the big toe.
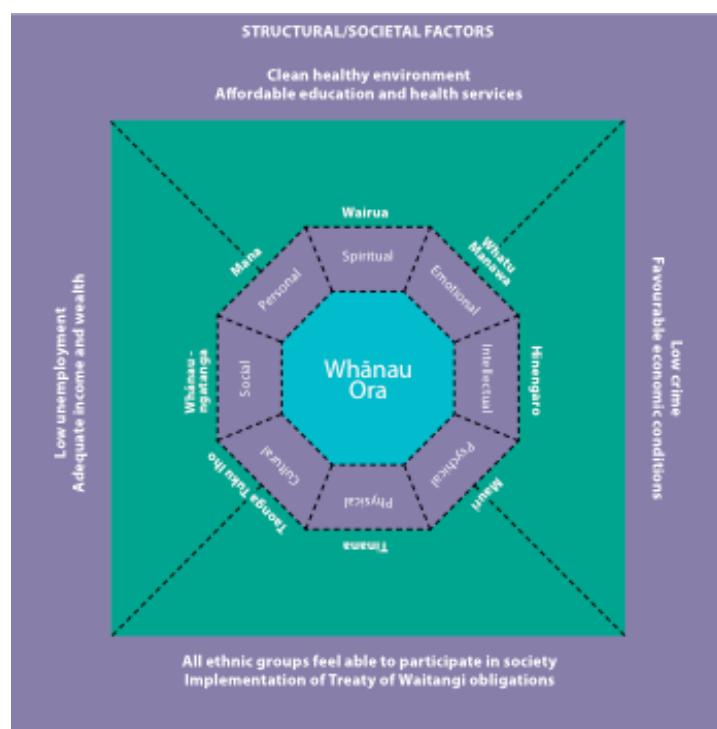
Figure 5. Reducing Inequalities Intervention Framework
Source: Hawke's Bay District Health Board (2011).

In the wider context of societal factors, lower educational achievement, joblessness, poverty and inadequate housing have all been noted as being strong contributing factors to a range of health problems for Māori. These include a greater risks of musculo-skeletal injury and other conditions (Howden-Chapman & Tobias, 2000). Osteopath practitioners are minded therefore of the need to understand these barriers faced by Māori and how basic human rights (adequate housing, employment) are out of reach for many Māori.

The impact of structural barriers also negatively affect health care access, with mounting proof of inequitable access to health care for Māori (King, 2001; MOH, 2002a). Population groups with high health care need improved access to health care, however, research has shown that non-Māori attendance to primary health care is much improved than Māori (WHO, 2005). Also, hospital data shows there to be low attendance of Māori in all health settings, which may reflect access issues and the appropriateness of health care provision for Māori (King, 2001). Some of the barriers to health care which have been noted include a lack of choice of culturally appropriate services, information about existing services cost (MOH, 2002c) and being disinclined to seek help, due to perceived costs and benefits (Cooper & Ensor, 2004; (Bacal et al., 2008). Structural barriers that prevent access to health care for Māori with

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musculo-skeletal injury and disorder need to be addressed so that information and delivery of health services occur in a way that better meet their needs as they are a population group shown to be at high risk.

Māori concepts

Concepts of Māori health adds to greater understanding of a Māori worldview of health and allow guidance for the health providers in the delivery of services which are culturally responsive to Māori. A brief description of the three main Māori models of health which are frequently mentioned in the health literature follow, to show the connection between the achievement of good health and the wider determinants and how the achievement of good musculo-skeletal health care needs a broad-based approach, than focusing on addressing issues in isolation.

Durie's (1998b) Te Whare Tapa Whā model is being used across the primary health care sector. It depicts the components of a holistic concept of health with interacting dimensions te taha hinengaro (thoughts and feelings), te taha wairua (spiritual health), te taha tinana (physical health, growth and development), and te taha whānau (family well-being). If there is balance between these interacting areas then there is well-being and these must be balanced for health (ibid).

Durie's (1999) Te Pae Mahutonga (Southern Cross Star Constellation) offers a further perspective by bringing together elements to promote health and preservation, which can be used to frame questions to support recovery work. Te Pae Mahutonga is made up of six stars, four central stars and two pointers. The stars form a pattern of a cross. The four key requisites of health promotion and preservation of the four central stars represent Mauriora (access to Te Ao Māori), Waiora (environmental protection), Toiora (healthy lifestyles) and Te Oranga (participation in society). The two pointers represent, Ngā Manukura (leadership) and Te Mana Whakahaere (autonomy) (ibid). This model offers an integrated approach to health promotion planning. It is being used in many health care settings, including the Like Minds Mental Health Foundation programme, to assist Māori providers to address stigma and discrimination associated with illness, in a way which reflects Māori realities (Mental Health Foundation of New Zealand, 2009).

Pere's (1997) Te Wheke has also attained wide recognition and is used in many health care settings. It makes a metaphorical reference of an octopus to define family health with interacting dimensions, the eight tentacles representing the same health dimensions as Durie's Te Whare tapa whā model (Durie, 1998b) with the addition of the head of the octopus representing the whole family unit, and the eyes as 'waiora', or total well-being of the individual and the family.

The models of health which have been presented here strengthen the importance of using a broad-based approach which includes supporting the family while taking into account community dynamics, to sustain health and well-being of the individual. Musculo-skeletal health interventions to reduce disparate disorders and injury rates and which assist the health and well-being of Māori need to address, all these aspects as they are wholly enmeshed with responsible lifestyle activity and interact with musculo-skeletal health promotion. What is more, this requires not only a level of individual responsibility but the family and community to be brought in as well so that these changes are supported. There appear to be limited osteopathy musculo-skeletal programmes and interventions that extend over each of these levels, although many references were found linking other allied health professions into the use of the model (Binns, 2003; New Zealand Guidelines Group, 2003; Waitemata District Health Board, 2010).

Māori health data

The use of research evidence to inform health policy and decision-making is informed by statistical data and research evidence (Statistics New Zealand, 2002b). Good quality statistical information is related to supporting the evidence for opportunities and risks for Māori, informs the progress and execution of appropriate interventions and to monitor improvements in health outcomes (ibid; Coleman, Dixon & Maré, 2004). Official health data has been shown to undercount Māori, which has been acknowledged as limiting Māori health outcomes and has important bearing on continued Māori health advancement. The obstacle is in part due to unreliable and inconsistent ethnicity statistical collection (ibid).

The undercount of Māori, has brought about adaptations of the New Zealand census ethnicity question from classification which lacked scientific credibility such as definitions of Māori being, *"half Māori blood"* or, *"half-caste"*, *"living as Māori"* and, *"persons living as members of a tribe"* (Reid & Robson, 2007, p.10). Currently, the self-identification details cultural affiliation. This has prevented comparisons epidemiologically to be made over time (ibid). Putting this in place can assist health stakeholders and organisations to more accurately monitor changes and trends of health equity (Statistics New Zealand, 2002b).

Reliable research is critical to improving Māori musculo-skeletal health and well-being and exposing major issues and innovations for intervention. Although the Bone and Joint Decade 2000-2010, as an organisation has brought together all stakeholders across the globe to consider all musculo-skeletal conditions (Woolf,

2000),[15] there has been a dearth of musculo-skeletal health research which reflects Māori as a distinct population group (ibid). Dillman (2000) recommends the importance of disaggregating official data, to ensure sufficient statistical power and appropriate sampling in research to be undertaken (ibid). Statistics New Zealand (2002b) discusses the need for Māori representation in sampling, to reflect the national population.

The most significant longitudinal study in New Zealand which shows promise is, *Best outcomes for Māori: Te Hoe Nuku roa* (Black et al., 1995). This longitudinal study of Māori households is focused on enabling cultural, social, economic and personal factors, of Māori to be correlated to measure Māori and whānau identity (Cunningham et al., 2009). A report for the Nelson-Marlborough District Health Board, based on the data from this study sets out a chapter on health and nutrition and physical activity (ibid). This includes risk factors and barriers to activity which will be of importance to osteopath practitioners in this region. This study has yet to produce papers specifically on Māori musculo-skeletal issues, however.

Impact of colonisation on Māori musculo-skeletal health

In order to contextualise Māori musculo-skeletal health in contemporary society, it is necessary to discuss the colonial history Māori share with Pākehā (non-Māori) and its continuing influence on Māori health. This section discusses the impact, changes to whānau

structures, the role of Māori and the concepts of tapu and noa have had on Māori musculo-skeletal health. In giving an account of the past and changing the meaning of traditional accounts to contemporary New Zealand, a greater understanding of the environment and position in which Māori see contemporary developments of Māori may be pursued.

Historically, Māori had a well developed society with tribal structures and systems of education, justice and health (Durie, 1994). Colonial descriptions of early Māori reveals frequent references to the population as being, *"gigantic in stature and muscular in frame, and may be justly regarded as the most robust and hardy of the oceanic race"* (Rowe, 1825, p.155). Responding to painful musuclo-skeletal disorders and tending to the maintenance of good health was viewed as an essential part of life,

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[15] Bone and Joint Decade 2000-2010 refers to the establishment of a world-wide awareness campaign which aims to raise awareness of the suffering and cost to society assocaited with musculo-skeletal disorders on the individual, health care systems and the society. It is a multi-disciplinary initiative involving professional bodies, patient care groups, research organisations and the community (Ching & Tsou, 2002).

given that human muscle provided most mechanical power as metallurgical processes had yet to be expanded and there was no transfer of technology from other societies (Coleman et al., 2004).

There was evidence also that in pre-European times Māori healing practitioners were regularly utilised by society to provide, *"Te Oo Mai Reia"* (the healing methods) (O'Connor, 2007, p. 5). These consisted of romiromi and mirimiri (massage work which facilitated the release of deep blockages), kōrerorero (a mode of healing, based on talking and discussion), karakia (healing method), takutaku (chanting and body movement), Kaupare (invocations of healing power) and rongoa (regenerating and stimulating the organs of the body) (ibid).

A look at whakapapa (genealogy) often reveals most families would frequently turn to some tipuna (ancestor) who were often people of high ranking and chosen for the role at birth (Jahnke & Taiapa, 1999). These people had the sacred duty to pass on the whole of the tribal history, with legends and spiritual beliefs added. This knowledge had to be memorised to make sure that the lessons learned in the whare wananga (school) were not forgotten or distorted (ibid). The tribal whakapapa then became the backbone for all of the traditions which assisted health and well-being (Adams, 1974), as well as stories recounting a balanced diet and a supportive community that had the resources to support injuries which family members sustained through tribal warfare (Cowan, Higgins, Phillips & Tikao, 2009).

The arrival of missionaries and first early settlers in New Zealand led to increased interaction between Māori and Pākehā. Many Pākehā expressed their disapproval of Māori traditional practice of Tōhunga in journal writings and letters for what they perceived as uncivilised cultural practices and beliefs (Pearson, 1958, p. 222) and tended to dismiss such practices as, *"unscientific, quaint, and superstitious"* (Voyce, 1989, p.120). Māori society went through considerable shift, adapting to a changing cultural landscape based on introduced understandings founded on Christianity and Pākehā ideals as techniques to aid the process of colonisation (Fanon, 1967). Colonisation and assimilation impacted upon and continues to impact on the erosion of Māori identity, beliefs and values (ibid).

According to Moon (2003) the loss of land, language, culture and the continuum of tōhungatanga (expert knowledge) led to a loss of perspective on the holistic health and well-being of Māori (ibid). This impacted on the economic base (sources of food sources), social networks and the introduction of a combination of new diseases. Orange (1987), discusses that diseases had a devastating effect on Māori (Measles, typhoid fever, tuberculosis and an influenza epidemic), consequently

there was a sharp decline in life span as the impact of these conditions took effect (ibid).

Despite the evidence from skeletal remains that physical living standards were quite high, there was the introduction of alcohol and famine (Hiroa, n.d.). The census returns of Ngati Kahungunu tribe of Hawke's Bay support the general effects of land loss by Europeans, which had a tremendous toll on the Māori population, wiping out many families in the process (see Table 3) (Sorrenson, 1956). The decrease in the 1896 census was probably not a natural decrease. There was widespread Māori opposition to this census and considerable numbers were probably omitted. There were no widespread epidemics between 1891 and 1896 (ibid).

Table 3. Census returns of the Ngati Kahungunu tribe of Hawkes Bay

Year	1874	1878	1881	1896	1901
Population of Kahungunu	6,065	5,172	4,730	4,672	5,064

Source: Pearson (1958)

One of the most detrimental effects of colonisation on Māori society has been the weakening of social structure (Gardiner & Pihama, 2005). Early depictions of Māori refer to whānau (family group) as being widespread in scope, often consisting of four generations of nuclear families living together. Here as part of social control, the elders would share the responsibility of childcare if a person was unwell, there were numerous others one could turn to. Matters of pain and musculo-skeletal were discussed and tended to between adults. The role modelling of the elders tended to the full attention of the children when they were present. This system worked well up until whānau broke away into smaller groups in their need to look for work in urban towns. At times this was due to governmental programs which systematically removed whānau from their homeland and in to urban dwellings. Subsequently, smaller family units and the trend toward smaller nuclear support structures resulted (ibid).

Since the early 1900's, when Māori moved from the marae (traditional focal and social place of learning, celebration, ceremony and meeting of Māori community), they found it difficult to adjust to living environments where poor lifestyle factors could be the norm (Durie, 2003).   In addition, a westernised lifestyle tended to bring about access to fast foods. This could lead to poor nutrition, alcohol abuse, sedentary

lifstyles and other factors, detrimental to health. Any of these factors, coupled with long-term unemployment was problematic (ibid).

The determination of the Tōhunga Suppression Act in 1907 was seen by many as another attempt at taking away and assimilating Māori culture and by others it was a response to the appalling health statistics of Māori at the time (Stephens, 2001).[16] The Act tended to have little practical effect as Tōhunga tended to be, *"beyond the reach of the Courts and of the Legislature"* (ibid, p.1). When Tōhunga were brought before the courts, the law tended towards confusion, of the line between genuine religious and traditional Māori belief (ibid).

Cowan et al.'s (2009) perspectives of ancient Māori disability describes different interpretations of Māori cosmogony by early ethnographers. They contend the need for researchers to be careful of much of the literature from this period (before 1840) having been written by non-Māori historians or missionaries, who carried their own cultural bias. This lead to interpretation of what had been told to them by their informants, and thus placed a particular lens on their knowledge and writings (ibid).

Linda Smith (Smith, 1999) raises objections to the value of the research that was put together by researchers and early ethnographers accounts of Māori society. The traditional stories through the colonists' eyes is frequently rejected. It is seen to negatively influence understandings of how early Māori perceived illness, disabilities and treated others with illness or disability (ibid).   Māori tended to see a health problem as belonging to the community as a whole, even regarding a person who had a disability or illness very highly as it was often thought to be the result of some social or spiritual transgression (Durie, 2003).

Early Western civilisation tended to locate an illness within the individual and also could attach meanings to illnesses, such as shame (Smith, L., 1999), particularly if westerners lacked the understanding and significance of Māori cultural beliefs. Subsequently the effects tended to undermine Māori mana (control, power, influence, status) (Cowan et al., 2009). Today there are a range of projects which provide an analysis relevant to diverse Māori worldviews, such as Kohanga Reo.[17] These link in to a decolonisation agenda, making Māori mana visible, while reclaiming other ways of knowing and defining reality for Māori (ibid).   These points are relevant to

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[16] The Tōhunga Suppression Act in 1907 refers to an Act of the New Zealand Parliament which was aimed towards replacing Tōhunga as traditional Māori healers with Western medicine.

[17] Kohanga reo refers to a total immersion Māori language family programme for young children from birth to six years of age.

osteopathy practice as they invite the practitioner to consider the significance of Māori cultural beliefs and the ways in which colonial practices have and continue to, impact on Māori health and well-being.

In traditional accounts of Māori creation and cosmogony, the story of Io, stories of Maui and his kuia are dominated by resilient figures of Hinenuitepō, Rarohenga and others (Grace & Kahukiwa, 2000),[18] these stories convey a high regard for, and significance of, the learning, seeking and becoming conscious with new knowledge and wisdom throughout time, portrayed in themes of health and well-being symbolism. Smith, L. (1992) shares that the more familiar versions of these stories have been interpreted by Pākehā as affected by the processes *of, "colonisation by church and by the more subtle hegemonic processes of internalised self-abhorrence"* (pp. 46-47). Smith, L. (1992) argues that ultimately colonisation has been the extent to which Māori have internalised these. For instance, believing Christian teachings, as representing their own tradition *(*ibid).

Concepts of tapu (sacred, spiritual restriction, implied prohibition) and noa (free from restriction or prohibition) as concepts of risk and safety have also been re-defined (Tapsell, 2009). These were an integral part of daily life which assisted by maintaining social security, discipline, protected the people's well-being and ensured the community's ongoing survival. If the violation of the tapu/noa separation was not maintained, then often this was seen as resulting in adverse consequences to ones well-being (ibid). An example of whakanoa (cleansing and setting about removing the tapu restriction from things and returning them to their normal state) is often recounted as that of tōhunga placing tapu over objects (for example, weaponry) to protect against injury or infection (Gray, 2006). Sometimes a rāhui (a temporary ritual prohibition) would be made. The purpose was to ban activities or work to prevent injury or save resources, water had a primary importance which was to cleanse both physical and spiritual ailments (ibid).

The re-telling of traditional stories and cultural practices in early ethnography has played a central role in the way Māori perceive themselves *(*Smith, L., 1992). Not all Māori link the impact colonisation has had on Māori health outcomes or of its potential ongoing effect on them as individuals (Bacal et al., 2008). Māori attempts to access mainstream medical health services have often lead to poor experiences of care, low satisfaction ratings and reduced trust (ibid). This requires prioritisation by the whole health care system (MOH, 2000) and the osteopathy profession at national,

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[18] Maui refers to a well-known Māori character of narratives. Kuia refers to elder woman. Hinenuitepō, Rarohenga and others refers to well-known Māori characters of narratives.

regional and local levels. Awareness and understanding of the importance of whānau, wider whānau and Māori society can shape osteopathiy practice in New Zealand. Particularly if the profession analyses these influences of both traditional and contemporary societal views, in relation to osteopathy care of Māori (ibid).

Prioritisation of osteopathy

> Osteopathy is based on the perfection of Nature's work. When all parts of the human body are in line, we have health. When the parts are readjusted, disease gives place to health. Dr. A.T. Still M.D. (1828-1917). (Chila & Fitzgerald, 1991, p.10)

Controversy, internal struggle, and the development of osteopathy are all recognised as being a part of osteopathy health care's development and movement to gain recognition. The formation of New Zealand societies attitudes and preferences towards osteopathy have been shaped by wider medical and society beliefs and values which often served to constrain and later, protect the profession's survival, which is documented in the historical path of development and acceptance of osteopathy. To understand the importance of the potential impact osteopathy can have on Māori communities musculo-skeletal health and well-being, an overview of the status of osteopathy in New Zealand is presented showing relevant features of the osteopathy population including a profile of the founder of osteopathy, definitions and classifications of osteopathy practice.

Complementary Medicine may be traced from 1908 (Duke, 2005). The broad domain of healing resources which this medical system encompasses, tends to include all modalities and beliefs, aside from the dominant western medical health system. It has tended to include osteopathy as well as Traditional Māori Medicine, Chiropractic, Acupuncture and others.[19] The practice of Complementary Medicine within New Zealand was detailed in a 1906 census by the term, *"quack specialists"*, who were just over 100 in number at the time. The term tends to reflect the opposition to alternative therapies. Subsequently separation occurred, where 20 percent of orthodox practitioners, who were often known to embrace and deliver this kind of care to their own patients, were found some hundred years later to prefer to refer their patients on into the burgeoning complementary medical health care sector (ibid).

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[19] Chiropractic is a health care profession that focuses on disorders of the musculoskeletal system and the nervous system, and the effects of these disorders on general health.

Between 1900 and 1920 saw the rise of science-based medical methods with Māori birth and mortality rates not being documented reliably until the 1930s. This effectively made the plight of Māori health invisible (Pool, 1990). Many of the illnesses predominantly featured during this period, were attributable to infection and gastroenteritis, due to inadequate sanitation (Davidson, 1984). It was around this time, that osteopathy began to emerge as a therapy in the early 1930s, with two full time practitioners in Auckland by 1940 (Duke, 2005). Up until the 1930s the medical approach tended to focus on the other but after the second World War, instead of taking an ethno medical stance, the gaze was turned inwards and society undertook study of its own beliefs about health, healing and illness (Miskelly, 2006). This work was instrumental in establishing more holistic approaches to the human experience of health and illness which tended to make complementary medicine more appealing as it widened societies view of the social and cultural variables (ibid), which could affect musculo-skeletal health and well-being.

The 1950s saw the rise of Talcott Parsons' (Parsons, 1951) perspective of the sick role, where being sick meant the individual was viewed as being an unproductive member of society. This tended to absolve them of their responsibility of taking responsibility for causing the illness, placing the responsibility in the hands of the medical professional (ibid). Lupton (1994) discusses Parsons' model tended to put patients within categories of innocence or of deserving (ibid). Such a role could impact on a person who had sustained long-term musculo-skeletal impairment by placing them permanently in the sick role, even when did not consider themselves to be sick (Cameron, 2010). Also, people could reluctantly acknowledge being sick for fear of being placed in the sick role. The association of disability with unwanted social status could also serve to ensure that people did their best to keep impairment hidden or to minimise its significance in terms of their everyday lives, for fear of not deserving their ill health, and running the risk of condemnation from their health professional and society in general (ibid).

The 1960s saw practitioners examining their practice accountability in ascribing patients to a passive role, by encouraging them to share responsibility and understand their illness. This it was thought, could assist in their acceptance of both diagnosis and treatment plans (Crawford, 1980). Complementary Medicine was perceived to be adept at encouraging this aspect of clinical practice, by encouraging patients to take a larger degree of responsibility for their health and well-being to ensuring disorders and conditions did not occur (ibid). During the 1960s, New Zealand complementary medicine struggled for legitimacy, to be part of the orthodox public health system (ibid). Regulation of their practice ensured reduced risks to the

public and enhanced practitioner status. Also this protected the osteopathy title and assisted in better referral networks (Duke, 2005).

The 1970s was a, *"watershed in the history of medicine and health care in New Zealand"* (Manning, 2011, p.1) where the Cartwright Report and the so-called Unfortunate Experiment investigated and found unauthorised experiments on women with cervical abnormalities had been undertaken. This lead to the unnecessary deaths of 26 women and a shift in public attitude towards the medical profession (ibid). Even though ethical approval had been part of the New Health research system since the 1950's, the system was developed further (New Zealand Health and Disability Ethics Committee, 2007). The consequences of this lead to changes. Under New Zealand Public Health and Disability Act (2000) a system of ethical review and Ethics committees was established (ibid).

It is within a health care environmental context of the Cartwright Report and other factors, that lead the osteopathy profession to press for recognition (Duke, 2005). Members gathered together and formed the New Zealand Register of Osteopaths (NZRO) in 1973. The Register's membership grew steadily and work was made towards gaining statutory recognition, based on a similar framework, which the Chiropractic profession had achieved some ten years prior with The Chiropractors Act (1960). A landmark for the osteopathy profession was in 1973, after much resistance by the Medical profession, a statute was passed by Government allowing members of the register to call themselves, an osteopath (ibid).

The most significant Act to follow for osteopath practitioners was the recognition by the New Zealand Government of osteopathy being a legitimate health therapy in the late 1970s. Recognition of osteopathy and other non-traditional health care services was related to changes in New Zealand health care services that placed greater emphasis on patient rights and choice (Pollock, 2011). This lead to the semblance of a professional association, and in 1973, a professional association, the New Zealand Register of Osteopaths was formed as an incorporated society (ibid). The New Zealand Register grew steadily for the next five years, all the while, the osteopathy profession pushing for recognition (Duke, 2005). Leading up to the passing of the New Zealand Register of Osteopaths Incorporated Act 1978, there was considerable opposition by the orthodox medical profession, however, once the statute was passed this eventually meant that only members of the register could call themselves, osteopath. The lack of research of Complementary Medical therapies has also been a concern for the orthodox medical professionals. The lack of availability of funding through which osteopath practitioners and other professions may conduct competent research continues to be an influential factor (ibid).

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Some of the reasons for the struggle of Complementary Medicine gaining equality with bio-medicine are evident. Dew (2003) discusses these in a paper entitled, *Borderland practices.* The medical profession experienced rapid widespread growth in status and popularity as it gained status, with improved scientific knowledge and technology. This lead to doctors transforming themselves into an increasingly homogenous and powerful profession and having, to a large degree garnered support from the Government, attempted to limit the practice of alternative and complementary medicines (ibid). Abbott (1988) describes the history of professions as the history of recurring battles over turf and argues that evolution is necessary, which require the shaping of territorial boundaries and the abolishment of old ones, because a profession may not occupy a jurisdiction, *"without either finding it vacant or fighting for it"* (p. 86). White (1991) discusses that the patients' rights' movement and advancing technology has led to a decline in medical power and points to there being a transition from medical control over health professions to more of a government directed role in shaping health care professions (ibid).

Osteopathy continued to expand, leading into the 1980s as a profession and in 1986, the Accident Compensation Corporation (ACC) recognised osteopathy as a viable treatment and subsidised costs for claimants being treated by members of the Register (Bowden, 1987). Leading up to the 1990's and 2000, the osteopathy profession lobbied for recognition. This lead to changes where osteopath practitioners were able to treat Accident Compensation Corporation (ACC) claims patients, without referral from a medical doctor and refer for x-rays and to other health professionals, if required (ACC, 2011).

In 2003, the Health Practitioners Competence Assurance Act 2003 (HPCAA) lead to the establishment of The Osteopath Council of New Zealand (Council) (Pollock, 2011).[20] The Council is directed by the Ministry of Health to appoint osteopath practitioners and lay-people to the Council in a governance role. In terms of responsibilities, the Osteopath Council of New Zealand has a range of primary tasks. These include the authorising of registration of health practitioners under the HPCAA and considering applications for Annual Practising Certificates. This includes assessing overseas registration applications and assessing the applications of graduates of the provider of osteopath training (Unitec Institute of Technology, New Zealand).

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[20] Maui refers to a well-known Māori character of narratives. Kuia refers to elder woman. Hinenuitepō, Rarohenga and others refers to well-known Māori characters of narratives.

Osteopathy Associations

Today, osteopathy is represented nationally by two professional associations including New Zealand Osteopaths Incorporated and New Zealand Osteopaths Incorporated Osteopathy Society of New Zealand. In terms of afilliations to International organisations, the OSNZ is a member of the Allied Health Professionals Association forum (Forum) (V. Tate, Personal communication, February 15, 2012). The Forum consists of representatives of Allied health professional associations who work together to raise the profile of Allied health professions, developing reciprocal relationships with health sector and governmental stakeholders. The Forum aims also to be the connected voice for its member associations and to provide advice to the Ministry of Health and provide a forum to discuss issues between professions and issues of common interest.

At a recent meeting of the Allied Health Professionals Association forum it has been noted that they wish to move away from being a, *"a monocultural organisation"* and have questioned, *"how can we take steps to change that?"* A recommendation of the Forum's minutes (Allied Health Professional Associations Forum, 2011) is that the Forum manoeuvre towards extending an invitation to Ngā Pou Mana, the organisation which represents Māori Allied Health Practitioners (ibid). Moves towards forging the gap between these organisations is an important aspect for the Allied health professions, to reflect the realities of Māori practitioners, and patient experiences, including their cultural values and beliefs. Involving Māori people in Allied health development is a step towards ensuring that this occurs and may contribute to reducing knowledge and practice gaps.

Osteopathy education

There is an unmet moral need to attend to the health, economic, and social inequities experienced by Māori (Durie, 2003). Durie (2003) pinpoints education as being integral to the future of Māori health and well-being (ibid) and it is on this premise that osteopathy is discussed as having an opportunity to actively encourage the involvement of Māori students into the osteopathy training programme at the undergraduate, master's degree and beyond. The purpose of this section is to discuss these challenges by integrating the literature of how cultural competence is fostered in relation to Māori contexts and prospective students. The term *student* refers to undergraduate students and post-graduate training experiences of osteopath practitioners.

Ensuring students navigate safely through programs of study requires, in part, the inclusion of Māori perspectives, academic and personal supports for students, and courses of study which foster competence among Māori and non-Māori graduates in the provision of care to Māori (Alton-Lee, 2003). The Māori youth population is a significant and potential human resource, to address the national and global rural workforce shortage (Durie, 2003) and the osteopathy profession. However, Māori remain mostly marginalised from osteopathy programs in New Zealand, which is evidenced in the low numbers of Māori in the osteopathy profession. For instance, the New Zealand Health Information Service (2009) has estimated 293 registered osteopath practitioners in New Zealand with around 3 percent of thse registered and active practitioners self-identifying as Māori, which is approximately ten practitioners (ibid).

Increasing the number of Māori in osteopathy education, beyond admission will warrant action. Guiding this process would require sufficient evidence for best practices regarding the education of Māori osteopathy students, of which the osteopathy literature is devoid. However, there are other sources and examples of professions and organisations which have developed guidelines for this (New Zealand Qualifications Authority, 2007; Hawken, Henning, Jones, Pinnock & Shulruf, 2011).

Programs adopting these best practices is thought to foster success among Māori students (Hawken et al., 2011) by creating safe learning environments, for all osteopathy students. Moreover, graduates of these programs tend to receive education in the provision of safe care to Māori (Ramsden, 2002). In this section, the evidence of the need for cultural competence in osteopathy education as it relates to Māori students and patients, will be pursued to provide context in this project. The areas which are briefly touched upon include, osteopath practitioners attitudes, advocating to reduce health disparities, culture, cultural competence, history of Osteopathy Medicine, Osteopathy Manipulative Medicine (ibid).

Statistical data about Māori populations provides insightful information of the inequities and disparities of health (Harris et al., 2006). This is characterised by unique cultural, historical, and social contexts among and between Māori, with additional factors. These are key determinants of health, and they serve as guidance to develop understandings about the diversity of Māori and their health. According to Ramsden (2002), this requires cognisance of the cultural and social barriers which may exist between Māori individuals (ibid) and within the context of this project, of osteopathy providers in rural communities. This requires an awareness and understanding by osteopathy students, of the unique histories, cultures, languages,

and social circumstances, which are manifested in the diversity of Māori, and that Māori will not access a health care system (and osteopathy) when they do not feel safe.

Osteopath practitioner attitudes

Within the health care arena there are a number of concepts which complementary health care professions are using. These need to be defined for the purpose of this project.   Included is cultural awareness (the acknowledgement of difference), cultural sensitivity (the recognition of the importance of respecting difference), and cultural competence (which focuses on skills). Cultural safety is different to these approaches as it requires the focus to be on attitude of practitioner than about knowing about other cultures (Wepa, 2005).

Culture is more than beliefs, practices, and values (Groot, 2006). Osteopathy courses of study can assist students to understand the limitations of essentialist views of culture. Students require assistance to develop an understanding of culture (ibid). According to Wepa (2005), cultural safety presents opportunities in which unequal power relations are exposed and managed. In this context, cultural safety is action orientated and alignment with the advocacy role of osteopath practitioners and the osteopathy profession.

Māori students bring their living contexts and histories of colonisation to the educational setting (Smith, 1999). This puts them in a vulnerable position if they enter into power imbalance relationships (ibid). Within the context of the osteopathy educational system this is a challenge. Osteopathy education could provide learning situations that create power and relationship balance between the student and individual teacher, courses of osteopathy study, and osteopathy institution of training. Integral to this process is that both Māori and non-Māori osteopathy students would need to be aware of the historical impact of colonialism on Māori, how the contemporary lives of Māori have been affected by colonialism, the consequences and the significance of the Treaty of Waitangi and land claims.   These have established a unique place for Māori within the ethno-cultural and political landscapes of New Zealand.

Advocating to reduce health disparities

The effects of health disparities are most pronounced for Māori and a relative disproportionate burden of disease, with different risk factors and risk conditions, incidence of disease and mortality across a wide range of musculo-skeletal and a range of other disorders. The most important consequences of these include

avoidable death and disability. Ajwani et al. (2003) have identified health disparities as they affect Māori populations in New Zealand. Of men in New Zealand, non-Māori live seven years longer than Māori men, with all women in New Zealand living five years longer than Māori women. The death rate from injury among Māori infants is four times the rate for New Zealand as a whole. Among Māori pre-schoolers and teenagers, the death rate is five times and three times the national rate respectively (ibid).

Other contributory factors to health disparities include distribution, accessibility and quality of health care services, and community characteristics (Ajwani et al., 2003). While the New Zealand suicide rate is dropping, unintentional injury (including road traffic crash) mortality has increased among the 15–44 age group of Māori males. Suicide rates increased for Māori males and females over the 1980s and 1990s. This was also evident for Pacific and non-Māori and non-Pacific males, but the increases were not as marked as for Māori (ibid).

Māori and Pacific people have experienced decreasing rates of suicide since, however, these gains have largely been offset by increasing cancer mortality (Ministry of Health, 2011). Furthermore, despite higher overall use of health services, large increases in health care spending, health disparities among Māori populations exist. Evaluation of accessibility and effectiveness of health care to those in poorest health requires analysis (ibid). Within these contextual factors is a need for osteopathy students, both Māori and non-Māori to understand the health determinants affecting Māori; socio-cultural and political factors which are health-protective and those factors that undermine the health of Māori and place them at risk for morbidity and mortality.

Osteopathy student candidates

A vital part of New Zealand's future lies in maximising the lives and opportunities of Māori (Associate Minister of Health & Minister of Health, 2006). As discussed in the earlier section, *Current trends in New Zealand* (p.19), future demographics for New Zealand will entail a youthful Māori population and a growing, ethnically diverse population (Statistics New Zealand, 1998b). Providing safe care to these growing numbers of Māori demands that osteopath practitioners, whatever their cultural background may be, develop competencies which assist them to be not only culturally sensitive, but to have a deeper and more sophisticated understanding about the health and well-being of Māori. It will be incumbent on osteopathy programs to facilitate students' development of the knowledge and understanding which encourages safe practice, culturally for all patients, and for Māori in particular.

Since people tend to identify with care providers who look and speak like themselves (Hopkirk, 2010), it would be beneficial for there to be more Māori osteopath practitioners, including rural, northern, and urban contexts (ibid). There is a need for the osteopathy profession to examine the situation and of the ways in which more Māori osteopath practitioners are working within Māori communities. Realistically however, shortages of most health care professions across the country have been highlighted by London (2001) and this particularly makes plain the need to attract osteopathy students from all backgrounds and both genders to deliver osteopathy practice.

In addition, consideration needs to be given towards osteopathy education in New Zealand, as it faces significant challenges in recruiting and retaining Māori students. According to MOH (2006a) this is significant across all health care professions (ibid). Cram (2010) notes that professional image is a variable, that impacts recruitment (ibid) and in this context, candidates into New Zealand osteopathy. This merits the osteopathy professions' attention in terms of presenting opportunities to help Māori but at the same time ensuring that the profession appeals to Māori as a profession which is respectful of Māori culture.

Consedine, R. & Consedine, J. (2001) discuss historically, the cost of obtaining a degree has made it accessible primarily to the middle and upper-classes (ibid). Given the make up of the osteopathy workforce is predominantly European, osteopathy, like society, will need to play catch-up to correct inequities that underpin the profession as it exists today. Māori and other visible minorities of New Zealand are nearly absent from the power structures and decision-making structures of New Zealand health care as it stands today (MOH, 2006a).

In this context, the osteopathy profession can plan for future diversification. This vision calls for increased numbers of Māori osteopath practitioners, so they are more in proportion with that of the Māori population in New Zealand. In this context, the osteopathy profession could understand more by encouraging osteopath practitioners to tell their stories about their education experience and practice experiences in New Zealand. Hopkirk (2010) outlines the value of providing information about Māori to occupational therapists who are changing their profession in the areas of practice, education, and administration, in relation to the health of Māori. The provision of sharing information up front about occupational therapy can support Māori students in their journeys toward degree completion and their place as registered practitioners within a profession (ibid).

The actual number of Māori students in New Zealand is not known as obtaining statistics is largely dependent on students making the choice to declare

their ancestry (MOH, 2011) and the lack of literature available on the profession currently. Based on New Zealand Health Information Service (2010) statistics, where the profession declares their Māori status, the total number of the active osteopaths to self-declare Māori is estimated to have increased from five to seven people between 2006 and 2010 (MOH, 2011).[21] There is room for improvement.

According to the MOH (2006a), Māori youth need early encouragement and advice from school counsellors to pursue the courses required for osteopathy programs (ibid). In this context, the process may be assisted through more collaborative by the provider of osteopathy training in New Zealand (information of which follows) in providing a foundation for successful recruitment efforts.

Educating students in primary, middle and high school about osteopathy as a profession is an important strategy. According to MOH (2006a) developing promotional materials and websites which focus on Māori students is helpful. In this context, Māori osteopathy role models who identify with the challenges of pursuing an osteopathy career could be fundamental to promoting and recruiting future osteopath practitioners. Other areas to be highlighted in assisting Māori workforce development are bridging and access programs with seats for Māori students, reflecting regional demographics. Universities can assist students by ensuring they have access to supports, which are known to contribute to attrition rates if not mediated. Mentoring has also been highlighted as being beneficial to Māori learners (ibid).

Culture

Mara (1998) defines culture as a dynamic lived process which includes values and beliefs, but steers away from reducing this to a list of individual characteristics, because culture is not homogenous (ibid). Banks, C. & Banks, J. (1995) discuss that culture can also be understood as a social and political construct with underlying power structures (ibid). In this project, culture underscores both of these meanings. Linda Smith (Smith, 2005) highlights the development of cultural awareness is a first step in understanding that there is difference. However the process does not require the practitioner to look beyond at the socio-political, and economic characteristics of difference or examine ones own experiences or relationships to these differences (ibid). Wepa (2005) points out that it is a starting point. The limitations of this concept is that it views the other (patient) as the bearer of culture from a place as being part of the dominant culture and may not encourage reflective practice or challenge the ways of working such as practitioners regarding their own actions (ibid).

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[21] Total number refers to total number of the osteopathic workforce (293 total workforce at the 2009 health workforce survey).

Cultural competence

Over the last decade or so has seen the commencement of the only osteopathy program of training available to be offered in New Zealand at Unitec. There is a summary of the skills required on Unitec's website page. This included the core biosciences – anatomy and physiology, and clinical sciences, pathology, osteopathy principles and techniques (Unitec Institute of Technology, 2011). Together with the Master of Osteopathy, the Bachelor of Applied Science (Human Biology) and Certificate in Foundation Studies: Whitinga – Sciences forms a five-year package, which enables osteopathy registration. The provider of osteopathy training currently has Compulsory Courses, where Māori health is mixed in with other components of the curriculum such as Clinical Practicum, Patient management, Clinical reasoning 1 and 2, and Professional Practice as an educational domain (ibid).

Wardle (2011) discusses that when teaching students cultural competence, stimulating approaches should include experiential learning activities within an interactive group format. For instance students are challenged to examine the development of their cultural values and explore these values in a group setting, with other students who have different experiences and perspectives (ibid). DeSouza (2008) supports that cultural competence is an imported paradigm which potentially leads to practitioners describing the practices of other ethnic groups with a, "*checklist mentality*" (p. 129). The lack of a stand alone curriculum component of the osteopathy training provider, also suggests that there is a possibility that information being delivered to osteopathy students is dominated by Western views. Potentially this may narrow the focus of osteopathy students of Māori health, to a medicalised discourse of biological processes and disease perspectives. Drawing on local initiatives and existing concepts of Māori health models, could help focus osteopath practitioners further in their work to improve broader population health outcomes.

Bishop & Graham (1997) have provided guiding principles from the perspective of Māori development. These are thought to enhance courses of study as they originate from the perspective of Māori communities. Emphasis is placed on respecting Māori students for who they are. This includes a careful consideration within the curricula content as to the relevance to their view of the world (ibid). Within the context of the provider of osteopathy training curricum, participation could be fostered by creating an environment which is inviting to Māori students, who access the osteopathy training programme. This will reinforce to them that the training institution is up to date and of the highest quality, within a culturally reinforced environment.

The Osteopath Council of New Zealand (OCNZ) (2011c), provides a comprehensive source of information on the, Capabilities for Osteopathy practice. The document is a policy which guides the profession and of particular interest to this project is the recommendations which are made in relation to cultural competency. In its policy to Registered osteopath practitioner members, the Council advises that cultural competency is a, *"praxis"* (p.6).[22] Recommendations include that competence as an ongoing process includes the need for osteopath practitioners to ensure that they are communicating sensitively and respectfully (ibid).

A strength of the Cultural Competence (OCNZ, 2011c) is that it suggests the need for action. To achieve cultural competence requires the practitioner to prioritise learning, assessing and sharing in the culture of the patient. Whether cultural competence as a concept encourages the practitioner to analyse and consider the concept of the various forms of racism, including internalised racism is uncertain and is an important point. For some Māori this aspect could have a bearing from an holistic perspective and in their treatment. DeSouza (2008) discusses that there are limitations of the cultural competency concept, if practitioners, as a way of simplifying the process, approach culture in a reductionist manner. Kiro (2009) supports that a life course approach which has the potential to incorporate the accumulation of risk across the life course is helpful.[23]

Another concept, cultural safety can be utilised by the osteopath practitioner. Wepa (2005) outlines that the concept of cultural safety is helpful for practitioners who are willing to address inequities for Māori, by encouraging the social, historical and political contexts of health care to be analysed (ibid). In this project, the concept provides some undergirding upon which osteopath practitioners can find encouragement, when considering difficult concepts such as racism, discrimination and prejudice. In addition Wepa (2005) explains that cultural safety is determined by the patients, with whom practitioners provide care (ibid). Within this context, cultural safety could be utilised by osteopath practitioners who wish to understand the limitations of their practice, in relation to culture and in terms of Māori accessing their care, while safely moving through health care. The WHO (2007) recommend practitioners recognise and accept that while they may not understand a patient's lifestyles, that reflecting on one's own experience, peers and family members lifestyles as part of the therapeutic interaction is inappropriate (ibid). Mahuika (2008) supports that Māori are not a homogenous group (ibid). What may be appropriate

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[22] Although Praxis is not defined in the Osteopathic Council of New Zealand (2011c) policy, the definition of it used here refers to praxis as the putting of theory into practice.
[23] Life course refers to an approach which conceptualises health care needs and services, by documenting risk and protective factors through a person's life-time.

therefore, is for osteopath practitioners who have Māori among their patient lists, to consider engaging with post-graduate education, which encourages exploration of these concepts.

History of Osteopathy Medicine

Figure 6. Dr. Andrew Taylor Still

Source: The Museum of Osteopathy Medicine & The International Centre for
Osteopathy History (2000). Reprinted with permission.

In order to contextualise osteopathy in contemporary society, it is necessary to discuss the American history, which New Zealand osteopath practitioners share with the Osteopathy community world wide. This section discusses the impact changes to the osteopathy profession's structures, the forms of conflict which have been encountered, and the concepts of osteopathy manipulative medicine, have had on the osteopathy profession. In recounting the past and reframing traditional accounts of osteopathy history, a greater understanding of the environment and position, in which osteopathy has developed into and its potential for furthering Māori health and development is provided, where available.

Close inspection of the history of osteopathy and Andrew Taylor Still (1828-1917) (see Figure 6) (Chila & Fitzgerald, 1991) reveals the modern rise of osteopathy from the mid- 1800s to the present. The American physician Dr. Still, became frustrated with allopathic medicine's fixation of treating patients symptoms, rather than approaching treatment based on an holistic philosophy of health (ibid). Dr. Still's work

generated considerable controversy in the 1800s and 1900s, and continues to stimulate support, criticism, and commentary up to the present day. The ongoing resonance of Dr. Still's work and influence of his broad-based approach is referenced in his philosophy of osteopathy, *"Find in man a miniature universe"* (American Academy of Osteopathy 1977, p.333).

Dr. Still's perspectives and subsequent body of research, published from 1910, has presented the view that when an osteopath explored the human body for the cause of disease that he would know that he was dealing with, *"complicated perfection"* (Still, 1992, p. 7). His analysis of the medical system of his time lead him to question the effectiveness of some of the most basic and widely applied techniques in public health, which at the time included leeches, mercury pills, blood letting and purging (Trowbridge, 1991). Dr. Still's techniques involved manipulation of the joints and bones to diagnose and treat illness (Guglielmo, 1998). He called his practice Osteopathy by naming it after the Greek reference of osteo (or osteon for bone) and pathy (or pathos), to communicate his theory that disease was grounded in a disorganised musculo-skeletal system. This is characterised by diagnosis and treatment of the musculo-skeletal system, with the premise that disease can be prevented and patients can be spared the negative side effects of drugs in the process (ibid).

The analects of Dr. Still encouraged inquiry and shaped the research hypotheses of many scholars and he became the subject of an extended controversy, due to his open mind towards spiritualism (Gevitz, 2004). Analyses in the field of osteopathy continues to support Dr. Still's research and the profession has shown remarkable staying power, continuing to draw support and commentary to the present day (ibid).

The purpose of this section is to examine the ideology that has characterised early osteopathy and extent in which this modality prioritises topics and ideas, falling within the realm of patient centred care. There is convincing evidence that Māori have a strong preference for Māori-centred services. This was highlighted by a study (Bacal et al., 2008) which detailed examples of cases of patient centred care:

> They make people comfortable. They explain what your injury is about, how you did it, how they can work with it and stuff. They don't get too close too fast. Like say you've got something on you, they don't start examining you straightaway. They ask you to explain instead of just saying, *"Let's have a look"* and getting straight into it. (Auckland Rangatahi). (p. 51)

Historically, Dr. Still opened the American School of Osteopathy (ASO) in 1892, Kirksville, Missouri and in 1922, the first profession-wide attempt at organising the osteopathy philosophy into simple phrases was undertaken (Chila & Fitzgerald, 1991). Their interpretation of the osteopathy concept described four principles, the body is a unit; the body possesses self-regulatory mechanisms; structure and function are reciprocally inter-related; and rational therapy is based on an understanding of body unity, self-regulatory mechanisms, and the interrelationship of structure and function (p. 641).

The words of these tenets, *"unit"*, *"inter-related"* suggest Dr. Still's preference of describing the whole patient and the importance for the provision of holistic care (p.763). The WHO (2007), links this to patient-centredness while describing this approach to care as being:

> rooted in universally held values and principles which are enshrined in international law, such as human rights and dignity, non-discrimination, participation and empowerment, access and equity, and a partnership, of equals. It aims to achieve better outcomes for individuals, families, communities, health practitioners, health care organisations and health systems, by promoting the culture of care and communication and supportive health care environments. (p.7)

Furthermore, the WHO (2007), discusses, *"holistic"* health care as not meeting broader health challenges and strongly supports health care which reaches out beyond the clinical setting to families and communities, while highlighting a profession's readiness to do this requires them to be empowered to want to change the system for the better (WHO, 2007). Regardless, Chila & Fitzgerald's (1991) book, Foundations in Osteopathy Medicine, highlight that osteopathy principles and philosophy, *"call"* for a patient-centred approach (p.371). Hera (2011) argues that a patient-centred stance supports health care practitioners who work with Māori, because it requires the professional to be culturally competent.

Dr. Still founded the American School of Osteopathy (now the A.T. Still University-Kirksville College of Osteopathy Medicine) in Missouri as a radical protest against the western medical system of his time (Still, 1902). Dr. Still thought the medical profession was morally corrupt and lacked credibility because it treated effects rather than the causes of disease, as evident in his discussion on health, *"to find health should be the object of the doctor: anyone can find disease"* (p.2). His intentions were to reform the existing 19th century medical practices of his time, as he envisaged that someday a better approach would use manipulation of the musculo-skeletal system, some surgical work and drugs, sparingly (Guglielmo, 1998). Factors

within Dr. Stills vision align strongly to a patient centred care paradigm, because at the heart of it he provides the space in which patients are encouraged to express their values and preferences of the therapeutic intervention. This gave the patient options, than relying heavily on a medicated approach.

Mark Twain, an American humorist, novelist, writer, and lecturer, was a stern supporter of osteopathy manipulative treatments after his daughter's epilepsy was treated. He addressed the New York State Assembly in 1909, *"I don't know as I cared much about these osteopath practitioners, until I heard you were going to drive them out of the state, but since I heard that I haven't been able to sleep"* (Kirk, 2004, p.1066). Philosophically opposed to the American Medicine Academy's position, that medicine was the only legitimate approach Twain supported licensing the osteopathy profession (Gevitz, 1996). As a response to this the Medical physicians of New York County's Medical Society vigourously confronted Twain who objected that this was more a case of power imbalance and a case of economic turf wars (ibid).

Between 1916 and 1966 recognition by the United States government was sought by the osteopathy profession as it strove on to establish equivalency with its Medical doctor counterparts (Gevitz, 1996). These years have also been noted as a time of struggle for the osteopath practitioners who sought to serve as physicians and surgeons in the United States Military Corps. In 1966, the Secretary of Defence authorised osteopathy physicians to enter into all the medical military services, and on the same basis as Medical Doctors. This acceptance paved the way for further solidification and in 1996 the first Doctor of Osteopathy entered into the Army to serve as Surgeon General (ibid).

The battle for recognition continued on into the 1960s (Baer, 1987. The American Medical Association of California tried to end the practice of osteopathy medicine, spending millions of dollars in the process (ibid). In the past decade, the two groups have merged and osteopathy physicians have been permitted full active membership in the American Medical Association (Allee et al., 2005). Subsequently, in 2006 the Medical Association has adopted a policy regarding the membership rights of osteopathy medical students in their main policy document's preamble. This recognises equality of osteopathy and allopathic medical degrees within the organisation and the health care community as a whole (ibid).

When osteopathy medical students take an oath, in addition to the Hippocratic oath of maintaining and upholding the core principles of osteopathy medical philosophy (Gevitz, 1996) they take time to mention the person as representing a combination of body mind and spirit, that the body is capable of self healing and health maintenance. There are different opinions around the significance of this.

Some liken the philosophy of osteopathy medicine as a social movement within the field of medicine, which promotes a more patient centred, holistic approach to medicine, while advancing the role of the primary care practitioner within the health care system (ibid). Within a New Zealand context, and as Māori face significant social and economic obstacles, with lower life expectancies compared with non-Māori (Reid & Robson, 2007), health care which is aimed at closing the gap between Māori and other New Zealanders is significant (ibid).

Osteopathy manipulative medicine

In terms of international practice rights, each country around the world is different (Burkhart & Tunanidas, 2005). The only osteopath practitioners that the United States (US) Department of Education will recognise as physicians are graduates of osteopathy medical colleges of the United States. Therefore, osteopath practitioners who have trained outside the United States are not eligible for medical licensure in the US (ibid).

In the United Kingdom 2005, the General Medical Council of Great Britain accepted US trained Doctors of Osteopathy as full medical practitioners, with the same rights of their existing members (Burkhart & Tunanidas, 2005). The referencing of this and the deliberation, which took a year, lead many to believe that there was still some confusion about US trained osteopathy physicians, whose practice rights are equivalent to MD qualified physicians (ibid).

Rural Māori health

The task of defining rural areas has always been particularly challenging (World Health Organisation, 2009, p.6). The term *rural* invokes images of farms, villages, small towns, and open spaces. But there is no consensus on specific definitions for these areas. This reflects the reality that, *"rural"* and, *"urban"* are multi-dimensional concepts, making clear-cut distinctions between the two is difficult (ibid). Images of glaciers, towering mountains and sheep stations, subtropical forest, vast bush-covered valleys, volcanic peaks and miles of coastline, commonly reference the environment and identity of rural New Zealand, with its richly productive and dynamic agricultural sector and sense of national identity (Ministry for the Environment, 2000).

The characteristics of rural New Zealand that define its uniqueness, often serve to constrain and are thought to positively and negatively affect the process of classifying a locality descriptor (Statistics New Zealand, 2008). As the osteopathy profession may take an interest in, and rural health workforce policy makers take steps towards improving or at least maintaining the rural health workforce, they make

decisions that can have life-long implications for rural communities health and well-being. Ensuring geographical categories capture and measure comparative degrees of rurality is part of a comprehensive solution to guiding rural health workforce policy for the health sector (ibid).

Definitions of rural Māori

The rural literature uses a range of terms to describe distinctive identity on rural people's behalf, these range from the, *"well worn imagery of kiwi rural blokes in swandris craving the taste of their favourite beer"* (traditional local stereotypes) (New Zealand Studies Association (n.d., p. 5) to an, *"an isolated rural community centred on hapū (sub-tribal) values and social structures"* (p.15). Today iwi is paramount to the identity of many Māori (Maré & Sin, 2004) with the role of Māoritanga (Māori culture) (ibid), Te reo (Māori language),[24] whakapapa (genealogy) and iwitanga (tribalism) (playing an important role in supporting a Māori identity (Raerino, 2007). The Eastern iwi use the term, *"Ngātiporoutanga"* which, *"personalises their iwitanga from the broader term of Māoritanga"* (p.84) with each tribe having their own way of doing their own things (ibid). In this project, Māori, Indigenous, rural people, and patient are used interchangeably to describe this population group.

Rural may also be defined in terms of social and economic characteristics of people living in all areas of the, *"rural spectrum"* (Statistics New Zealand, 2008 p.5). Statistics New Zealand's (2008) document, *"New Zealand: An Urban/Rural Profile",* and acknowledges the frustration that users may have of their population classification (see Table 4, p.61). This is particularly of the rural classification which is based on population size. Using population measure, *"alone often does not necessarily reflect the characteristics that make places similar, or not"* (p. 5). To make adjustments for this, classification is encouraged which separates rural, according to the different influences of nearby urban areas which may reflect an areas', *"heterogeneity"* (p.5).

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[24] Iwi refers to kinship group, tribe, nation, people.

Table 4.   Statistics New Zealand Population Classifications for 2006

Urban/rural classification	Area type	Definition
Urban	Main urban	Towns and cities with a minimum population of 30,000 people
	Secondary urban	Towns with a population between 10,000 and 29,999 people
	Minor urban	Towns with a population between 1000 and 9999 people
Rural	Rural centre	Population between 300 and 999 people
	True rural	Population less than 300 people

Source: Statistics New Zealand (2008)

For the purpose of this project, the term rural refers to Highly Rural/Remote Areas and Rural Areas with Low Urban Influence,[25] because people living in these areas have health needs that are most distinct from those of the urban majority (Statistics New Zealand, n.d., a). Independent Urban Areas are also a focus of this project due to their importance for people living in rural areas, as service centres for the surrounding rural areas (ibid).[26]

Primary health care

It is important also, to clarify and define the terms primary health care, the primary health care osteopath and rural as they pertain to the New Zealand health context and to this project. Primary health care is a broad multidisciplinary area of practice which is provided in urban and rural settings by osteopath practitioners and other health professionals (MOH, 2001b). The Primary Health care Strategy (ibid) discusses primary health care as, *"essential"* care. It has as its basis, practical,

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[25] Highly rural/remote areas refers to the population density which is very low, 0.5 people per square kilometer (Statistics New Zealand, 1998a) and where there is minimal dependence on urban areas in terms of employment, or where there is a very small employed population (Statistics New Zealand, n.d., b). Rural areas with low urban influence refers to a population density of up to 10 people per square kilometer (ibid). Rural Areas with Low Urban Influence has a strong rural focus. The majority of the population in these areas work in a rural area (Statistics New Zealand, n.d., b).

[26] Independent urban communities refers to areas which have on average up to 14.2 people per square kilometre (Statistics New Zealand, 1998a). Independent Urban Areas are urban areas (other than main urban areas) where less than 20 percent of the usually resident employed population's workplace address is in a main urban area (Statistics New Zealand, n.d., b).

scientifically sound, culturally appropriate and socially acceptable methods. These are universally accessible to people in their communities, involves community participation, is integral to, and a central function of, New Zealand's health system and may be the first level of contact with the health system (ibid, p.1).

Rural osteopathy description

In New Zealand the Osteopath Council of New Zealand (2011b) has no description of rural osteopath. It provides the following comprehensive definition of the osteopath practitioner, while commencing the description of the osteopathy scope of practice falling within the parameters of, *"primary health care"* (ibid). Given the Osteopath Council's definition of primary health care and the primary health care role of an osteopath, this project links the osteopath into another rural definition, by using Barnett & Brabyn (2004) descriptions of rural, outlined in their project of, *"population need and geographical access to general practitioners in rural New Zealand"* to include, *"isolated rural areas"* (p.1), *"travel time, and distance"* (p.1), *"remote rural areas"* (p.10), *"geographical and cultural barriers"* (p.10), and a, *"dispersed rural population"* (p.2) (ibid). Therefore, in this project it is envisaged that the rural osteopath will probably practice in an environment that may be geographically and/or professionally isolated or service patients who live in areas in which they may be geographically and/or isolated from health care services.

Rural New Zealanders

There were over half a million people (one in seven) (532,740) recorded in the in the 2001 New Zealand census resident population count, who were living in rural areas. [27] This accounts for at least 13 percent of the total New Zealand population in the North Island and 19 percent in the South Island (Statistics New Zealand, 2002a).

Regionally, New Zealand's rural communities have seen increases in the last ten years in North Island towns and cities with a 12.6 percent increase recorded in North Island regions, compared with 7.6 percent in the South Island (Statistics New Zealand, 2006). Rural populations tend to be highly mobile due to seasonal employment. Table 5 (p.63) enables comparisons to be made regionally, showing the high Māori population of Hawke's Bay (23 percent) in comparison to urban environments such as Wellington's (around 12 percent are Māori) (ibid).

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[27] Rural areas refers to those people living outside urban areas; that is, outside concentrated settlements of 1,000 or more people. Rural centres have a population of 300–999, although there are exceptions at either end of that scale. 'Other rural' residents are those in rural areas but not living in a rural centre. The rural population includes those residing in offshore islands, but excludes those residing in inland water, inlet and oceanic areas (Statistics New Zealand, 2002a).

Table 5. Regional Attributes of New Zealand in 2006

Region	Population	Percentage of NZ Population	Percentage Māori	Population density People per Square Km
Northland	148,470	3.69	31.70	10.8
Auckland	1,303,068	32.35	11.08	215.3
Waikato	382,716	9.50	20.96	15.9
Bay of Plenty	257,379	6.39	27.53	21.0
Gisborne	44,499	1.10	47.27	5.3
Hawke's Bay	147,783	3.67	23.51	10.5
Taranaki	104,124	2.59	15.76	14.3
Manawatu-Wanganui	222,423	5.52	19.62	10.0
Wellington	448,959	11.15	12.77	55.2
Tasman	44,625	1.11	7.09	4.6
Nelson	42,888	1.06	8.67	96.7
Marlborough	42,558	1.06	10.47	3.9
West Coast	31,326	0.78	9.67	1.3
Canterbury	521,832	12.96	7.22	11.7
Otago	193,800	4.81	6.56	6.2
Southland	90,876	2.26	11.78	2.8

Source: Thornley (2007, p.2)

There are also legal boundaries which define rural communities in New Zealand, such as regions or districts, based around the New Zealand Geographic Frame. This is important to the present project, as it identifies small units of variable geographical areas called meshblocks, which determine the local authority boundaries of District Health Boards.

Demographic features of Māori

The total Māori population makes up around 15 percent, with the majority of New Zealanders being of European descent (67 percent) (Statistics New Zealand, 2006). According to Durie (2009), the Māori population is projected to increase at a relatively fast rate (see Figure 7, p.64) (ibid).
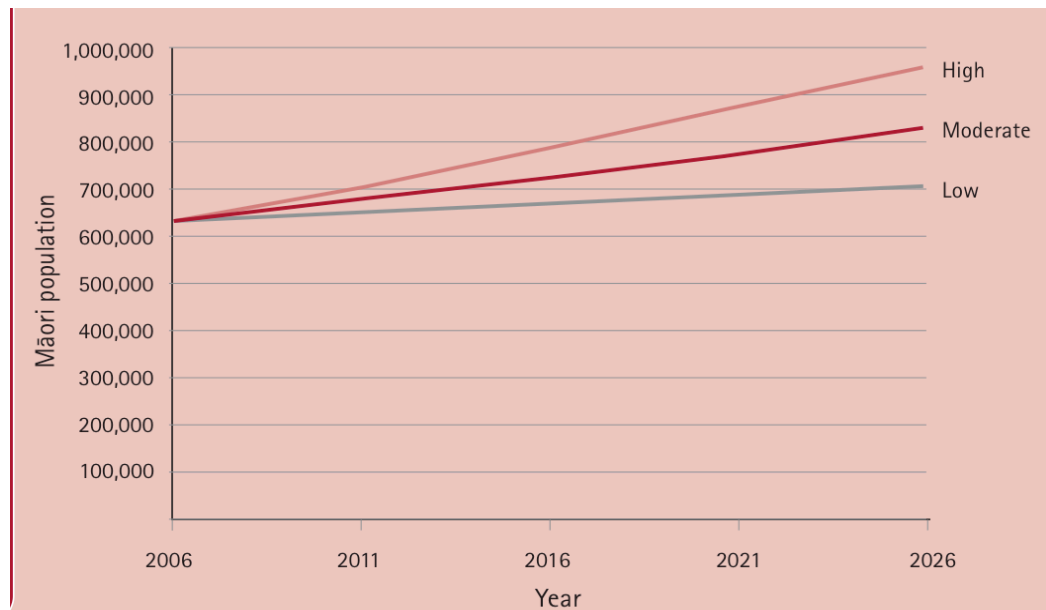
Note: High, moderate and low refer to different population projections reflecting different demographic assumptions. The moderate projection is the most plausible, while the high and low projections represent alternative

Figure 7. Projected growth of Māori population projections 2006-2026 (2006-base)

Source: Te Puni Kōkiri (2010, p.1).

In addition to projected growth of population, both the Hawke's Bay and New Zealand populations are predicted to age, but Hawke's Bay had a higher proportion of its population in the 65-84 year age group in 2008 (12 percent) compared to New Zealand (11 percent) (HB DHB, 2010b). Hawke's Bay also has a slightly higher proportion (nearly 2 percent) than New Zealand as a whole (1.5 percent) in the 85 plus years (ibid). Durie (2009) supports these predictions of changes in age structure for Māori (see Figure 8, p.65),

> by 2051 about one-third of all New Zealand children will be Māori but the percentage of men and women over the age of sixty-five years will increase from four percent in 2006 to thirteen percent in 2051… the burden of disease will be high and that the larger older Māori population will have high health needs. (pp. 6-7)

Contributing to this is a high fertility rate and a younger child bearing age (Statistics New Zealand, 2008). Swift action to address life course epidemiology of musculo-skeletal injury and disorders, back pain and injury for Māori is vital as the extent of the problem could rapidly escalate. Especially considering the projected growth of the Māori population. This would not only have a devastating effect on

Māori whānau, hapū and iwi, but there is an associated economic cost to the health sector now and in the future.

1 Māori population projections are based on the estimated resident population of Māori ethnicity at 30 June 2006.
2 Total population refers to all people in New Zealand, including Māori. Total population projections are based on the estimated resident population of New Zealand at 30 June 2006
3 The regions employed in this section are Regional Council areas.
4 Median age is the midpoint of the age distribution, meaning half of the population are younger, and half are older, than this age.

Figure 8. Population pyramids for age of Māori and the total population in 2006 and 2026

Source: Te Puni Kōkiri (2010).

Hawke's Bay region

This project is situated in Hawke's Bay. Hawke's Bay is located on the east coast of the North Island (see Figure 9, p.66) and stretches from the north of the Mahia Peninsula to just south of Porangahau, the Pacific Ocean to the Ruahine, Huiarau and Ahimanawa ranges (HB DHB, 2010b).
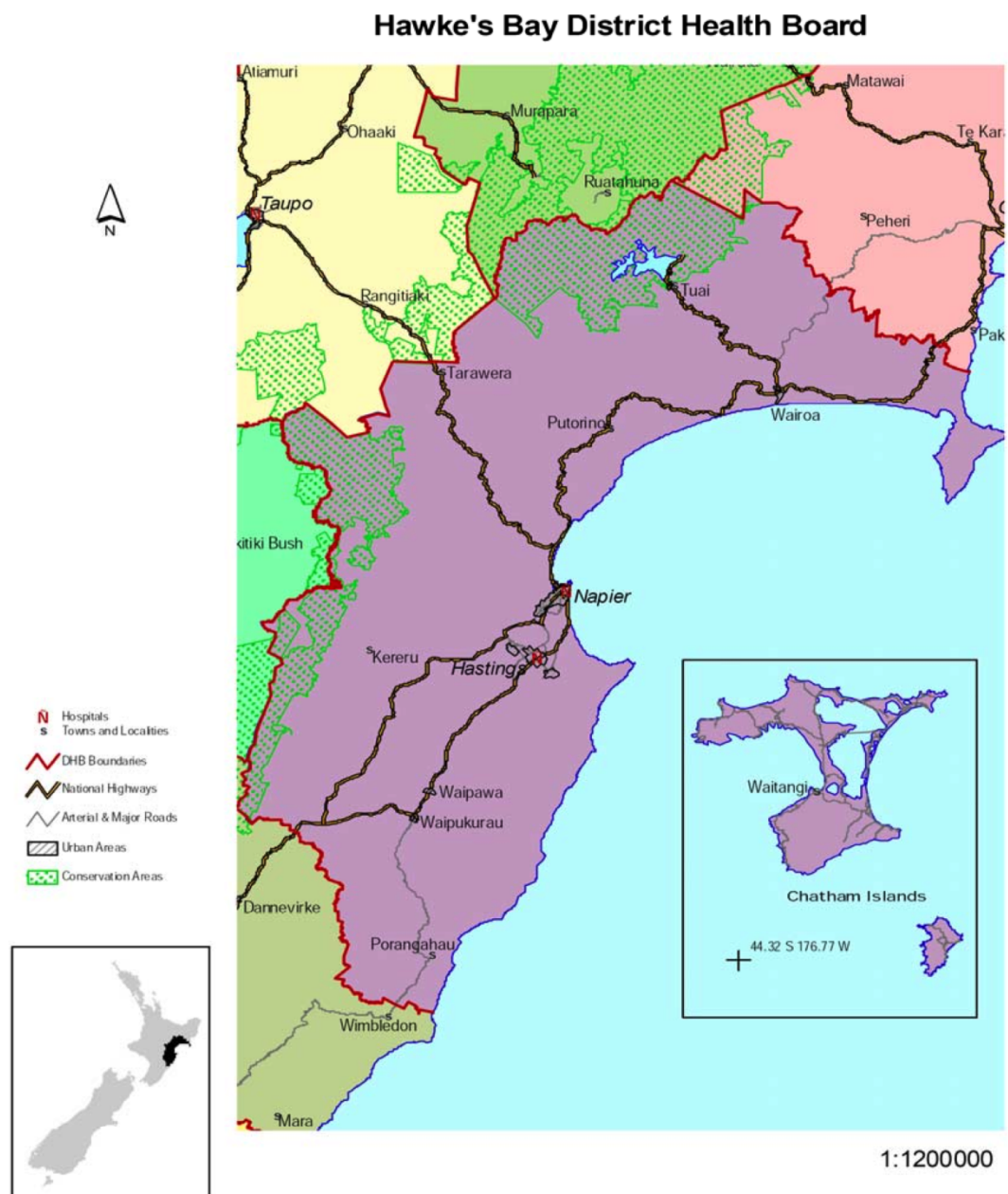
Figure 9. The Hawke's Bay region
Source: HB DHB (2010b).

The region comprises Napier City, Hastings, Central Hawke's Bay and Wairoa Districts and the Chatham Islands (see Figure 9) (HB DHB, 2011). In terms of an Urban/Rural Profile, Statistics New Zealand (1998a) designates the region rural because of the population density which is 10 persons per square kilometre. This is significantly lower than the New Zealand average of 14 persons per square kilometre. One fifth of those living within the Ngāti Kahungunu rohe region are Māori (20.7%) (see Table 6, p. 67) (ibid).   Factors contributing to this include natural growth. Māori

living in Hawke's Bay contend with various issues and challenges (HB DHB, 2010b). Maintaining good musculo-skeletal and general health is one of the challenges Māori face, with higher prevalence rates of diagnosed arthritis, compared to the national and consistently higher than national rates of hip and knee replacement procedures (ibid).

Table 6. Māori and non-Māori living within Hawke's Bay

Taiwhenua/Rohe (geographical areas)	Māori	(%) Population)	Non-Māori	Total Population
Wairoa	4,467	(57.0%)	3,366	7,833
Te Whanganui A Orotu	7,719	(16.2%)	40,074	47,793
Heretaunga	18,651	(23.6%)	60,438	79,089
Tamatea	2,694	(20.8%)	10,263	12,957
Tamaki Nui A Rua	3,951	(18.1%)	17,826	21,777
Wairarapa	5,502	(14.3%)	33,105	38,607
Ngāti Kahungunu	**42,984**	**(20.7%)**	**165,072**	**208,056**

Source: Hawke's Bay District Health Board (2011)

Age projections for Māori between 2006 and 2026, show an increase in the median age from 22 years to 25 years (see Figure 10, p.68) (Te Puni Kōkiri, 2010). The increases in median age relate to changes in the age distribution, with fewer individuals projected to be under the age of 15 in 2026 proportionally, and 32 percent of the Māori population (down from 34 percent in 2006). There will be increases in the population above the age of 65, which is nine percent of the Māori population (an increase of four percent in 2006) (ibid).

Māori are youthful compared to the total New Zealand population (Te Puni Kōkiri, 2010). It is expected tht they will age at a rate which is slower than the total population (ibid). Of the total population, the median age is projected to increase by four years from 35 years in 2006, to 39 years in 2026. Māori are projected to increase by two years over the same period. This will result in a 14 year difference in median ages at 2026 (an increase of 12 years difference than in 2006). The Māori population despite ageing, are expected to be more youthful when comparing the rest of the total population in 2026 (ibid).
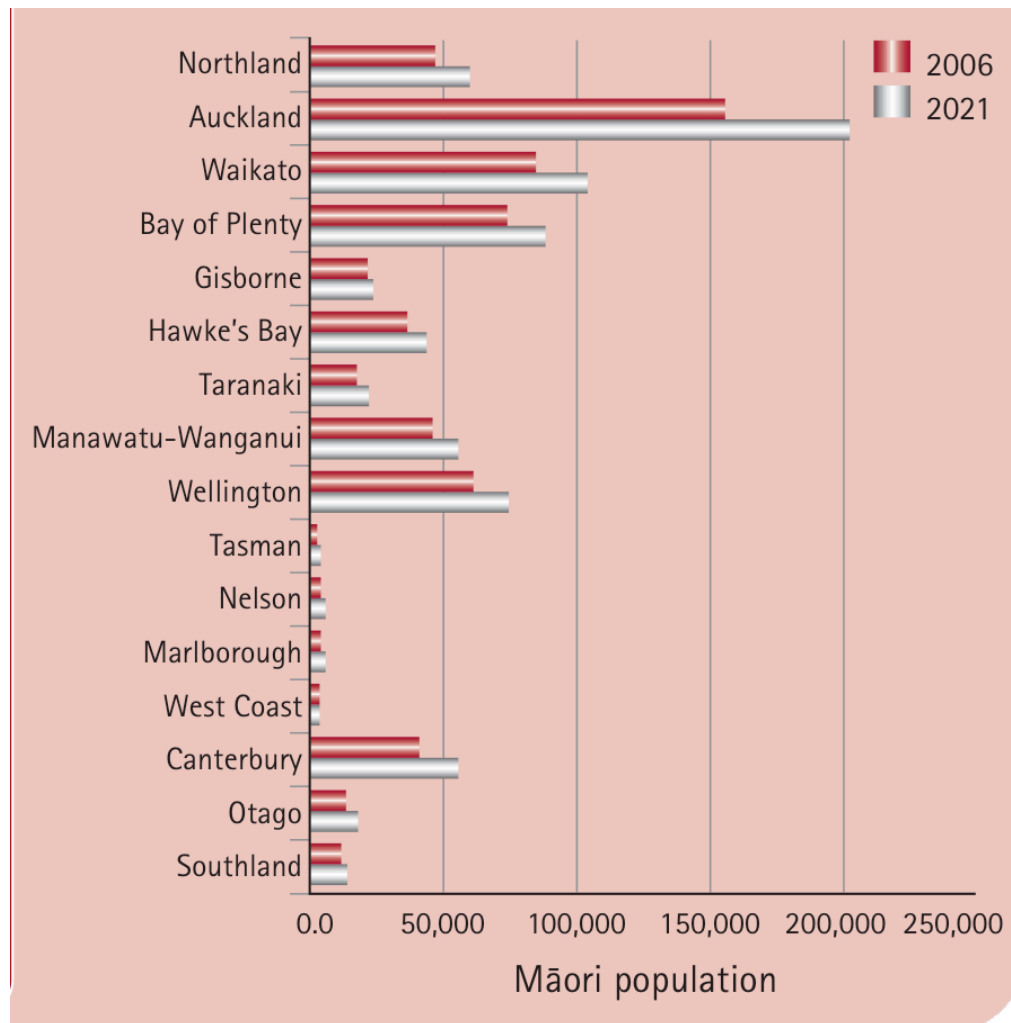
Figure 10. Age projected regional numerical growth of the Māori population

Source: Te Puni Kōkiri (2010, p.1).

Using projections based on the 2006 census, the percentage of Māori making up the Hawke's Bay population in 2008, were 24 percent of the Hawke's Bay, compared to 15 percent nationally (HB DHB, 2010b). Musculo-skeletal conditions are among the most common causes of illness in Hawke's Bay with an estimated 20 percent of all cases being presented to general practices within a 12 month period being diagnosed.   This has resulted in significant costs to health, socially and economically. The most commonly diagnosed musculo-skeletal disorders in Hawke's Bay are Osteoarthritis, Rheumatoid arthritis, Osteoporosis, Fibromyalgia, and Gout with the number of confirmed cases steadily increasing (ibid). They are a major public health concern in New Zealand as the national public expenditure on musculo-skeletal health care, such as orthopedic operations is substantial (Hall, McPherson, Smeets & Taylor, 2004).

The prevalence of musculo-skeletal disorders are generally higher in individuals who are smoking tobacco, have a poor diet with a low calcium intake, when there is heavy alcohol consumption, low levels of weight bearing physical activity and long term use of some medications (HB DHB, 2010c). With increasing age, the rates increase (ibid). Specifically, the bone and joint conditions mentioned by HB DHB's (ibid) survey, *"Musculo-skeletal disorders"* highlight a serious public health problem. There is a high incidence among people in Hawke's Bay, with long-term ramifications. The large aging population and the increasing weight of individuals, combined with lack of exercise, will significantly influence musculo-skeletal burden statistics in the foreseeable future (ibid).

Osteoporotic fractures in Hawkes Bay are projected to be high in 2013 (18 percent) (Bossley & Miles, 2009). It is thought that prevalence rates are under-diagnosed, for instance in osteoporosis. This is due to a lack of investigations. The costs of non-diagnosis means that the problem may be underestimated (ibid).

Increased incidence rates of hospitalisation are found in Hawke's Bay's Māori population for hip fracture and knee replacement (HB DHB, 2010c). In terms of key findings, the HB DHB's (2010b) report details an increasing prevalence of osteoporotic fracture. This falls mainly on women, with the cost of hospitalisation for hip fractures being nearly twice that of spinal vertebra. Hawke's Bay Māori are at greater risk of presenting with musculo-skeletal conditions relating to osteoarthritis in females and males, with rises in prevalence with age and increasing body weight. Forty percent of these cases were people over the age of 70 years, who presented with osteoarthritis of the knee. The difference in musculo-skeletal rates between Māori and non-Māori are related to a complex interaction of social, economic, behavioural and biological changes.

Rheumatoid arthritis is highlighted in Hawke's Bay (HB DHB) as leading to work disability, within a decade of its onset. In nearly 60 percent of patients, this commonly leads to cessation of employment. Fibromyalgia is also noted in Hawke's Bay with approximately 80 percent of sufferers being woman and the condition most commonly being diagnosed between 30 and 45 years (ibid).

Gout has been estimated to affect 5 to 10 percent of the overall population of Hawke's Bay (HB DHB, 2010c). It is high in prevalence for Māori and people of Pacific Island decent, usually over age of 40 years (ibid). It is nine times more common in men than women, until after menopause and more common in Māori (ibid). According to The Counties Manukau DHB Māori Gout Action Group (2011), *"knowledge and awareness-raising campaigns"* (p.3) are needed to improve the low awareness of potential damage to the joints, if gout is left untreated over time. In

addition, this can cause and result in kidney damage (ibid). Gout tends to present in conjunction with other risk factors such as high blood pressure and diabetes, and can increase the risk of heart disease and stroke (HB DHB, 2010c). Osteopathy healthy lifestyle interventions can focus on gout, as a health promotion strategy.

Chapter Three: Methodology

Introduction

> What researchers may call methodology... Māori researchers in New Zealand call kaupapa Māori research or Māori centred research. This form of naming is about bringing to the centre and privileging indigenous values, attitudes and practices. (Smith, 1999, p.125)

Over the past few decades, there have been changes to health research in New Zealand, towards engaging in approaches which recognise the important role of culture (Renwick, 1991). These legitimise the relevance of Māori cultural values and concepts within the research process. The determination for a distinctly Māori defined area of research which has positioned at its core Māori and culture, is intimately connected to the politics of Māori self- determination and identity (ibid).

In this project, research which is advantageous to Māori communities and in keeping with Māori aspirations and self-determination is the primary focus. This chapter, presents the research approach and methodology of the project. The importance of incorporating a Māori world view and values will be outlined. Further to this, the methods used, which guide this project are detailed with the final section outlining the data analysis, ethical issues and the actions of selecting and meeting the research participants (practitioners).

Constructing the research question and tool

Constructing a research tool to assist in the analysis of the research question and objectives, which acknowledged a Māori worldview was sought at an early stage in this project. This provided an opportunity to explore both the intention and objective of the research and methods used in the project. Providing input, while ensuring the quality and validity of the output (the findings) was significant to making an informed decision and reiterating the project's question, and determining the potential objectives which would follow, was an important part of the process.

Prior to the literature review, the initial question asked was, *How can osteopath practitioners contribute to rural Māori well-being (with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand)?* The literature review of this project identified gaps in health research, that Māori are not accessing health services at the same rates as non-Māori (Accident Compensation Corporation, 2004; (Bacal et al., 2008). When Māori do access health

services, often their health conditions, including musculo-skeletal disorders are more acute and complex (ibid).

Māori have a unique body of knowledge based on ancestral traditions which has adapted to meet contemporary challenges (Black et al., 1995). While Māori knowledge is widely applied in Māori communities it is now increasingly being used in mainstream domains. For example, the literature review included, *Best Outcomes For Māori: Te Hoe Nuku Roa Māori Profiles, a longitudinal Māori household project* (ibid). This project detailed Māori development in cultural, social and economic terms. It also demonstrates how Māori knowledge and the osteopathy scientific tradition can potentially be used together to resolve critical failings of the health care system and advance the aspirations of Māori people. The principle of Tino Rangatiratanga (self-determination) principle underpins these aspirations and guides this project's methodology.

Exploring the osteopath practitioners perceptions of how their patients make informed decisions about health was important. Ascertaining whether Māori are being provided with quality information and services (ACC, 2004), required an exploratory exercise in the first stage of the qualitative research process, to guide the formation of objectives and assist the methodological process (ibid).

Individually listed objectives and research questions were sought and associated questions detailed. This process allowed a range of questions for the interview process (see Appendix C, p.171). The objectives included *(a) How does the Treaty of Waitangi influence osteopath practitioners in practice? (b) What holistic perspectives do osteopath practitioners hold, which are in sync with Māori health and well-being? (c) To what extent do osteopath practitioners utilise Māori health models? (d) What training has influenced osteopath practitioners in their rural Māori practice?* Secondary objectives were to ascertain the sources of information the osteopathy profession used, identifying tensions and factors associated with rural osteopathy practice.

Jobling, Merna & Smith (2006) refer to this first stage of defining objectives and questions in the qualitative research process as, *"qualitative risk assessment"*. It is an important part of the, *"risk management process"* for it undergirds all subsequent stages in the process. This includes the analyses which are frequently required to define budgets, time-scales, and processes to managing risk (p.52). On closer inspection of the questions which I outlined in the first stages of this research process, the key words, were felt to be underpinned by a *Māori worldview* and *Māori values*, particularly the reference to Māori health and well-being, which the Māori health literature frequently related to Māori identity (Durie, 1994; 1998a; Moeke-

Pickering, 1996). In addition, the Treaty of Waitangi underpinned by the notion of tino rangatiratanga (absolute self-determination) (Renwick, 1991) was taken into consideration.

The process of building a methodology would need to be recognised by the Māori community, if this project was to be useful. However, being a novice researcher, I reflected on two main areas. The first was about having an awareness of constructing a methodology which involved the ways and processes which I use to construct meaning about my world (Creswell, 1998). This lead to an awareness that the design of this project would be determined by my approach of inquiry from my philosophical worldview (Blunt, 1994). It was therefore essential that this process be guided by supervisorship and other sources of mentorship and eldership from within my whānau. Tomlins-Jahnke (2005) discusses that this process of building a methodology up to a stage which is recognised by the Māori community as being appropriate and relevant to a Māori worldview and Māori values, is implicit on the researcher's understanding (ibid).

The second realisation in relation to the methodological constructing process of this project was of the position that, *"just because you are Māori, or your topic and/or participants are Māori, doesn't necessarily mean you are conducting or engaging in Kaupapa Māori research"* (Rangahau, n.d.).[28] My identification as Māori and Māori researcher is critical to the methodology of this project (Irwin, 1994). Although the right to utilising certain parts or aspects of Kaupapa Māori research in this methodology was not a *given.* Part of the process of constructing this methodology has involved self-reflection of points highlighted by Te Awekotuku (1991) as relating to my tribal background and qualifications (p.2). These aspects have been discussed further in the ethics section of this chapter (see, *Ethical consideration*, p.86).

When researching the Western literature, in my quest to unveil the right way forward, I agonised with constructivist grounded theory, a qualitative research process.[29] This is outlined by Roulston (2010) as describing the ways in which different methodologies and methods may be applied, while making a link between the researcher and researched (ibid). This related to a feeling that these European theories were presented as, *universal* and that was likely to hinder my intention of engaging with, post-colonial experiences of indigenous peoples, while also realising

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[28] Rangahau refers to seek, pursue, research or investigate.
[29] Constructivist Grounded theory refers to a method of qualitative research often utilised in the disciplines of health and education (Bonner, Francis & Mills, 2006). Qualitative research refers to a form of social inquiry which designed to reveal a target audience's range of behaviour and the perceptions that drive it (Shank, 2002).

the contradiction that this posed. Pihama (2001), highlights the development of indigenous theories as being part of, *"post-colonial theory"* (p.74) while advising Māori researchers be mindful. Particularly she asks that Māori researchers look at the ways in which their writings, thoughts and languages are being utilised and assumed by Pākehā (non-Māori), as a means of affirming their own positions (ibid).

Relevance

As outlined in the previous chapter there are disproportionately high rates of disease, including musculo-skeletal. Despite the insurmountable health needs, there is a lack of osteopathy research that focuses on how musculo-skeletal disorders affect Māori. To develop and implement effective interventions which can assist to address the current epidemic, ideas and information from practitioners who are at the coal face of rural health practice is required.

The aim of this research project is to create a space for non-Māori voices to be heard and to help inform rural Māori health and osteopathy health care delivery for Māori. It was paramount to me that care should be taken to ensure that the Māori view and voice was not lost in the diversity of this project because non-Māori osteopath practitioners voices were to be privileged. I was aware of Cram's (2001) stance that, *"non-Māori can support a Māori research kaupapa"* (p.38) the inference being that they cannot, *"conduct"* it (p.38). The reasoning is that this support by non-Māori is often good for Māori. The involvement of non-Māori osteopath practitioners in this project also highlights the diversity of all involved, their osteopathy training, ethnicity, knowledge and experience of the Māori world. This diversity assists a richness which allows multiple perspectives to be focused on Māori development.

Determining a position forward, through the careful selection of elements of Māori research processes was I considered, to be appropriate and fruitful to this project. This helped to ensure Māori cultural values and concepts were not being suppressed or dominated by traditional osteopathy thinking or methods. Also, I wanted to stress that there was no space in this methodology for deficit or victim blame analysis theories (Ryan, 1976) to be situated and located within the eventual framework of choice (ibid).

Māori inquiry framework

Throughout the literature review of this project, it has been reiterated to me of the desire by Māori to regain autonomy over the ways in which their knowledge is being generated (Smith, 1999). The propensity being that these forms may make a valuable contribution to the Māori community and are helpful to Māori development

(ibid). On reviewing the literature of Māori methodologies, there appeared to be a raft of literature positioning Māori theoretically (Durie, 1994; Kingi, 2005; McNeill, 1995; Fairweather, Henley, Poharama, Simmons & Smith; Smith, L.; 1999). These sources favoured use of the term, Kaupapa Māori research (Hingangaroa-Smith, 1997, p. 467) while highlighting that their approach was underpinned by a, *"Māori-centred research"* (Pihama, 2001, p. 102) philosophy, framings and practice.

On close inspection, these Māori centred processes were all very similar by the supporting notion of tino rangatiratanga (absolute self-determination) (Renwick, 1991). Māori-centred was defined as being akin to Kaupapa Māori research which placed Māori at the centre of the research activity (Cunningham, 1998).[30]   In comparison, Kaupapa Māori research was similar, because it promoted a research approach which located Māori as the focus and beneficiary of the research activity (Durie, 1998a). It also promoted Māori control, where the analysis was Māori, which produced Māori knowledge and met Māori expectations and quality standards.

As I have already mentioned, the limitations which I felt rested in Western research constructivist grounded theory. Relating this to a Māori research process was at odds.   I did not want to base this project conceptually within European philosophical traditions (Pihama, 2001). The implications which I drew, was that of theory, which historically has tended to underpin much of the, *"denial"* of Māori access to, "*culture, land, language"* (p.85). In due process, I was developing a resonance for Māori research tools as a means of avoiding the trap of the project being, *"inherently oppressive"* rather there was a need for it to be, *"transformative"* (p.85).

Pihama's (2001) position suggested to me that, Māori centred as an approach was more useful than Grounded Theory on its own. To guarantee the outcomes of this project would be meaningful and have validity for Māori, it was important that the research approach respected Māori cultural beliefs, values and engaged clearly defined Māori processes (ibid). Pihama (2001) and my supervisor clarified for me, those notions I had around theory, when describing the use of the term theory alongside Māori centred research.[31] As an appended word, theory could be in direct contradiction, because Māori centred is based within Māori cultural and philosophical traditions and theory is, *"conceptually based within European philosophical traditions"* (p.85).

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[30] Māori refers to Māori people and the Māori experience (Durie 1996).
[31] Māori centred research refers to locating Māori as the focus and beneficiary of the research activity (Durie, 1998a).

After clarifying that a Māori centred approach would assist to pave the way forward in this project, I wanted to clarify further, the distance or overlapping features between Māori centred and Kaupapa Māori research. A succinct explanation was I felt, attained through Cunningham's (1998) interpretation in terms of the positioning of Māori centred and Kaupapa Māori research processes. I interpreted this description of the concept, in levels. At one level you have research which does not involve Māori. It refers to there being no impact on Māori. Then you have research involving Māori, where Māori are involved as practitioners or possibly as junior members of a research team. Both these types of research are controlled by mainstream analysis. On another level is Māori centred research which is still controlled by the mainstream but Māori are the main practitioners of the research process and the analysis undertaken is Māori and produces Māori knowledge. The fourth level is Kaupapa Māori research, which has some of the features of the Māori centred approach but differs vastly in that Māori are significant participants, Māori have the control and the research meets the prospect of gain and quality values as set by Māori (ibid).

The above definitions were elucidative for me, as Māori centred research was not always facilitated by Māori and therefore did not always require a strong degree of participation by Māori. Kaupapa Māori research, however, (Durie, 1998a) promotes a research approach which locates Māori as the focus and beneficiary of the research activity (ibid). It also promotes Māori control where the analysis was Māori, which produced Māori knowledge and may meet Māori expectations and quality standards.

The key principles of a Māori-centred research approach includes, *"Whakapiki tangata"* (Enablement or Empowerment) [32], *"Whakaurunga"* (Integration),[33] and, *"Mana Māori"* (Māori control) (Durie 1996, p.6).[34] In addition, Māori centred research advocates for research that is for Māori and includes Māori expectations of research and facilitates meaning for Māori and non-Māori. A Māori centred framework was retrieved (p.13) and adapted for the purpose of this project (see Table 7, pp.77-78) (ibid).

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[32] Enablement or Empowerment refers to a principle which applies to researchers and practitioners alike, that a result of participating in a research activity should result in an improvement in Māori health status or that Māori should be well positioned to take control of its own health or both (Durie 1996).
[33] Integration refers to integration which focuses on supporting the use of a Māori worldview for the research approach (ibid).
[34] Mana Māori refers to responsibility of controlling the research process, caring for the data and guarding the knowledge which the research generates.

Table 7. Māori centred framework.

Principles		Whakapiki Tangata (Enable)	Whakarunga (Integrate)	Mana Māori (Māori control)
Purpose of the research	• Health gains for Māori. • To strengthen Māori culture. • To advance positive Māori development and acquisition of new knowledge.	Enabling contemporary application of the Treaty of Waitangi within an osteopathy context to improve the position of Māori within osteopathy.	- Integrating Māori understandings of research ethics into all research processes and activities which include Māori health goals, aspirations, development, expectations.	Refining, developing, making informed choices about research methods. Taking care to ensure that the Māori view and voice is not lost in the diversity of this project.
Practice of research	• Active Māori participation. • Multiple methodologies. • Measurements relevant to Māori.	Enabling Māori at all stages of the research process by using Māori centred and Kaupapa Māori principles to undergird the process and ensure a transformative, strength-based approach is facilitated for Māori development.	- Demonstrating respect for the mana of practitioners by integrating the values[1] at all levels of this research project, Recognising the broad range of ethical issues identified in the literature review, particularly in the context of health research.	Mana whakahaere[2].

The practitioners of the research	• Māori researchers.
	• Interim solutions.
	• Competencies
	  - Māori knowledge.
	  - Health research.
	  - Māori society.
		Enabling Māori development methodology. Legitimising Māori cultural values and concepts within the research process.		Using mana to gauge the quality of relationships by acknowledging issues of power and authority in relation to the data, in terms of rural Māori rights, osteopath practitioners roles and responsibilities. Especially when considering the risks, benefits and outcomes of the present project.

Table 7. Māori centred framework (cont.).

The politics of research	1. Treaty of Waitangi. 2. Māori and Iwi. 3. Funding.	Ensuring the Treaty, Māori, Iwi focus is not lost in the diversity of the present project because non-Māori osteopath practitioners voices are being privileged. - Enabling qualitative information about osteopathy to be translated into qualitative data. Ensuring information is acceptable to Māori, osteopathy profession, education providers and stakeholders. To inform decisions about rural Māori health care.	Utilising the main principles from tikanga Māori and its philosophical base of mātauranga Māori, but also integrating understandings from the Treaty of Waitangi, indigenous values and western ethical principles into this research project.	Mana Tangata.
Values refs to: [1] Aroha ki te tangata includes respect. He kanohi kitea includes building trust. Titiro whakarongo … kōrero includes the execution of communication skills. Manaaki ki te tangata includes sharing, hosting, and participation among other things. Kia tūpato includes being cautious, politically astute, culturally safe, etc. Kaua e takahia te mana o te tangata includes the maintenance of dignity. Kia māhaki includes being humble (finding ways to share knowledge). [2] Mana whakahaere includes awareness of the sharing of power and control.				

Source: Durie, (1996, p. 13)

A further assessment was made into this project's position in relation to Kaupapa Māori research. According to the Rangahau (n.d.),[35] a website whose main aim is to assist Māori researchers through the research process, Kaupapa Māori research is a process which, *"does not have a clear beginning or end, it is not linear or straightforward".* The Rangahau (n.d.) then goes on to discuss Kaupapa Māori research:

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[35] Rangahau refers to seek, pursue, research or investigate.

Kaupapa Māori research is about challenging the 'ordinary' or notion of normal that has been constructed by the dominant culture, and seeks to identify and uphold Māori views, solutions and ways of knowing. It is about empowering Māori people, voice, processes and knowledge. Kaupapa Māori research addresses issues of injustice and social change. Writers who work in Kaupapa Māori research talk openly about research that has to be transformative – it has to produce positive change, instead of simply reproducing the same old same old status quo. While the range of potential topics and research questions is diverse, Kaupapa Māori research deals specifically with research that interacts with and/or impacts on Māori people, knowledge, processes and issues.

Reading the website, one could be fooled into thinking that Kaupapa Māori research is a relatively contemporary or recent concept. However, the literature reveals that some three decades past, Kaupapa Māori research was coined in the late 1980s. Graham Hingangaroa-Smith, a Māori educationalist located at the University of Auckland, at the time, reacted to the narrowing of the interpretation theory which was being applied in education of New Zealand (Hingangaroa-Smith, 1997). Hingangaroa-Smith paved the way for Māori academics to be supported in their efforts of transformation for Māori (ibid).

On further investigation, however, it would appear that Kaupapa Māori research has existed long before, and prior to the signing of the Treaty of Waitangi. When inspecting the Māori version of the Treaty of Waitangi notions of, *"expressly"* preserving the, *"power and autonomy of the Māori chiefs"* are clearly detailed (Kerr, n.d.). This is supported by Kerr's (n.d.) position that Kaupapa Māori research is, *"commitment by the Crown in 1840 that underpins Kaupapa Māori's self-determination stance with the government"* (p.3).   Hingangaroa-Smith's (1990) contribution has included six principles or elements of Kaupapa Māori research, which include the research context and which have been encapsulated within the context of this project (see Table 8, p.80).

Table 8. Principles of Kaupapa Māori research

Principles	Outline
Tino Rangatiratanga (self-determination)	Self-determination and independence, reinforcing the goal of kaupapa Māori initiative, while fulfilling the desire for Māori to control their own culture, aspirations and destiny.
Taonga Tuku Iho (cultural aspiration)	Legitimising the validity and relevance of Māori culture and other considerations of Māori culture to be taken into account.
Ako Māori (culturally preferred pedagogy)	Acknowledging teaching and learning practices which are inherent and unique to Māori, as well as practices which are preferred by Māori.
Kia piki ake I ngā raruraru o te kainga (socio-economic mediation)	Asserting the need to mediate and assist in the alleviation of negative pressures and disadvantages experienced by Māori communities. This principle asserts a need for Kaupapa Māori research to be of positive benefit to Māori communities. It also acknowledges the relevance and success that Māori derived initiatives have as intervention systems for addressing socio-economic issues, which currently exist.
Whānau (extended family structures)	Acknowledging the relationships that Māori have to one another and to the world around them. Whānau, and the process of whakawhānaungatanga are key elements of Māori society and culture. This principle acknowledges the responsibility and obligations of the researcher to nurture and care for these relationships and also the intrinsic connection between the researcher, the researched and the research.
Kaupapa (collective philosophy)	Kaupapa refers to the collective vision, aspiration and purpose of Māori communities. This is larger than the topic of the research alone, the kaupapa refers to the aspirations of the community. The research topic or intervention systems therefore are considered incremental and a vital contribution to the overall kaupapa

Source: Hingangaroa-Smith (1990)

Expanding on Graham Hingangaroa-Smith's (1990) contribution has included the work of Kaupapa Māori research theorist, Leonie Pihama (2001), whose principle includes the importance of the Treaty of Waitangi document, which his outlined in Table 9 (p.81).

Table 9. Principles of Kaupapa Māori research

Te Tiriti o Waitangi (Treaty of Waitangi)	The Treaty of Waitangi (1840) is a crucial document defining the relationship between Māori and the Crown in New Zealand. It affirms both the tangata whenua status of whānau, hapū and iwi in New Zealand and their rights of citizenship. The Treaty provides a basis through which Māori may critically analyse relationships, challenge the status-quo and affirm their rights.

Source: Pihama (2001)

Furthermore, Pohatu (2004) outlines principles for Kaupapa Māori research in relation to growing respectful relationships (see Table 10).

Table 10. Principles of Kaupapa Māori research

Āta (growing respectful relationships)	Focusing on relationships, negotiating boundaries, working with others in the creation of safe space with corresponding behaviours. Gently reminding people how to behave in their relationships with people, kaupapa and environments, while intensifying a person's perception of according quality space of wā (time) and wāhi (place), demanding effort and energy of participants while conveying notions of respectfulness, reciprocity (mutual exchange), reflection as a pre-requisite to critical analysis, discipline and ensuring the transformation process is part of relationships. Āta also incorporates the notion of planning and strategising.

Source: Pohatu (2004)

A comprehensive profiling exercise has been undertaken Kerr (n.d.). This is outlined in Table 11 (p.82-84) (Kerr, n.d., pp. 6-7). Kerr (n.d.) details a range of overlapping concept s as including five key principles, *"control, challenge, culture, connection, change"* (pp. 6-7). *Control* refers to Māori control and ownership, *challenge* is the analysis of power in relationships and *culture* is about the revival of the Māori language and culture. There is a *connection* principle which is about sharing and generating knowledge and a *change* or transformative principle, also (ibid). These clearly highlight various theorists' preferences, while highlighting that all of the theorists tend to prefer centralising the notion of Tino Rangatiratanga (self-determination) (see Table 11, pp.82-84).[36]

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[36] Tino Rangatira (self-determination) refers to the principle that relates to self-determination and independence and supports the goal of kaupapa Māori research initiatives and a true destiny that allows for culture and aspirations to be expressed as outlined by Graham Hingaroa Smith (1990).

Table 11. Kaupapa Māori research theory

Kaupapa Māori theory						
Theorist	Kaupapa Māori Principles/concepts.[37]	KM Principles A. Control B. Challenge C. Culture D. Connection E. Change * Credibility				
		A	B	C	D	E
Graham Smith (Hingangaroa-Smith, 1997), Kaupapa Māori Matrix	Tino Rangatiratanga (Self-determination).	X	X	X	X	X
	Taonga Tuku Iho (Cultural Aspirations.			X		X
	Āko Māori (Culturally preferred Pedagogy).			X	X	
	Kia Piki ake I nga Raruru o te Kainga (Socio-economic Mediation).	X	X	X		X
	Whānau (Extended Family Structure).			X	X	
	Kaupapa (Collective philosophy/vision).	X		X	X	X
	Te Reo me ona tikanga (Language and Culture.			X		
Leonie Pihama (Pihama, 2001), Unpublished PhD Thesis	Treaty of Waitangi.		X		X	X
	Tino rangatiratanga (Self-determination).	X	X	X	X	X
	Taonga Tuku Iho (Cultural aspiration).			X	X	
	Whakapapa (Connection).			X	X	
	Whānau/whānaungatanga (Extended family/ Connection).			X	X	
	Ako Māori (Teach and learn).			X	X	
	Decolonisation.	X	X	X	X	X
Shellagh Walker (Walker, 1996), Unpublished Masters Thesis	Praxis.		X			X
	Tino Rangatiratanga (Self-determination).	X	X	X	X	X
	Resistance.		X			
	Living in our own world.	X		X	X	
	Treaty of Waitangi.		X		X	X
	Mana whenua (Sovereignty over land).	X		X	X	X

Source: Kerr (n.d.)

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[37] The order in which the Kaupapa Māori concepts are presented is taken from each theorist's writings. It does not necessarily represent a priority ranking.

Table 11. Kaupapa Māori research theory (Cont.).

Kaupapa Māori Research					
Linda Smith (Smith, 1999), Working Principles.	Whakapapa (Connection).			X	X	
	Te reo me ona tikanga (Language and Culture).			X		
	Rangatiratanga (Self-determination).	X	X	X	X	X
	Whānau (Extended family).			X	X	
Linda Smith (Smith, 1999), Kaupapa Māori ethical code of conduct.	Aroha ki te tangata (a respect for people).			X	X	
	Kanohi kitea (the seen face; that is, present yourself to people face to face).			X	X	
	Titiro, whakarongo … kōrero (look, listen … speak).			X	X	
	Manaaki ki te tangata (share and host people, be generous).			X	X	
	Kia tūpato (be cautious).		X	X	X	
	Kaua e takahia te mana o te tangata (do not trample over the mana of the people).		X	X	X	
	Kaua e mahaki (do not flaunt your knowledge).		X	X	X	
Kathy Irwin (Irwin, 1994).	Culturally safe for Māori.	X		X		
	Māori researchers/ mentorship of elders.	X	X	X	X	
	Culturally relevant and appropriate.	X		X	X	
	Rigourous research.				X	
	Whānau (family).	X		X	X	
Russell Bishop (Bishop, 1996).	Treaty of Waitangi.		X		X	X
	Non-Māori able to be involved – Treaty Partnership.	X	X		X	X
	Whānau (Family).	X			X	X
Helen Moewaka Barnes (Moewaka Barnes, 2000)	Māori control.	X	X			
	Māori as normative.		X	X	X	
	Benefit of Māori.					X
Shellagh Walker (Walker, 1996).	Tino Rangatiratanga (Ownership).	X		X	X	X
	Social Justice.		X			
	Māori world view.	X	X	X	X	
	Te Reo (Language).			X		
	Whānau (Family).			X	X	

Table 11. Kaupapa Māori research theory (Cont.).

Kaupapa Māori Evaluation					
Helen Moewaka Barnes (Moewaka Barnes, 2000)	A *collective* journey.	X			X	X
	The goal is negotiated.	X	X		X	X
	All parties are united in achieving the goal.				X	X
	Others with the same or compliementary goals may join along the way (network building, collaborations and capacity building).				X	X
	The journey itself is important for relationship building and learning.				X	
	It is by Māori, for Māori, towards Māori development and self-determination.	X	X	X	X	X

Source: Kerr (n.d.)

All of the literature which has been reiterated on this methodology section so far and in relation to Kaupapa Māori research, lead to my conclusion that self-determination, in terms of control and ultimately empowerment, would need to be prioritised.

Contemporary phenomena and qualitative research

Qualitative methodology can be guided by a framework and it is useful for investigating complex contemporary phenomena, using multiple data sources (Yin, 2003). Phenomena refers to the viewing of a topic or area of interest in its entirety, holistically because it is not always possible to reduce complex phenomena into a few interdependent or independent factors (Wiersma, 1995). Systematic methodology in the social sciences involving the generation of theory from data is predominantly utilised in qualitative inquiry research (Charmaz, 1994; 1995, 2000). Qualitative inquiry research methodologies enable insight into situations with considerable depth and breadth. In this project, the aim will be to learn the practitioners personal views and perceptions, while determining the social structure and contexts and then putting these observations into an holistic picture (Guba & Lincoln, 1981).

Within qualitative research is an approach which is called narrative inquiry (Boje, 2001). This has emerged as a way of understanding how people make meaning of their lives as narratives and is set apart form storytelling. The word narrative suggests an audience and a narrator, which is a defining feature, apart from storytelling. Of particular focus is not what happens so much as what meaning

people make of what happened. Narrative is a tool which is useful in the sharing of knowledge, and is bound to cognitive issues of memory (ibid). Bruner (1990) discusses that the narrative approach captures the emotion of the moment described, which is rendered in an active manner rather than passive. The process is infused with the meaning by the teller and this ties into the notion of time in terms of time of the past and to the present. The method also accepts that knowledge which people can relate their stories to, requires them to engage in processes of memory retrieval and storage (ibid).

Constructivist grounded theory relates to this project also. It is traceable to Corbin & Strauss (1998). The theory sits on a relativist position which is about points of view. These can lack truth or validity and so have relative value depending on the differences in perception (ibid). This is then demonstrated in the idea that the researcher constructs their theory as an outcome of their interpretation of the practitioners stories (Charmaz, 1994; Guba & Lincoln, 1981).

Research methods

Research methods in this project have been selected to address the main research question, which asked, *How can osteopath practitioners contribute to rural Māori well-being with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand?* These aligned to the project objectives.[38] The approaches chosen for this project included a qualitative narrative approach as it allowed the topic to be covered in greater depth and detail than a quantitative survey. In addition, as this project sat outside the definition of Kaupapa Māori*,* reference is made to drawing on, Māori research instead. Also, this project has been shown to be more in keeping with a Māori centred positioning and therefore the research framework will draw on Māori centred and various elements of Māori research as described by Linda Smith (Smith, 1999), Te Awekotuku (1991), Cram (2001), Durie, (1998a), Pihama, (2001), Cunningham, (1998), Graham Hingangaroa-Smith (Hingangaroa-Smith, 1997), Kerr (n.d.), and Pohatu (2004).

The primary means for data collection being extracted from semi-structured interviews. Although I am familiar in my working experience of rural osteopathy provision and providing osteopathy to rural Māori, rural outreach osteopathy clinical provision was less familiar for me. This both assisted and hindered the analysis of

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[38] Project objectives refers to the objectives of the research project which were to determine, *(a) How does the Treaty of Waitangi influence osteopathic practitioners in practice? (b) What holistic perspectives do osteopathic hold, which are in sync with Māori health and well-being? (c) To what extent do osteopathic utilise Māori health models? (d) What training has influenced osteopathic in their rural Māori practice?*

the literature and during the interview stage. In the initial phases I read widely, maybe too widely, to attain a level of comprehension of the projects' matter, spending large amounts of time putting into order the literature for material that had a bearing to this project. In contrast, this inexperience was also an advantage in the field when interviews were being undertaken. Not being specialist or expert allowed me to absorb into the process, the practitioner's stories and experiences, rather than being tempted to persuade them into an answer that would suit a particular hypothesis. The practitioners were the specialists and I was the novice.

A purposive sampling method was utilised to select osteopath practitioners to participate in the project. Patton (1990) defines the process of selecting participants who have had more exposure to the issues which are looking to be explored as, purposive sampling (p.182). Here the researcher picks out information rich cases for in-depth study. Purposive sampling allowed the selection of practitioners, in this case osteopathy practitioners who worked with rural Māori and who had a range of osteopathy experience, nationally and internationally. They were therefore rich in information for the purpose of the project, in order to gather a range of views and opinions (ibid).

The sampling process was combined with the personal experiences of the researcher who then sought a sample of sufficient intensity to interpret the area of interest (Patton 1990). I chose practitioners who, like myself are osteopath practitioners with experience of working with rural Māori. In addition to this, another purposeful sampling strategy to be used was accessing practitioners for this project, using snow-ball sampling to help locate rich individual cases. I commenced by asking my supervisor, along with other osteopath practitioners in the region which I knew, who I should talk to first. As names were put forward I commenced the study. This process of snow-ball method continued, progressing in the rural network by word-of-mouth as more names emerged (ibid).

The snow-ball technique of gaining access to practitioners in all cases involved a link to the local area which I was familiar with and known to all practitioners. I feel that this helped the practitioners to trust in the research process because there was a familiar acquaintance which they could connect with (Patton 1990). As an osteopath, I was regarded by practitioners as an *insider*. I equated sharing a professional identity with the practitioners, our responsibilities to one another as well as to our kaupapa. The inclusiveness and process of reaching out to these practitioners and including them within my kaupapa acknowledged our connectedness.

Embracing the principle of whakawhānaungatanga incorporated the acknowledgement of our immediate connection but also our connection of focusing on Hawke's Bay rural Māori.[39] The process involved taking into consideration our unique environment, the maunga, awa, whenua, moana.[40] All these factors assisted me with access, and the practitioners were also comfortable with me as an interviewer, freely sharing their stories. Balzer, et al. (2007) term this a, *"Ritual of Derivation"* and explain that it is an essential part of the scoping and profiling of any methodological application and research, which has at the core an intention of bringing in, *"holistic contextual portrayal"* to the research data (pp. 41-43).

I did encounter the moral dilemma of practitioners feeling so comfortable that they revealed very personal ideas about the information and about themselves. I knew that publishing this information would leave them open to political exploitation when the findings were published (Finch 1984). Therefore, with the guidance of my supervisor these were edited out with care to ensure that the narrative method of storytelling would counteract the exploitative potential of this project. The practitioners also had final power to veto their own, *"kōrero"* (narrative) (Graham 1994, p.119).

To ensure the project would generate findings that would be useful and responsive to rural Māori communities, only osteopath practitioners were interviewed, who self-identified as living and/or working in Hawke's Bay, which has a high Māori population and an Urban/Rural Profile.[41] Practitioners were also required to be Registered with the Osteopath Council of New Zealand. It was very easy to find osteopath practitioners willing to volunteer as they were all known to the researcher. However, practitioners in the Gisborne region showed initial interest agreeing to an interview, then failed to return correspondence or telephone calls and were therefore considered to have withdrawn from the potential pool of practitioners.

As outlined in the previous chapter, the Hawke's Bay region was selected as the primary project location. It is an area of high Māori population with high Accident Compensation Corporation (ACC) usage. High rate of injuries such as falls are the leading cause of injury, with 114 recorded hospitalisations followed by other land transport and motor vehicle traffic injuries (ACC, 2011). In addition, Hawke's Bay had a high rate in machinery related injuries which could be due to the rural community of

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[39] Whakawhānaungatanga refers to the process of establishing and re-establishing relationships and relating well to others.

[40] Maunga, Awa, Whenua, Moana refers to the unique landscape features of Hawke's Bay.

[41] Urban/Rural Profile refers to Hawke's Bay which is designated a rural region because of the population density which is 10 persons per square kilometer, which is significantly lower than the New Zealand average of 14 persons per square kilometer (ibid) (Statistics New Zealand, 1998a).

Hawke's Bay having more contact with farm machinery. Notably Hawke's Bay had a high rate of injuries on farms (Elers, 2007).

Practitioners were drawn from the researcher's community contacts, including the Osteopathy Association websites, which listed Registered osteopath practitioner clinics located throughout the Hawke's Bay region. A telephone call was followed by a poster. This was emailed to the clinic, providing information of the research and outlining informed consent processes. The poster invited practitioners to be contacted to take part in an interview by returning their preferred contact details and time they wished to be contacted. This was followed by an introductory email and/ text message, which was sent out to known contacts. Using email and text messaging allowed practitioners to make contact easily and was not too onerous on their day-to-day running of a busy clinic, and was also a relatively low cost approach and accessible as a means of communication.

From the outset I was concerned that there would be very few osteopath practitioners interested in participating in the project. Especially as talking about their clinical practice to a known colleague about Māori health literature, may potentially have been an unfamiliar topic to the practitioner. This could it was thought, cause embarrassment or be viewed as a sensitive topic area, not to be discussed openly. Therefore the approach to finding practitioners was aimed at maintaining practitioner privacy throughout the interview process.

Email (n=8) and Text messaging (n=3) were distributed and lead to more than half of the volunteers for the project, as opposed to the poster approach (n=2). I set out with the intention of interviewing 10-15 osteopath practitioners. Initially ten potential practitioners volunteered to take part in the project. Two of these practitioners were not interviewed as a result of non-response to ongoing communications (n=2) and availability issues (n=2). The final number of practitioners interviewed totalled eight, as no new information was being gathered and the time constraints which related to keeping the project timeline on course. Interviews were conducted on a one-on-one basis, except for two cases.

In one case two practitioners requested to be interviewed together and in the other three practitioners wanted to be interviewed. All practitioners spoke openly about their individual experiences and showed interest in their different upbringing backgrounds and training, which prompted further discussion and insights. The sample included practitioners aged 43 to 67 years with the median age 58 years. All practitioners resided within the Hawke's Bay. Practitioner age by osteopathy qualification is presented in Table 12 (p.89). Most of the practitioners had completed their training outside New Zealand (n=7), one had trained in New Zealand (n=1). All

practitioners were registered and working in Hawke's Bay. The average working hours were 40 hours per week, all practitioners were working full-time.

Table 12. Practitioners age by osteopathy qualification

Country of Education	Age (years)								Total
	36	43	50	55	61	63	66	67	
Unitec, NZ	1								1
RMIT, Australia		1							1
British School of Osteopathy, UK			1			1			2
European School of Osteopathy, UK				1	1		1	1	4
Total	1	1	1	1	1	1	1	1	8

Interview process

Semi-structured interviews were chosen as the main data collection approach. Face-to-face interviews corresponded with Kaupapa Māori research practices and Māori cultural values (Smith, 1999). This approach has been shown to be useful in knowledge brokering (exploration) of practitioners perceptions and knowledge of a topic (Butters et al., 2011) and assisting the researcher to ascertain whether the interview data rings true. An interview schedule (see Appendix C, p.171) was developed in discussion with known osteopath practitioners located outside of the Hawke's Bay area, but whom had extensive experience of working in a rural location as an osteopath practitioner. The interview schedule focused on the practitioners knowledge of how the Treaty of Waitangi influenced osteopath practitioners in practice, what holistic perspectives osteopathy held which were in sync with Māori health and well-being, the extent osteopath practitioners utilised Māori health models, how their knowledge was gained, the appropriateness of the information and the appropriateness of available information on Māori health and accessibility issues. The use of a semi-structured interview schedule allowed the main research questions to be addressed, while allowing practitioners to share their personal stories.

Open-ended questions with gentle prompting, provided practitioners with an opportunity to explore their experiences further, by encouraging more depth of information. Following the first few interviews, topics not specifically outlined in the interview schedule were consistently raised by practitioners. Therefore it was decided that additional questions related to practitioners rural Māori patients, should be incorporated. The interviews were more conversational with further exploration to uncover information in a way which questions were woven in and framed to belong

with the unfolding conversation. This technique is referred to as guiding the interview process (McNamara, 2008) where the researcher thinks *off the top of their head*, constructing questions as they move forward. This is thought to be beneficial because of the lack of structure, which allows for flexibility in the nature of the interview.

Interviews generally took place in practitioners homes, but also included a range of other locations such as; parks, and at a local cafeteria. Information was gathered by taking written notes and digital recordings. The interviews ranged from between 45 minutes to nearly three hours. All practitioners consented to the interview being recorded. Interviews were recorded on an iphone digital recorder (G3) and downloaded onto the researcher's laptop using the itunes (Version 10.1.1(4)). Interviews were transcribed by the interviewer, then listened to and edited to ensure accuracy. Each transcript was emailed to the original practitioner to be checked and confirmed as true.

During the interviews the act of sharing generously and hosting enabled re-connections to be made between the interviewer and practitioners. These were important aspects which helped practitioners to feel respected and at ease. The process also included: arranging times and a place of meeting which suited the practitioners; letting them make the final decision on the arrangements; assisting with transport if necessary; encouraging other colleagues to be present if needed; ensuring practitioners were compensated for, if there were any out of pocket expenses through their participation, while acknowledging their support and participation. Dissemination of the findings was discussed as being shared, when the time came with the practitioners who had participated. In addition osteopathy stakeholders and Māori stakeholders and collectives, would be presented a summary report.

Rigour

Guba & Lincoln (1981) discuss that, *"there can be no validity without reliability"* (and thus no credibility without dependability). One way to enhance dependability is put forward as using an audit of, *"inquiry"* where the process and the research outputs are checked for consistency (pp. 316-317). In this project a number of aspects have contributed to its rigour. These include the positioning and credibility of the researcher, appropriate supervision, piloting of the interview schedule and a record of practitioners own talk and accounts. These preserved the original text and recorded word-for-word the verbal descriptions, provided by the practitioners. Marshall & Rossman (1999) discuss this in terms of keeping several lines of site, to ensure

standards of relevance and rigour are maintained (Castaneda, Morrow & Rakhsha, 2001).

In the introductory chapter I set out my positioning as the researcher and my potential biases. As a novice researcher I acknowledge that this project is part of my learning to be a researcher and as such I have drawn on my previous experience of undertaking research, my professional clinical skills and life experiences as starting points for developing my knowledge of the research process and interview skills. It was also important that I relied on appropriate academic support and guidance.

A supervisor was approached drawing on the strengths of the individual, for the methodological and process advice and tikanga Māori support, while the topic area was well known to me, having worked in the field. The diverse skill set my supervisor offered proved complementary and extremely valuable. The interview schedule used for data collection was piloted prior to use. This helped shape the leading questions, useful exploration and further investigation and ways to encourage practitioners to share their stories to ensure responses would generate information to answer the research question.

Finally, the discipline and rigour of qualitative analysis depended on the ability to present narrative data in such a way that others were able to draw their own interpretations. The findings chapter describes the major themes and patterns, as well as alternative ideas captured in the interviews, while the discussion chapter explores their meaning.

Ethical consideration

Institutional regulations and professional codes of conduct are seen to direct research ethics. A low risk ethical application was submitted to the Massey University Human Ethic Committee and the research project was processed. A letter from the Health and Disability Ethics Committees, confirming the project did not require approval under section 11.9 of the Ethical guidelines for observation studies was received on 18 August 2010 (see Appendix D, p.172).

Māori understandings of research ethics is at a basic level of people, as individuals and as members of communities, of respect, control and reciprocity (Henry & Pene, 2001). In this project these ideas have been integrated into various research processes and activities including recruiting and working with practitioner's, encouraging involvement and control of the interview arrangements, gaining informed consent, ensuring privacy and confidentiality, generosity, reciprocity and cultural safety. The ability to strengthen relationships and build connectivity has been

important in this project not only in terms of talking with the practitioners who participated, but in accessing rural communities and making contact.

The process of establishing relationships, outlined a connection and implied a level of integrity and commitment to those involved in the project (Bishop, 1996). In an effort to maintain confidentiality in recruiting practitioners, email and texts were chosen as a primary means of contact. Following this, informed consent was gained to ensure that each practitioner understood the purpose of the research and the implications of participation. Each practitioner was provided with an information sheet (see Appendix E, p.173) outlining what would happen with the information they disclosed and their control over that information. This information was discussed at various opportunities, prior to the interview taking place and a consent form was signed by each practitioner, at the time of the interview (see Appendix F, p.176).

All practitioner information, interview recordings and transcripts were stored safely and securely in a locked filing cabinet at the researcher's premises. Practitioners were given a koha (a small gift) and for those who had travelled, a voucher which was generally a pre-pay mobile phone voucher, and for some a petrol or supermarket voucher. This research also provided the practitioners with an opportunity for increased access to Māori health information. During interviews there were discussions related to primary health care strategies and material developed by the Māori health unit of Hawke's Bay's District Health Board on rural Māori health priorities, and musculo-skeletal health sourced from Te Wahanga Hauora Māori (Hawke's Bay DHB, 2010a).

Key to Māori research methodology is researcher conduct (Smith, L., 2006). Elements of Kaupapa Māori research were utilised as aspects, in this project's generating and sharing of knowledge. These concepts are included within Hingangaroa-Smith's, (2006) outline of *Cultural values, researcher guidelines* (see Table 13, column 1, p. 94) and were used as an accountability tool throughout this project.[42] The concepts guide the way forward to ensure safety and integrity of the knowledge shared by practitioners in this project. It also assisted in accountability regarding research outcomes being useful to, and meeting the needs of Māori communities. The objective being to fulfil these outcomes, than the focus being solely used for my personal academic or professional advancement (ibid). Linda Smith (Smith, 1999) notes that these practices are often taken for granted by Māori researchers, but are important to articulate.

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[42] Accountability tool refers to a performance management reference device which may guide the researcher.

Fiona Cram (Cram, 2001) has articulated Linda Smith's (1999) key Māori values by outlining a model which was determined early on in the process of this project. It was useful in terms of application within a practical research setting. These values and guidelines are presented in a descriptive Table (see Table 13, column 2, p.94-95) with a third column added to reflect guiding principles for this research project. This was adapted for use between Māori osteopath researcher and osteopath practitioners. This was outlined as a potential starting point to assist in conducting an adapted approach, which allowed a focus on Kaupapa Māori research as guiding principles of this research. This it was thought could assist an inclusive approach, which would need to be revised in any future osteopathy research. As with any method and tool, this framework is merely a starting point.

Table 13. Cultural values, researcher guidelines

Cultural values (Hingangaroa-Smith, 1990)	Researcher guidelines (Cram, 2001)	Māori osteopath researchers' guidelines utilised when working with osteopath practitioners (during the present project).
Aroha ki te tangata.	A respect for people – allowing people to define their own space and meet on their own terms.	Allowing practitioners to define their space and meet on their own terms. Although the Māori osteopath researcher and osteopath practitioner/s may be colleagues, and therefore known to each other, it is important to allow time to re-establish these linkages and connections with each other. Respecting the diversity of the osteopath practitioner/s.
He kanohi kitea.	It is important to meet people face-to-face, and to also be a face that is known and seen within a community.	It is important for the Māori osteopath researcher to conduct the interviews in person with the osteopath practitioners.
Titiro whakarongo …kōrero.	Looking and listening and then (maybe) speaking. Develop understanding in order to find a platform from which to speak.	Allow practitioners to set the agenda for the research, including the pace at which it proceeds and decisions about, *"What is this practitioners story? What do practitioners want to speak to? What is the role of practitioners, within the space that rural Māori claim?"*
Manaaki ki te tangata.	Sharing, hosting, being generous.	Enable practitioners to participate in the research (e.g. provide a budget for any potential costs which they may incur). Provide food, refreshments and/or koha during research encounters. Enable practitioners to move in and out of their (research) space.
Kia tūpato.	Be cautious – be politically astute, culturally safe, and reflective about insider/outsider status.	Being cautious that the interview space is kept safe – that practitioners are left in the same, or a better space than before they engaged in the research project. Assisting practitioners to obtain information, which can offer them support for any issues and concerns raised during the research. For example, Māori culture, cultural competence and osteopathy practice.

Table 13. Cultural values, researcher guidelines (Cont.).

Kaua e takahia te mana o te tangata.	Do not trample on the mana or dignity of a person.	Ensure that the research journey is enjoyable and enlightening for practitioners. This includes communicating with practitioners, about the research, while also sharing the findings and publications. Acknowledging practitioners ideas about the current research project and future research.
Ka Māhaki.	Be humble – do not flaunt your knowledge, find ways of sharing it.	Being humble – not , *"flaunting"* my Māori and other knowledge, but finding ways to create a context for practitioners to access it. Answering practitioner questions (or seek out the knowledge) and sharing knowledge. Supporting practitioners in their understanding and use of research findings.

Source: Adapted from Cram (2001, p. 12) & (Hingangaroa-Smith, 1990, p. 26).

Data analysis

When categorising qualitative data and describing the implications and details, coding is used. Coding is a process which initially commences with open coding. This is about considering the data in minute detail, while developing some initial categories. Later, there is a move towards being more selective, where one systematically codes with respect to a core concept (Bryman & Burgess, 1994). In this project, each transcript was reviewed and codes were openly assigned, until several combinations of concepts were gathered together. These were then re-categorised into themes (Corbin & Strauss, 1998).

During analysis of the transcripts, further notes were made of possible themes that were becoming apparent, within the coding and categorising process. HyperResearch (Version 3.02) software package assisted the coding process, eventually these were collapsed down into sub-themes (Patton, 1990).

Logical analysis was sought through the use of written descriptions within HyperResearch's, *"view annotation"* function (Huberman & Miles, 1994). The data analysed included not only the use of transcripts of the interviews, but the field notes taken following each interview. These included comments and observations which I had made. To check the data further, a comparison of commonalities and difference

in the events, activities, and processes of each practitioners interview was made, to check responses and answer the research questions of the project.

Summary

The opening quote of Linda Smith (Smith, 1999, p.125) at the beginning of this chapter is related to this project.[43] I recognises the exclusive nature of knowledge, which has emerged in this methodology section. Even though this project is about privileging non-Māori voices, it is driven by a set of kaupapa and tikanga, which are consistent with Māori worldviews, to bring a greater focus to, and improve co-ordination of, activity. The activity is aimed at the positioning of arguments, to bring about population-level health gains for Māori.

Within this project are key features. These are consistently evident as issues for the next generation of Māori osteopath practitioners coming through the profession, who may seek to find new approaches to ongoing issues through their research and methodological approaches. The phenomena described can represent the partnership between Māori and the osteopathy profession, to improve musculo-skeletal well-being for Māori, both partners working together, there will be more to gain.

This project is positioned within various approaches to Māori research. These are woven in to produce outcomes. These aim to be useful and meaningful for all stakeholders, but in particular for rural Māori and the wider Māori community. Qualitative narrative methodology and various Māori research practices have become inherent to this research project. These include elements drawn from Kaupapa Māori research practices and Māori-centred research practice, which legitimate and validate Māori cultural values and beliefs. Practitioners were drawn from Hawke's Bay, as they were known to the researcher and were working in Hawke's Bay, which has a high Māori population. Although data is presented within the following chapters, under specific categories and themes, the narrative used also enables readers to draw their own conclusions.

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[43] "*What researchers may call methodology ... Māori researchers in New Zealand call kaupapa Māori research or Māori centred research. This form of naming is about bringing to the centre and privileging indigenous values, attitudes and practices...*" (Smith, 1999, p.125).

Chapter Four: Results/Analysis

Section 1: Introduction

In this chapter, the findings from the project are discussed. Practitioners talked about the concept of wellness for rural Māori populations and disadvantaged rural community groups.[44] This chapter is presented in two sections. The first section starts by placing the project contextually within practitioners perceptions of *The rural environment*. The second section concerns, *Rural dimensions of Osteopathy practice*. A list of specialised Osteopathy and Māori terms can be found in the glossary (Appendix A, p.168).

The rural environment

Socio-cultural characteristics

Practitioners indicated that their rural patient base was drawn from multiple patients, across a wide range of age and disease profiles, and was spread over a large geographic area (on the East Coast of the North Island of New Zealand). There was a high population concentration of indigenous people, *"A good percentage of those were Māori, half of them"* (Practitioner 1). The comment that practitioners rural community was mainly composed of Māori patients was based on the relatively low visibility of non-Māori people, in comparison to the diversity which they perceived, were found in urban areas.

The perception from practitioners was that rural communities tended to have a relatively small population of people of working age, *"All the young ones move away, Australia is beckoning"* (Practitioner 1). Practitioners discussed that the migration of younger people from rural communities, aggravated deprivation for the region. The presence of an increasing proportion of elderly and children in rural communities was noted as leading to geographical isolation, with many having limited social and family networks.

The diversity and similarity of Māori

Within the context of the barriers which rural patients faced in accessing osteopathy services, practitioners discussed that Māori patients' were not a homogenous group. They were a diverse population with individual needs and

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[44] Wellness refers to positive health, quality of life and a sense of well-being (Corbin, C., Corbin, W., Lindsey & Welk, 2001). Disadvantaged rural community groups refers to socioeonomically disadvantaged groups in rural regions who have a difficulty in accessing comprehensive and quality health care services.

expectations, *"Money, distance, lack of knowledge about what osteopathy is [an issue], for anyone, city Māori or rural Māori populations"* (Practitioner 1). Practitioners suggested that Māori patients (no matter what their location was – rural or urban) tended not to be uniformly disengaged from osteopathy care.   Patients experienced access issues for many reasons, regardless of location. For example, people with chronic illness and the socially isolated, especially the elderly, may find that it is difficult to access osteopathy services, however, there are of course many people in these groups that are perfectly happy to use osteopathy services, and do so successfully. Disengagement from osteopathy for people was not always uniform, for instance they may have no difficulty in attending for trauma, but are *reluctant* to see an osteopath for preventive care.

> While discussing communication styles, practitioners were diversity-focussed as they keenly pointed out the dangers in stereotyping Māori patients,

> *I don't want to make generalisations, but I think a Māori person if you said, "I would like to see you in a week's time", I've learnt that they're actually too polite to tell you that they don't want to come next week or might not be able to afford to come next week or actually they're fine and they don't need another treatment, because they're fine after the first one. Or they've responded really well to treatment and that was a surprise. You don't know how someone's going to respond. But sometimes one treatment and off they go they're fine. I'm expecting to see them again, because I didn't expect them to get better so quickly … but then the other factor of not being able to afford it … they're too polite to tell me that they don't want to come and see me a second or third time. So experience teaches you that. They might not turn up a second time.* (Practitioner 1)

Note the use of the phrase, *"I don't want to make generalisations"* (Practitioner 4). Practitioners were aware of the problems when ascribing characteristics to Māori patients, as this potentially lead to over-simplifications of the patients involved. For instance, practitioners discussed that although some patients utilised face-saving or positive politeness strategies, that not all Māori patients communicated in this way. There was a desire by practitioners to stress that there was no place for, *"generalisations"* (Practitioner 4), as these did not allow for diversity of Māori styles of communication.

Practitioners highlighted patient communication strategies, *"I've learnt that they're actually too polite to tell you that they don't want to come next week"* (Practitioner 4). What is being implied here is that there may be some patients who place importance on avoiding conflict, while preferring to show respect for authority of the practitioner. It may be that rather than refusing a follow-up appointment directly,

that the patient felt that it was more appropriate to agree to the practitioner's face and then not follow through with the appointment. The implications from the practitioners viewpoint may incorrectly imply that this approach is converse to being direct and honest. However, from the patients' perspective, it may be that when asked a direct question by a practitioner, deliberately ambiguous communication is designed to let the practitioner know that the real answer is, *"no"* but the relationship is worthy of preservation.

In relation to patient communication strategies, what is lacking from the practitioner data is discussions relating to non-verbal cues. According to Akert & Archer (1984), non-verbal cues are non-language messages, such as eye gaze, gestures, touch, and tone of voice (ibid). Practitioners discussed that these could correctly inform the words - if you knew what to look and feel for. For some patients, actions such as attitude and body language, could be far more important than any words that could possibly be spoken.

The patient's response of being *"too polite to tell you that they don't want to come next week"* (Practitioner 4) could also represent to a practitioner, as the patient exhibiting deceptive behaviour. Particularly, if the practitioner was not experienced at attending to the non-verbal cues, which could correctly inform the words. For example a practitioner may place emphasis on the literal integrity and meaning of spoken words – and therefore hear a *lie,* whereas a patient may have known intuitively and precisely what was intended and would not have perceived intentional deception at all. Potentially, from the patient's perspective, the general communication would only form a genuine lie, if the accompanying communication was intentionally calculated to mislead.

According to Sue, D. & Sue, D. (2002), the difference in non-verbal cues between two cultures may be difficult to interpret, unless you were raised with them. Enhanced communication may lead to the strengthening of clinical outcomes, when there is an ethnic match between patient and practitioner (ibid). This highlights the benefit of practitioners paying full attention to the non-verbal cues of their patients, such as checking for patients' interpretations, to allow for a richer understanding and trust building. The necessity, therefore is for practitioners to have the inclusion of cultural aspects in training curricula. In addition, health care professions can develop strategies to train and recruit under-represented groups. According to the New Zealand Health Information Service (2010), within the osteopathy health workforce, under-represented workforce groups include the Māori, Pacific and Asian populations (ibid).

Practitioners explained that, *"sometimes one treatment and off they go they're fine … but then the other factor … that they don't want to come and see me a second or third time. So experience teaches you that"* (Practitioner 1). Note the use of the word, *"experience"* (Practitioner 1). This was deemed an invaluable point of reference when working with Māori patients. Individual cultures affected the way people understood health and illness, how they accessed osteopathy and responded to health care interventions. When osteopath practitioners used effective communication skills, they could obtain more complete and accurate histories. This lead to more accurate diagnoses and effective treatment plans. It resulted not only in greater patient comfort and perception of better care, but also improved patient adherence to treatment recommendations and effective patient management. Patient satisfaction and acceptability of health treatments were strongly dependent on the ability of practitioners to appreciate patients' concerns, understand the patient, and explain osteopathy information, in terms that could be readily understood by the patient.

Practitioners discussed that there were a number of benefits, when appreciating and understanding cultural issues in the practitioner-patient relationship. The osteopath was likely to encounter patients with worldviews and experiences different to their own. Trying to find common ground between osteopath and patient provided an increased chance of patient satisfaction. Mutual interests were perceived as helping the practitioner to gain the patient's trust and respect. Akert & Archer (1984) suggest that this could include styles of speech (ibid). Durie (2001) discusses that traditional Māori valued eloquent terms of speech. These included the ritual practices of whaikōrero (formal speech), which were performed by the most experienced orators (ibid). Therefore, a practitioners service delivery would not be the same for every Māori patient. For instance, there may be times when asking a patient to *just present the facts* in response to a practitioners questions, could result in discord.

Practitioners, *"experience"* (Practitioner 1) was important in the development of relationships, when working with rural Māori patients. Fennell & Magnussen (2011) support the importance of practitioners experience, understanding the role of culture in pain. Although there may be a commonality between cultures with regard to the experience of pain, for Māori the role of whānau can assist practitioners, when it is made a point of emphasis. Specifically, a wider view which incorporated the strength of the collective Māori community, tended to be lacking from practitioner data, however. This is something which Fennell & Magnussen's (2011) work promotes, the

importance of working alongside whānau and a wider collective, to secure optimum clinical results for Māori (ibid).

Geographic characteristics

Practitioners who lived and worked in rural communities discussed their rural area *spatially* as being dominated by open space and beauty, *"I love solitude and this gorgeous environment … by the sea"* (Practitioner 7). They discussed the stand-out feature of the rural environment in terms of being more natural than the urban landscape. In relation to wellness it was implied that there were health benefits of the country air, open spaces and a slower pace of life. These provided a degree of satisfaction, lifestyle and greater relaxation. While practitioners held a positive feedback loop with the rural location (as a valued space), there was a sense of fleeing from the stress of urban life, to a more *laid back*, *peaceful* environment.

Benefits of a rural way of life

Practitioners suggested that living rurally had a myriad of benefits, which were associated with a rural way of life. For instance the differences in the patient base (between rural and urban patients) was noted, including that rural patients were commonly perceived as friendlier, *"They are friendly people – you can say more to them"* (Practitioner 2). The perceived advantages to rural osteopathy practice was a friendly atmosphere.

Not only did practitioners experience a friendlier and less demanding rural patient base, but practitioners perceived this aspect of rural practice to be an advantage, because patients appeared more relaxed, *"They have a way of relating to you with humour and openness, very casual of course"* (Practitioner 1). At first, practitioners suggested that having a robust sense of humour encouraged relationship building. This was facilitated by good communication skills, which lead to trust and a level of openness. On another level this was also suggestive of a practitioner having *adjusted well* to practicing in a rural community.

Practitioners extended the conversation regarding the friendly and casual *way* of rural patients. They discussed integrating therapy with comforting surroundings, where rural patients could feel most relaxed.

> *Because of the way we are. I think we are as a practice open and casual, in a sense. We're not a very starchy clinic, I think the farmers appreciate that, I don't mind if they come in with a bit of cow stuff on them so long as they leave their boots at the door, that sort of stuff.* (Practitioner 1)

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Practitioners were aware of the importance of their own style of delivery and were mindful of adapting this. Providing a service which worked synergistically with each patient to deliver therapeutic benefit, reflected rural practitionership, the community and a rural way of life.

While there were benefits of working with friendly patients and a rural *way* of life, practitioners discussed the benefits for Māori patients. That Osteopathy is a therapeutic touch-based therapy, was considered beneficial:

> *It's an awareness thing – because massage – hands on – laying on of hands - manual therapy is part of their medicine culture – Māori is similar to that by the sound of it – not just taking pills, looking at a broader way of health – osteopathy would be more appealing to Māori than some of the physiotherapists who are using lots of machinery. They are two or three steps removed from putting your hands on the patient.[45]* (Practitioner 3)

Practitioners drew comparisons between osteopathy in relation to touch-based aspects, while referring to Māori patients as having their own, *"medicine culture"* and, *"looking at a broader way of health"* (Practitioner 3). There was the inference that osteopathy might be well suited to Māori patients than other approaches, as it involved "*looking at a broader way of health*" (Practitioner 3). According to Durie (2001), a broad-based healthcare approach for Māori would need to highlight the involvement of whānau at times of illness. This should be recognised in the management of the whole patient. The challenge for practitioners is to support the change away from utilising a western nuclear family concept or individual focus, to taking more of a whānau focus. For instance, when considering chronic conditions, practitioners can promote whānau involvement in the patient's self-management programme. Being respectful and open to these different beliefs and values around health and the individual and whānau, may facilitate meaningful engagement (ibid).

In discussing the benefits of a rural way of life, practitioners spoke fondly of living in a close knit community. The rural community had been instrumental in assisting the process of enabling the establishment of an osteopath practitioners outreach service into a region, *"What they wanted to do was increase availability of services in [small rural town] to what they had in there at the time"* (Practitioner 1). Practitioners refer to a primary feature of a socially organised community (Burton, 1999), where members work together to resolve collective problems (ibid), such as access to osteopathy services more easily.

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[45] Physiotherapists refers to therapy that uses physical agents: exercise and massage and other modalities.

There were shared benefits when a community was socially organised. Practitioners emphasised that rural living was a beneficial way of life. It gave rise to a special kind of intimacy, *"Plus they had more time … it takes a little bit longer for things to come out … you know we'd talk about pig hunting, fishing and it all comes out"* (Practitioner 1). The rural environment was perceived as being a slower pace of life. This tended to suggest that within the rural geography, there was a culture of intimacy, which created the bonds of social trust and engendered empathy.

Despite many positive aspects of rural social life, practitioners indicated that there were difficulties. These related to osteopath practitioner turnover, recruitment and retention, *"The problem with providing osteopathy treatment in rural communities is the lack of osteopath practitioners"* (Practitioner 5). Factors which hindered the rural workforce development were the ability to recruit, retain, train and promote osteopath practitioners to work in rural areas. Practitioners discussed for instance, the difficulties osteopath practitioners faced if they had school age children, "*Schooling is also a problem for professionals working in a rural setting. It often means they have to send their children away to boarding schools, for their secondary education and tertiary. This does not appeal to many"* (Practitioner 5) and, *"But maybe once, when the kids have gone … then I will be able to work more rurally"* (Practitioner 1).

The availability and quality of schools for children emerged as an important factor. This could deter osteopath practitioners from living in rural areas with their families. That children would need to be sent, *"away to boarding schools"* (Practitioner 5) implicated a level of uncertainty (on behalf of the interviewer), as to whether this was due to a lack of quality or availability of schooling in the rural area. For other practitioners, the idea of working rurally was discussed as being something for the *wish list*, once the children's education was complete (Practitioner 1).

Personal coping skills

Practitioners discussed that within the context of displaying personal coping skills, rural patients tended to be more self-sufficient than their urban counterparts. This tendency for self-sufficiency exhibited by rural dwellers bordered on stoicism, *"[they need treatment but instead of getting treatment for it] … They are probably working on the land"* (Practitioner 5). Rural attributes seemed to support an image of a practical, independent community.

Practitioners explored themes about rural lifestyles by making comparisons to their urban patients, *"And you get them [urban Māori] coming in and they're like no I didn't do that, I didn't do this"* (in comparison, rural based Māori were), *"very keen to*

follow advice" (Practitioner 1). This comment suggested that rural patients were perceived to be more compliant than their urban counter-parts. Better osteopath-patient communication and more time spent in the therapeutic encounter was thought to be attributable to this.

Practitioners discussed rural patient attitudes as being primarily related to action. Particularly, in relation to providing lifestyle change applications to patients during the therapeutic encounter, *"they [patients] were much more practical up there"* (Practitioner 1). Practitioners acknowledged the benefits, when patients were practical or action based. For instance, they undertook the functional rehabilitation advice, provided during the course of treatment. However, there was a paucity of data identifying trends in rural patient health seeking behavior. For instance, the data might identify that rural patients who were pro-active were more health literate. They may have the knowledge and ability to make healthy choices and adopt healthy lifestyles. This could link health literacy, health-seeking behavior and lifestyle practices among rural patients. However, such generalisations could not be made. In addition, there is the possibility of social desirability bias, where patients may have told practitioners what they wanted to hear to obtain their approval.

Health status

In relation to health status comparisons, practitioners discussed that a major area of health differential for rural populations, was a greater exposure to injury. For instance one practitioner discussed their rural clinic as having a high ACC usage, *"80% ACC [usage is what our clinic has], which is more than Auckland and Wellington. [Rural area] has got the highest along with [Rural area] usage in New Zealand"* (Practitioner 1). At a micro- level practitioners inferred that injury rates tended to reflect the physically hazardous nature of rural life (linking the impact of *place* on health).[46] This had a knock on effect for individual health outcomes, which escalated upwards to a population level. During discussions (across all practitioners) conversations were void of reference to Māori health status otherwise. This suggested that osteopath practitioners held shared definitions, methods and concepts, in accordance with reducing inequalities in health in New Zealand.

Economic factors

Practitioners related with a tone (voice and posture) of sadness when providing an account of the rural socio-economic situation:

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[46] Micro level refers to interventions to reduce patient's exposure to injury.

And she used to tell me that [small town] is dying. The meat works – if that closes, people will either have to wither and just use public funding for existence or move away … So that's really quite tough up there. (Practitioner 1)

The importance of employment as being a source of wellness for patients,[47] beyond an economic transaction, was stark during the course of the conversations with practitioners. Meatworks closure and the loss of jobs was recognised as offering a devastating blow to rural communities. This insight came when practitioners talked about the emotional and social impact of redundancy, particularly when attempting to re-enter the workforce. While income sufficiency was important, employment clearly provided more than a pay-cheque.

Section 2: Rural dimensions of Osteopathy practice

Practitioners explored the dimensions of osteopathy healthcare in relation to the quality of practice in a rural environment. According Hurst & Kelley (2006), six indicators can be used when when assessing the quality of health care provision for performance and outcome measurement. These include, *Effectiveness, Responsiveness, Accessibility, Equity, Efficiency* and *Safety.* The objective of using these was to explore themes and identify trends, reflecting a picture of rural osteopathy care.

Effectiveness

The changing landscape of health and social care services in New Zealand, was apparent as practitioners discussed demographic changes and technological advances. The enabling approaches embedded in the practitioners abilities were indicative of a group of individuals, who were highly motivated to providing osteopathic care. There were varying levels of success, which were reflected in the diverse and differing levels of resources, while dealing with the multiple challenges of rural osteopathy practice. These related to the initiation, action and achievement of, *Health promotion efforts at a community level*, the importance of, *An holistic approach to health care delivery* and alliance formation or, *Networking*.

Health promotion efforts at a community level

Practitioners discussed the effective health promotional efforts which they made part of their rural osteopathy practice, *"We can advise on diet, nutrition,*

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[47] Wellness refers to positive health, quality of life and a sense of well-being (Corbin, C., Corbin, W., Lindsey & Welk, 2007).

posture, lifestyle, work – a distinct advantage. There's no more money for providing this, however" (Practitioner 4). Practitioners highlighted that health promotion was a *given* (part of what the osteopath did in the usual course of delivery). From the perspective of conducting health promotion, practitioners provided the role of community activist, while highlighting the lack of funding with respect to equity of access to appropriate and high quality care. Practitioners discussed that equity was at the core of their health promotion efforts.

To ensure that health promotion efforts were effective, there were examples which practitioners provided. These involved conducting health promotion, as part of a community partnership:

> *I got a place in a General Practitioners clinic for zip rent, what they wanted to do was increase availability of services in [rural town] to what they had in there at the time. So they weren't charging me anything knowing that I was going up there.* (Practitioner 1)

Broadly, there were three inter-related components of the community partnership and subsequent ownership by the rural community, of the osteopath practitioner lead services.[48] *Collective power* allowed the rural community to determine their own health priorities which the community lead, "*what they wanted to do was increase availability of services"* (Practitioner 1). In addition to partnership there was *support* for the development of local osteopathy interventions, which in the case of one practitioner, included financial resources (rent-free premises), "*I got a place in a General Practitioners clinic for zip rent"* (Practitioner 1), and *expertise* which was oriented toward facilitating local osteopathy development.

Of the many factors which influenced the success of the osteopath-rural community partnership, *leadership* played a central role. Osteopath practitioner contributions to rural communities were enhanced by a leadership process. This emphasised active involvement and empowerment of rural people at both the individual patient and community level. This broad-based health approach encouraged community support for community change, and a common community vision for the future. Effective leadership was shared, participatory, and based on the quality of relationships within and external to the community. The nature of health care leadership was central to the osteopathy-rural community alliance. Such

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[48] Three inter-related components of the community partnership refers to collective power, support and expertise. Ownership refers to promoting an osteopathy health service memory with the rural community. For instance, the osteopath may form partnerships with community representative organisations, and other health providers to increase knowledge of local community needs thus strengthening local relationships and networks while providing a sense of ownership by the local community of the osteopathy service.

partnerships were enhanced by practitioners, who had multiple linkages within the rural community. They were skilled in harnessing community resources, and had the vision to connect the osteopathy profession and wider community through an outreach program. Involving local people to generate community solutions for community problems, enabled these people to feel ownership for osteopathy services.

Local ownership of community solutions was essential to long-term success. At the community level, bringing the groups caring for the rural community together into a coalition strengthened the power, visibility and planning abilities of these entities. Moreover, local leadership tended to feel ownership of osteopathy services and be involved in generating community solutions for community problems. Consequently osteopathy advocates in rural areas, could be political.

Through work with various community groups and participation on the health care needs of rural people, practitioners attention was focused on the plight of this population and the issues surrounding rural osteopathy delivery. There was a lack of data, however, relating to advocacy at the national level of the osteopathy profession. For instance, public health, medicine, behavioural and social sciences, or governmental health policy research teams. These raise questions such as, *Could the osteopathy profession do better to promote intersectoral cooperation and rural partnerships? Could a concept of integrated health promotion provide a framework for osteopath practitioners to work with multi-sectoral partners to improve health and well-being in rural communities?*

An holistic approach to health care delivery

An important component which practitioners spoke of as benefiting the osteopathy profession, was promoting a rural public profile. This entailed promoting the benefits of osteopathy practitioners, as providing people-centred and holistic health care,

> *I think that is why osteopathy survives here [at the crux of it ... Osteopathy is holistic], I think people relate to the type of contact we offer as well. Decent session times, looking at things more holistically [body, mind and spirit], I use the word intuitively as I don't know how much we are, as much as we'd like, we are not narrow in our overview either economically, socially, practically or medically. I hold the banner of osteopath proudly. We are able to get out into the community being who we are. I think it's a healthy situation to be in.* (Practitioner 1)

Practitioners discussed that patients enjoyed the contact which they offered during clinical interactions, "*I think people relate to the type of contact we offer as well*" (Practitioner 1). They implied that Māori patients, *"related"*, they made a connection, established a reciprocal relationship and responded favourably to osteopathy. Note the reference to practitioners giving patients, "*decent session times*" (Practitioner 1) in clinical practice. Practitioners said that it was important not to *rush* patients. Spending enough time with Māori patients and listening was valuable, as this increased rapport.

Practitioners discussed that Māori patients related well to osteopathy and appreciated the interpersonal contact. Potentially, of any other health care provider, the osteopath engaged in the closest and longest session time of many other health care interactions. It is proposed that there are certain assumptions that may be made here of effectiveness of a health care system, which is inherently holistic and provides patients with quality health care interactions. Firstly, patients have certain expectations when attending osteopathy treatment. Usually they are in pain and seek effective pain management and enhancement of comfort. The osteopath must determine what stimuli caused or might cause these individualistic negative responses, that may be making focal pain worse and then intervene with osteopathy interventions. These include the need to treat anxiety, before it reaches panic levels. This may involve taking a case history, asking about any predisposition for heightened focal pain, such as previous experiences with pain or high anxiety levels.

Asking patients (and or their families) about possible pain intensifiers and finding out what may have worked for patients previously may provide personalised continuity of care, while increasing patients' confidence. This involved providing thorough education about pain to be expected for a specific condition or osteopathy procedure. The ways in which osteopathy was the best option for managing pain and setting pain management goals with patients were all important aspects. All of these pain management strategies, relied on the osteopath practitioner to take their time and ask the right questions and ask them frequently. Strong interpersonal communication skills were an opportunity for the practitioner to sensitise themselves to the patients needs and backgrounds. Communication in the osteopath-patient relationship was the most powerful influence on patient and family satisfaction, which practitioners emphasised as being the very foundation of quality care.

The cost-effectiveness of osteopathy care garnered attention from practitioners, when they discussed the lack of continuity of care:

> *That was the problem I found with [rural area]. I would go up there on a Friday and I couldn't see them again until the next Friday. So the next time I said well go to the*

Physio down the road. Or they had to suffer that little bit of stuff, so people to rotate a satellite practice [would be the ideal in rural osteopathy provision]. (Practitioner 1)

Continuity of care was potentially difficult for practitioners and rural patients to maintain, if care being delivered by way of an outreach service lacked supportive infrastructures, to ensure frequency of care. This tended to result in the fragmentation of patient care services and was in part due to the under-funding of health system resources to promote continuity and comprehensiveness. These powerful forces combined to make access for effective, continuing, and comprehensive care more difficult for rural Māori patients. Patients experienced significant benefits in having access to the same osteopath and/or even the same osteopath practitioners in a group practice. However, maintaining continuity of care was a challenge to the practitioners themselves. The importance of covering their practices and making themselves available to their patients at all times had to be balanced by other factors. These included supportive practice arrangements being made available so that the needs of both patients and practitioners could be met.

There were examples of practitioners endeavouring to ensure that the needs of patients were being met. Practitioners discussed certain efforts, such as making the most out of post-graduate education, which focused on improving the ways in which osteopathy care interacted with Māori patients:

Doing post graduate study has helped me widen my view of Māori rural health patients – it's a Māori world view… at the crux of it though Osteopathy is holistic – we are so closely aligned to Māori health. (Practitioner 7)

A familiarisation with the Māori models of health care had set the practitioner on a continuing quest to improve and critique osteopathy actions and interventions and to think about the ways in which osteopathy care could be improved, including the systems within which the osteopath worked in, when interacting with rural Māori patients. This process acknowledged patients different realities, cultural values and beliefs, which could not be stereotyped or ritualised. Some elements of the postgraduate study built on others, such as exploring a, *"Māori world view"* (Practitioner 7). Asking questions about the ways in which osteopathy care responded to individual patient needs, while assisting practitioners to uncover what they did not know or challenging potentially taken-for-granted assumptions.

Māori philosophies about health were talked about as being based on a holistic or wellness model. The osteopathy health care approach was felt to be aligned with Māori holistic approaches to health and general well-being. For instance,

in the case of a patient presenting with an injury, instead of focussing purely on the physical aspects of an injury, the osteopath would be aware that potentially a Māori patient may prefer a system which looks and feels more in tune with their beliefs and one which facilitates their engagement. An important aspect within the unique treatment of osteopathy is that it is a touch based therapy which utilises the effectiveness of broadly targeted osteopathy interventions. The intention being to elicit a positive whole-person response from pain towards comfort and wellness.

Practitioners talked about a central, or critical point or feature of osteopathy practice. This related to the intent of optimal attainment of the physical, mental, emotional, social and spiritual aspects of health, "*…at the crux of it though Osteopathy is holistic – we are so closely aligned to Māori health*" (Practitioner 7).

There was implied a syncretism between osteopathy and indigenous health care systems, holding firm the concept of health, as being holistic in approach, such as believing that whole persons consisted of a mental, spiritual, physical, emotional life which was intimately connected with the physical body and set within a complex web of factors, that contributed to well-being and wellness. These included ecologies such as social and environmental networks. There were many approaches to this and not all fitted with every Māori patient. Each approach was evaluated in terms of its relevance and applicability to diverse Māori realities.

Practitioners discussed that osteopathy was, *"so closely aligned to Māori health"* (Practitioner 7). Osteopathy notions of personhood, identity and well-being emphasised the interconnectedness of persons with each other and the environment (Trowbridge, 1991). In terms of forging a sense of connection between the osteopath and the rural Māori community, practitioners perceived there to be certain parallels to indigenous philosophy. Osteopathy is a system which has its roots in primal religious study.

The founder of osteopathy medicine, in the mid-1870s in Kirksville, Missouri, was renowned for his intense spiritual experiences of the spiritual movements of his time, American transcendentalism,[49] phrenology,[50] mesmerism,[51] magnetism,[52] and also bone setting,[53] as practised by the medicine men of the Shawnee Indians, where

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[49] Transcendentalism is a philosophical movement that developed in the 1830s in the United States as a protest to the general state of culture and society. Core beliefs include the inherent goodness of man and nature.
[50] Phrenology is a psuedoscience that linked bumps on a persons head to certain aspects of the individual's personality and character traits.
[51] Mesmerism is the therapeutic system of hypnosis.
[52] Magnetism is a physical phenomenon produced by the motion of electrical charge, resulting in attracting and repulsive forces between opjects.
[53] Bone setting is a form of traditional manual medicine.

his father was stationed as a missionary in the mid 1800's. However eclectic his approach was, the history of osteopathy to this point is in many ways, the personal history of Andrew Taylor-Still. The history of Osteopathy since has been intimately intertwined with the unfolding of American economic, sociological, political and philosophical thought. While there is no distinct spiritual component of osteopathy, this is often referred to as *energy* or *healing force.* It is this defining character that practitioners conveyed, made osteopathy a powerful and unique health care system (ibid).

It is at this point that the benefits of osteopathy may be recognised. Particularly if for the patient, it is important that the services which they interact recognise taha wairua.[54] For instance, that the mind, thoughts and feelings cannot be separated from the body or soul. According to the MOH (2007), in a traditional Māori approach, the inclusion of the wairua, the role of the whānau and the balance of the hinengaro are as important as the physical manifestations of illness.[55] It is believed that if an individual does not have a spiritual awareness, they may be prone to ill health. Wairua can help to explain a person's relationship with the environment, with people, and their heritage. The breakdown of this relationship could be seen in terms of ill health or lack of personal identity. Lacking in the data is the challenge for many health practitioners of knowing how to ask about this area in a meaningful manner (ibid).

During the discussions, practitioners admitted that they looked at, *"things more holistically"* (Practitioner 1). However a level of uncertainty was noted in relation to working with Māori patients, *"I use the word [holistically] intuitively as I don't know how much we are, as much as we'd like" (Practitioner 1).* The data was devoid of practitioner perceptions of the ways in which they tied their practice specifically to Māori health models. Across all practitioners there was room for discussion in relation to approaches, incorporating Māori cultural responsiveness in rural communities*.* Osteopath practitioners can bridge potential gaps by participating in Māori cultural responsiveness training.

A possible example of the contemporary expression of holistic health care promotion in rural communities, may be of the osteopath who works in partnership with Māori-health promoters and educators. They can also tap into health promotion programs or national advisory groups to provide the most effective intervention, which are attuned to the community. For instance, this may be utilising holistic health

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[54] Taha wairua refers to the spiritual dimension.
[55] Hinengaro refers to mind.

models such as Te Whare Tapa Whā or Te Pae Mahutonga,[56] as these offer scope for Māori health action, which is aimed at addressing the determinants of health.[57] This (effectiveness) may, in turn, be directed at various levels (individual, whānau, hapū and iwi). The result being a focus on population health – customised illness prevention and health promotion efforts at the community level.

Practitioners placed emphasis of their practice in relation to the effectiveness of interventions, which were perceived as potentially reducing disparities in rural health. A primary concern was the Scope (Osteopathy Scope of practice).[58] A lack of receptivity was noted in the data by practitioners in relation to the Scope. This was viewed as being restrictive upon osteopath practitioners range of practice ability through its definition. Currently, the osteopathy profession, is undergoing a scope of reform. Practitioners spoke with fear that if limits were placed on their osteopathy scope of practice, that this potentially may limit what an osteopath could or could not do in clinical practice. The activity of scope definition was considered to be reductionist and thus thought by some osteopath practitioners to being counter to the underpinning philosophy of osteopathy.[59] The osteopathy profession's competence, and the requirements of public safety, were imperative to redefining the osteopathy scope of practice. For instance, the scope protects the public from unqualified practitioners and informs the public of what they should expect from an osteopath practitioners services. Given that the osteopathy scope of practice is an holistic philosophy, potentially an osteopath could have given up all manual practice and just prescribe herbs. So a member of the public could ring up, make an appointment, and not have any manual treatment at all and just be given herbs, and be thoroughly confused. The scope of practice is in place to prevent a range of situations, from happening.

Practitioners discussed the HPCA Act (HPCAA) 2003 as having some unintended consequences of the legislation. This potentially reduced the effectiveness of osteopathy intervention. These practitioners referred to as causing

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[56] Holistic health models refers to models which are detailed in, *Chapter 1: Introduction*. Te Whare Tapa Wha is a Māori holistic health and wellness model. Te Pae Mahutonga is a Māori Health Model based on the Southern Cross Star Constellation.
[57] The determinants of health and well-being which contribute to Māori health include macro-political, ecological and indigenous determinants (Durie, 2001).
[58] Osteopathic Scope of practice is defined in legislation by the HPCA (Act). The Act has made the scopes of practice a regular part of practice and describes the contents of the osteopathy profession.
[59] Underpinning philosophy of osteopathy refers to various elements of Osteopathic philosophy which emphasises the following principles: *(1) The human being is a dynamic unit of function; (2) The body possesses self-regulatory mechanisms that are self-healing in nature; (3) Structure and function are interrelated at all levels; and (4) Rational treatment is based on these principles* (Osteopathic Council of New Zealand, 2011a).

potentially rigid boundaries, which were restrictive and counter-productive to working within a broad holistic paradigm of well-being:

> *Yes but they might say we'll have you in under that umbrella manual medicine – but make it prescriptive – like 2nd World War – we've give you Osteopath's MB status – they lost the manual side of osteopathy – big drive again and it's coming back – if they weren't limiting our scope of practice then yes it would be OK … we are not given the same rights as practicing Doctors – it's great to say I am broad – but called in from the law – no consensus from anyone – who will back you up? Otherwise you will end up rubbing the joint and that's about it.* (Practitioner 3)

Note the use of the word, *"prescriptive"* (Practitioner 3) in relation to manual medicine. Practitioners spoke of over-zealous monitoring of osteopathy practices and standards which were counter-productive to what practitioners highlighted as a, *"broad [holistic]"* (Practitioner 3) approach to osteopathy practice. While the HPCAA may have been intended as guidelines, they were felt as increasingly being treated as rigid boundaries and, as such, could be restrictive and counter-productive to osteopathy practice.   There was a fear of litigation noted in the data, *"- it's great to say I am broad – but called in from the law … who will back you up"* (Practitioner 3)? The risk was that an inexperienced practitioner may be reluctant to make difficult decisions and result in the practitioner restricting the range of osteopathy interaction to one where the practitioner just ended, *"up rubbing the joint and that's about it"* (Practitioner 3).   The implication was that an over zealous monitoring of osteopathy practices and standards could result in the practice of *defensive* osteopathy.[60] Practitioners tended to be seeking a balance, a move away from any further review of the osteopathy scope of practice being reductionist or attempting to narrowly define osteopathy practice.

Over the course of discussion, practitioners language was noted (by the interviewer) as being emotionally charged, when it came to discussing the Scope of osteopathy practice.   References of historical episodes of perceived loss of power over the duration over the history of the profession were made. This was particularly the case as practitioners mentioned that osteopath practitioners were not, *"given the same rights as practicing Doctors"* while referring to the, *"2nd World War"* (Practitioner 3). The reason for this was due to the Osteopathy Scope of Practice, potentially reflecting a source of tension. These comments are grounded in the fascinating history of the osteopathy medical profession's long and arduous road to

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[60] Defensive osteopathy refers to the practice of diagnostic or therapeutic measures conducted primarily not to ensure the health of the patient, but as a safeguard against possible malpractice liability.

United States government recognition, where osteopathy originated.[61] For instance, practitioners reference to, *"war"* (Practitioner 3) may relate to Osteopathy physicians (DOs) who were not recognised as physicians by the armed forces during their draft to World War I,[62] World War II, and the Korean War or given the same rights and privileges enjoyed by Medical Doctors, when they returned from war (Gevitz, 1996).[63]

In contemporary times of New Zealand, practitioners commented, *"rights"* (Practitioner 3), *"…we are not given the same rights as practicing Doctors"* (Practitioner 3). This referred to the autonomy of osteopathy practice, as being challenged. To some extent this depended on how autonomy was defined - if it meant having the, *"same rights as practicing Doctors"* (Practitioner 3), as much power as Doctors, or the legal and practical rights to do everything which General Practitioners did, such as prescribing narcotics, then osteopath practitioners obviously did not have autonomy. However, participants felt that the autonomy of osteopathy practice was being challenged by powerful health care system actors (for example, General Practitioners, exercising practical control over osteopathy).

Networking

Practitioners discussed the ways in which they promoted their osteopathy practice. These included network exploitation, such as word-of-mouth, and face-to-face interactions. There was great potential in exploiting networks through word-of-mouth campaigns.[64] These networks generated conversation-worthy information naturally, particularly if it was positive word-of-mouth, articulated by patients' experiences:

> *You need to know someone there [rural community] who can put the information out there and a bit of support, if you are to work rurally. But sometimes it depends on the first three patients through your door … if they get better they'll spread the word … one of my guys Hohepa – would be more interested in coming because a family friend – someone that knows you [word-of-mouth process] – that is more effective – than yellow pages – having a bit of rapport knowing where they are from is a very powerful tool. You don't feel you have to prove yourself or justify yourself – you have pre-knowledge before they come in. For example, Doctor down the road – oh he's a nice chap* (Practitioner 3).

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[61] Where osteopathy originated, refers to the mid-west of America in the late 19th Century.
[62] D.O. or DO is a professional doctoral degree for physicians in the United States.
[63] See Introduction 'History of Osteopathy' for example the use of palpation (touch), seeing the individuality of the patient, etc.
[64] Word-of-mouth refers to the passing of information from person to person by oral communication. Campaign refers to the spreading of news and information about osteopathy services by osteopath practitioners and their patients.

Practitioners tended to think that patients were more inclined to believe word-of-mouth recommendations, than more formal forms of promotion methods. The receiver of the word-of-mouth referral tended to believe that the communicator was speaking honestly and was unlikely to have an ulterior motive (i.e. they were not receiving an incentive for their referrals).

Practitioners found that word-of-mouth was an important conduit for health information to rural communities, particularly among socio-economically constrained populations, with low levels of access to media outlets. Rural community word-of-mouth by osteopath practitioners and their patients (and their family, friends, and other health practitioners) tended to bridge the gap in an environment which often lacked information about osteopathy services:

> *Well we have a lot of rural patients, particularly farmers and always have had being rural, that's how our name has spread (word-of-mouth) … but I didn't advertise at all … just word-of-mouth … as a rule we don't use advertising, it doesn't bring in a lot of work.* (Practitioner 1)

Tapping into word-of-mouth networks were held in higher regard than other forms of advertising which were also undertaken, *"yellow pages; attendance at Women's Expo; Bowling for fundraising; and sports clubs"* (Practitioner 2). Word-of-mouth marketing was considered an important area. It lent an added credibility of person-to-person communication and personal recommendation, than other more formal forms of promotion methods.

The discussion of informing rural communities about osteopathy services continued further. It was beneficial for the osteopath to sit down with their rural community as the process of interacting on this level with the rural community could be an important conduit for health information, *"you'd better row your own boat and go out there and do your own advertising … sitting down with the community and talking about what you do as an individual …"* (Practitioner 3). Practitioners positively emphasised ways of working which they considered to be conducive to promoting their osteopathy practice. For example by taking the clinic - outside - of their walls.

Implicit was that the osteopath needed to earn the trust and patronage of their communities. Trust was an active process, in this case it was gathered through face-to-face interactions with rural Māori populations and rurally disadvantaged rural community patients.[65] Getting out and about in the Māori community to know the

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[65] Disadvantaged rural community patients refers to socioeonomically disadvantaged groups in rural regions who have a difficulty in accessing comprehensive and quality health care services.

people, the local issues, personalities and politics all helped being known in the community. It was then likely that the osteopath would develop effective contacts and networks. This was one way in which osteopath practitioners could begin to understand Māori needs, aspirations, beliefs, values and practices at a meaningful level.

Responsiveness

In undertaking the interviews, it was impressive to see the level of commitment, motivation, professionalism, and wide range of skills across all of the osteopath practitioners. There was a great generosity around sharing ideas, experience, and expertise and an eagerness and enthusiasm to learn and a willingness to shape osteopathy services.   There were benefits to enhancing osteopath practitioners roles and contributions within the health and social care system of New Zealand.

In this section, practitioner's discuss these aspects and their perceptions of the ways in which osteopathy was a responsive and effective health service under two headings, *Patient tailored-intervention* and, *Provision of information*. There were issues which practitioners highlighted as being of particular interest, if osteopathy was to go from strength to strength in New Zealand's health care system. It is in this context that responsiveness is discussed, in particular highlighting that in the face of the persistance of health disparities in New Zealand, that a traditional one size approach to osteopathy does not meet the health care needs of diverse patients.[66]

Patient tailored-intervention

Practitioners discussed the challenges of providing osteopathy care which was responsive to the needs, preferences and expectations of rural people,

> *It is a dangerous route – if you think you are this ethnicity, therefore I should treat you this way if you're this ethnicity, or that ethnicity. You could otherwise be seen to be selective - and racist - difficult route to go down. But some cultures you would treat differently with towels – exposing areas so you can moderate it … but I think if you say I treat everyone the same - with grey areas.* (Practitioner 4)

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[66] Health disparities refers to differences between groups of people. These differences can affect how frequently a disease affects a group, how many people get sick, or how often the disease causes death. Numerous disparities exist between Māori and non-Māori New Zealanders. Disparities in Māori health persist even after controlling for confounding factors such as poverty, education, and location, suggesting that culture is an independent determinant of health status and access to services (Ajwani, Blakely, Bonne, Robson & Tobias (2003).

This compelling data suggests that practitioners perceived that it would be impossible for one osteopath to reflect the unique cultural perspective of each patient in highly diverse environments. If this were the case in a rural area with a high Māori population, then a culturally competent osteopathy service would required an osteopath to have a thorough grasp of the language, values, belief systems and challenges of the patient and their family members.

However, practitioners felt that osteopathy did not need to be narrowly tailored to each cultural group. Rather, by incorporating a a sensitivity to patients values, customs and beliefs, *"But some cultures you would treat differently"* (Practitioner 4) would enable practitioners to recognise difference and actively engage care in keeping with that recognition. For instance, practitioners discussed moderating the treatment through the procedure of draping or covering the patient to protect a patient's modesty, dignity, and privacy while ensuring that the patient was not exposed, *"but some cultures you would treat differently with towels – exposing areas, so you can moderate it, but I think if you say I treat everyone the same - with grey areas"* (Practitioner 4).

Practitioners indicated that cultural sensitivity was a *"difficult route to go down"* (Practitioner 4). This was thought to be due to the risk of generating a *cookbook* or *prescriptive* response to cultural differences, which was a, *"dangerous route"* (Practitioner 4) and could do more harm than good. For example, if practitioners were taught about the values, beliefs, and practices of *other cultures* such as *Māori* values, then there may be a danger that assumptions, stereotypes and generalisations about the *other cultures* which are based on class, gender, sexual orientation, ability, religion, age and so on, will be perpetuated.

Practitioners related that having cultural awareness and sensitivity was required when working on the basis of mutual respect and understanding. However, cultural competency was perceived as having,[67] *"grey areas"* (Practitioner 4)*,* and uncertainties, *"What really does it [clinical competency/The Treaty of Waitangi] have to do with osteopathy anyway – they're [rural patient is] still a human you still treat them as human?"* (Practitioner 5).

These comments, in particular, *"you still treat them as human"* (Practitioner 5) indicated that respecting the lived experience of patients, was an essential part of practice. A hesitancy was noted in the practitoners speech throughout conversations relating to the Treaty which was interpreted as practitioners not having consciously considered either the relevance or the implication of the Treaty to their practice of

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[67] Cultural competency refers to the skills, knowledge and attitudes to safely and satisfactorily deliver osteopathy.

osteopathy. The Treaty was an area of uncertainty for practitioners, due to mixed levels of Treaty awareness and potentially comprehensive knowledge.

While knowledge of the Treaty was mixed, all of the practitioners had acquired snippets of Treaty information by way of a variety of sources:

I went through playcentre with the children and learned about the Treaty there. That was my bit. (Practitioner 2) And,

You read about Treaty of Waitangi before you come for yourself. (Practitioner 4) And,

Clinical competency – core competence course covered all that, when I did the exam. (Practitioner 5) And,

It's part of the cultural competency. (Practitioner 5)

The main sources of Treaty information for practitioners ranged from formal training, word-of-mouth and migrant information packs. Surprisingly, missing from the data, was a strong New Zealand Osteopathy *bent* or *angle* to the way in which the Treaty was brought to life in the practitioners day-to-day experiences of working.

Some practitioners, thought that the Treaty was best left to the academics of the profession, while it was noted as being an historical event by another:

It's just an education thing for some people. (Practitioner 4). And,

that's history – in the U.K. we don't talk about stuff that happened 1,000 years ago. In New Zealand it still hasn't grown up yet, still babies. (Practitioner 6)

In addition to there being a sense of hesitancy related to the Treaty, there was an air of impatience surrounding discussions with practitioners, and desire for New Zealand to put Māori issues behind them. These personal views were in contrast to the Capabilities of Osteopathy practice, which encourage practitioners to be familiar with principles of the Treaty and the discourses in its application in the provision of health services to Māori patients (Osteopath Council of New Zealand, 2011c). There was an overwhelming lack of data which explored the complexity involved in ethnic disparities of New Zealand or the role which osteopathy was perceived to play in reducing the barriers that Māori experienced toward health services and improving Māori Ora.[68]

Practitioners spoke about Māori and non-Māori as having a similar culture, *"I guess if you had Māori people – they instantly realise we have a similar culture"* (Practitioner 5). Practitioners mentioned, *"they instantly realise we have a similar culture"* (Practitioner 5). Potentially, this was an example of *denial* of cultural differences. For instance, a practitioner who is unaware of cultural difference may

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[68] Māori ora refers to Māori holistic health and wellness (Wilson, 2006).

take the attitude that *osteopathy is osteopathy the world over* or *everyone would respond this way*. Practitioners might be so intent on the tasks at hand, that they fail to notice the cultural aspects of therapeutic relationships with the patient.

There is a risk, however, that a general lack of awareness about difference of culture, could be perceived by the patient as *insensitivity* to their expectations. This may result in a missed opportunity to establish trust and good relations, with patients from other cultures. Also, there is a risk of ineffective care strategies being implemented, due to the misinterpretation of patient behaviour. Practitioners may experience unnecessary conflicts and misunderstandings, along with an overall lack of understanding of the importance of communication across cultures.

There were examples of the new challenges for overseas osteopath practitioners, when it came to understanding the peculiarities of New Zealand society, and the context and processes involved with osteopathy delivery:

> *Taking into account a lot of osteopath practitioners in NZ trained in the U.K. … do you think those fresh off the boat are equipped sufficiently to work with rural patients* (Interviewer)? *No idea.* (Practitioner 4) And,
>
> *[It's] new territories [knowing whether osteopath* practitioners *from the UK are well equipped to work with Māori rural patients].* (Practitioner 5)

Practitioners eluded to there being Māori rituals which were relevant to osteopathy practice, *"because there are rules and expectations ... and if you didn't know that ..."* (Practitioner 1). Knowledge of these rituals, such as protocols around meeting and greeting, paying tribute and thanking were held in high regard. There were cultural elements which practitioners felt assisted the osteopath, especially when it came to putting patients at ease during consultation. Although the discussions with practitioners tended to lack a range of examples of these.

In contrast, there were practitioners who had experience of Māori rituals and protocols. They warmly described the interactions which they had encountered:

> *You go onto a marae – our favourite little marae in [rural town] – it's so gentle – even with Māori they change when they go on marae, because there are rules and expectations and you're guests … And it's sad that we don't have a lot of that in our society anymore. But when they come into the clinic, see that's a Māori handshake – soft – it's a whole different thing. I swing my questioning slightly different, I ask questions that they might understand more … very rural Māori would be very different You've really got to look at who you are dealing with really in terms of their own setting, where they've come from and how culturally immersed they might be.* (Participant 1)

This excerpt highlights that the marae encounter was a positive experience for practitioners. Note the sentimental tone of admiration, *"it's so gentle"* (Participant 1) Potentially, this exerpt provides an example of a practitioner who has familiarised themselves with the knowledge of whānau, Hapū and Iwi. This also provided an opportunity to meet key people involved in Māori health.

According to the Māori Cultural Responsiveness Project Team (2010) in their, *Māori Cultural Responsiveness in Practice* guidelines, a primary care practitioner who is culturally responsive and competent will be able to demonstrate knowledge of whānau (family, Māori community), hapū (kinship group, sub-tribe) and iwi (kinship group, tribe). They will know the value of being culturally responsive in providing services to Māori. This includes, being able to identify key Māori interactions, including Pōwhiri (rituals of encounter) (ibid).

Mauri Ora Associates (2010) identify the process of pōwhiri as being an ideal opportunity which practitioners can utilise, when wishing to establish rapport. For instance, when initially meeting a patient, Māori may expect formal introductions, similar to a pōwhiri. This provides the space and time to establish some rapport, rather than rushing in. After this process, sharing some background will allow the patient, the space to share theirs also. At times this might extend to genealogical connections being displayed as you would expect to see at a pōwhiri. In addition, identifying the kawa (Marae protocol) of individual iwi/hapū through attending pōwhiri or Māori practice is invaluable. Marae is the ideal place to learn all of these aspects. The reason being that these will all assist the practitioner to recognise the diverse realities which are determined by Māori (ibid).

Practitioners spoke of the important place of family involvement within the therapeutic encounter, *"usually the whole family will come"* (Practitioner 4), *"two people come … and visit me at the same time"* (Practitioner 1). Having the, *"whole family"* (Practitioner 4) or involving them throughout the treatment process, enabled greater potential for the osteopath to influence the health of the patient and their family members. Change (healthy behavioural change) was more likely to be successful and permanent when the patient's family was involved in initiating and promoting change. Ultimately, this gave patients and their family the opportunity to drive wellness, on their own terms.

Practitioners talked of the composition and distribution of the New Zealand osteopathy workforce, as being predominantly composed of practitioners who were overseas trained, *"I think if you went straight into [small town] from the UK, you would have to have your wits about you. Which is a very rural community"* (Practitioner 1). Practitioners related to needing to have your, *"wits"* about you in a rural New Zealand

community, due to there being much more to a, "*rural community*" (Practitioner 1) than may meet the eye. For instance, when studying rural health, practitioners eluded that we must look beyond the obvious (geographical location) and consider a multitude of factors and interactions. In other words there is no *silver bullet* solution currently which meets the needs of practitioners who are trained overseas. In addition to learning about the many facets of Māori culture, there were colloquialisms and other shared cultural understandings, which osteopath practitioners needed to make sense of, when working in rural New Zealand.

Practitioners who had trained and lived in the United Kingdom, discussed bringing a wealth of knowledge with them to the therapeutic encounter. This was considered to be beneficial, because it increased practitioners' sensitivity to working effectively with people from different cultures:

> *In the United Kingdom (UK), [I saw Indian families] … usually sons or daughters can come along and help out with translation – in the UK Indian families – Mum and Dad don't speak English but daughters or sons could translate. I'm used to seeing diverse populations– Sikhs, Muslims Hindu – In the UK – I saw a broader patient base in London … we have lots of skills - a lot more than what we were taught.* (Practitioner 3)

Practitioners discussed the skills which they had benefited through their international experience of having lived and travelled overseas. This enabled the osteopath to *get* and *accept* knowledge about different cultures, ask the proper questions and receive pleasure and satisfaction in these differences. There was a perceived ability to construe (and experience) cultural difference in more complex ways.

There was reference made of the difference in demographic and cultural diversity between the two countries (United Kingdom and New Zealand) and the increasing tendency of globalisation, which required a practitioner to attain knowledge of inter-cultural aspects. This discussion centres the conversation of osteopathy care in relation to there being a need for the developers of osteopathy education to focus on the osteopathy student and professional's experience of, and a level of responsiveness towards, diverse cultural groups. For instance, encouraging students to participate in rural outreach osteopathy service provision. The dialogue, *In the United Kingdom (UK), [I saw Indian families] …* (Practitioner 3), demonstrated practitioners utilising reflective processes (of past interactions).

There is a potential link in the data of the value of reflective practice and of the ways in which previous interactions with patients might be improved. These

discussions raise interesting questions, such as, *How do osteopath practitioners relate to patients of other cultures and what are the ways in which osteopathy skills are developed and translatable when working across a range of cultures?* Also, whether practitoners would benefit from a framework which they could utilise to reflect and evaluate their own prctice, using this to check their own behaviour and its effect on patients. According to the Māori Cultural Responsiveness Project Team (2010) an indicator of cultural competence for practitioners, is the use of a framework which allows the application of Māori-specific interventions. For example teina/tuakana models (Māori mentoring processes), peer supervision/mentoring and other general interventions such as journal writing, peer review processes, satisfaction surveys, professional supervision and audit tools. Collaboration with the Māori community could also assist this process (ibid).

Provision of information

Practitoners discussed that there were several barriers to rural people accessing osteopathy services. For instance, practitioners discussed the way in which osteopathy was funded by ACC and the structure of payments.[69] Overall, there tended to be a perception of a lack of knowledge by the rural community as to the funding structure of osteopathy co-payments, particularly when payments were subsidised by ACC. Potentially, this provided an environment of mis-trust between the rural patient and the osteopath practitioner:

> *But carrying on about (in small rural town), I didn't think people expected to pay anything because it's a lower SES or lower employment for instance, they get far more grants and don't expect to pay for the treatment, they didn't want to pay (some of them).* (Practitioner 1)
>
> *I often think if its ACC why should we pay anything – people are often taken aback when you say there is a surcharge.* (Practitioner 3)

At the outset, the difficulty looked to be a case of a rural patient's lack of willingness to pay, *"they didn't want to pay"* (Practitioner 1). In addition, potentially a tone of embarressment, surprise, confusion (of patient) is noted as, *"people are often taken aback"* (Practitioner 3). For the patient, the ability or inability to understand the way in which osteopathy was funded, required navigating health care systems.[70] Information as to where patients interacted with resources to provide them with information about osteopathy, particularly funding, which was high quality,

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[69] ACC refers to The Accident Compensation Corporation (ACC), New Zealand.
[70] Health care systems refers to hospital, public practitioners, community health settings, and osteopathic (private practitioners).

independent and readily accessible was absent from the data. This implied that there was a perceived gap which could be bridged, by providing relevant information to rural communities about the practice of osteopathy, including the way in which it is structured from a funding perspective.

Nevertheless, it may be deduced that the confusion about osteopathy co-payment for the patient as exemplified by the previous comment, *"people are often taken aback"* (Practitioner 3), was a reflection of systemic complexity in the provision of information to people about osteopathy, as well as individual skill levels, for instance an example of poor osteopathy health care literacy.[71]

Practitioners discussed the Scope of Osteopathy practice (under the public safety responsibility of the Osteopath Council of New Zealand, the scopes of practice described the profession for the public so that they had a clearer understanding of the skills and qualifications of osteopath practitioners and of the health services provided by osteopath practitioners). Practitioners perceived that the provision of information as to what osteopathy and osteopathy practices had to offer was lacking: [72]

> *One of the issues that we have as osteopath* practitioners *is that when someone says osteopathy, those rules are never generic. We are so different in the way that we practice. There is no uniform way of practicing osteopathy. So people get very confused about what it is they are going to get when they come to see me. If they went to see [osteopath] versus if they come and see me they are not going to get cranial osteopathy, they are going to get a whole raft of things. So we have a bit of a problem there in describing the practice of osteopathy.* (Practitioner 1)

There was a notable issue around clarity for the public, patients, and other health care professionals, about how and what conditions osteopath practitioners treated and what type of patient or condition would respond to osteopathy treatment. The public, patients, and other health care professionals were confused as to the difference between Chiropractors, Osteopath practitioners or Physiotherapists and could not decide who treated what better. This was put down to the broad ways in which osteopath practitioners practiced, and a low awareness of the osteopathy professions' identity.[73]

There was a connection made to the Osteopathy Scope of Practice, *So we have a bit of a problem there in describing the practice of osteopathy* (Practitioner 1). This tended to undermine the position of osteopath practitioners and lead to a

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[71] Osteopathy health care literacy refers to patient's knowledge of osteopathy or knowing where to go to obtain information.
[72] People refers to the public, patients, and other health care professionals.
[73] Professional identity is concerned with the roles, responsibilities, boundaries and overall ethos of osteopathy practice.

potential under-utilisation of osteopathy care. There was a general consensus that if osteopath practitioners were to be seen as health professionals, then osteopathy could not exist without clearer provision of information about its approaches to health and strategies. The dissemination of information was perceived as requiring assistance from the stakeholders of osteopathy to engage with. For instance, the Osteopath Council and Osteopathy Associations could promote public awareness of the responsibilities of their authority and advise all the positive ways in which their registered members engaged with education and training of the osteopathy profession. This was not just about marketing but public confidence, safety and awareness of osteopathy services.

The provision of information was perceived as fuelling tension in the health care marketplace. There was an ambiguity of what an osteopath was and did. This was perceived as a serious and costly phenomenon. For instance, practitioners related with a tone of surprise and dismay, a conversation which they had with a patient in relation to the confusion that their General Practitioner expressed of osteopathy:

> *One guy I saw said I mentioned osteopathy to my Doctor and the Doctor said osteopathy was quackery – I said would be nice if you said to General Practitioner it was good and worked for me – patient said I'm not going to say that.* (Practitioner 3)

Role ambiguity contributed to intra-professional tension in the health care marketplace and potentially resulted in a lack of trust among professionals. This lack of trust was perceived as preventing any chance of effective collaboration or teamwork. Within the context of Māori wellness, poor intra-professional teamwork was disastrous. If health care professionals did not trust, respect, and collaborate with one another, there was more likely to be a mistake made which could negatively impact the safety of patients.

Regarding the provision of information and the scope of osteopathy practice, a strong theme for practitioners was the considerable role confusion among people,[74] as to which musculo-skeletal professionals (i.e. Chiropractors, Osteopath practitioners or Physiotherapists) treated what disorder better, *"Some people say can you click me neck? Other people… Physio – want to come 20 times, every day? No not I'm not a chiropractor, what drugs"* (Practitioner 5)? The confusion tended to be related to the

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[74] Role confusion refers to the perception of role overlap. People refers to the public, patients, and other health care professionals. Chiropractic is a health care profession that focuses on disorders of the musculoskeletal system and the nervous system, and the effects of these disorders on general health. Physiotherapy refers to therapy that uses physical agents: exercise and massage and other modalities.

difference between Physiotherapy, Osteopathy and Chiropractic therapy.[75] Essentially, practitioners related that people perceived an *overlap* in roles which needed to be clarified, through an improvement in the provision of information.

Practitioners discussed that when osteopath practitioners undertook joint arrangements to work under the roof of a General Practitioners health centre, that this could limit productive collaboration and the provision of information about osteopathy to patients:

> *Because they're [General Practitioners] pushing physiotherapists (giving physiotherapists all of the patient referrals). What's happened is that physios have joined big practices. Physios, there might be 6 or 8 of them. They align themselves with General Practitioners practices. A little hard word on the General Practitioners and they get the work. I think if you went in and asked your Doctor to refer you to an osteopath they would say yes fine.* (Practitioner 1)

There was a level of frustration in relation to professional politics. This was perceived as limiting productive collaboration with other health professions. Practitioners referred to potentially utilising a strategy, such as encouraging patients to ask their *"Doctor to refer [them (patient)] to an osteopath"* (Practitioner 1)*.* By creating strong, enduring, and productive partnerships, practitioners had a better chance of unleashing collaborative power. For instance, partnering with patients to assist other professionals the chance to move from *power over* others to *power with* intra-professionally (osteopath practitioner-other professionals).

There were further challenges to collaboration when it came to the legacy of other allied health professions, who had strong links to referring health professionals. For instance there were cases where General Practitioners tended to refer their patients to physiotherapists rather than osteopath practitioners. This was thought to be due to local contextual factors such as these parties, General Practitioners and physiotherapists', operating in joint locations. This could entail remunerations and increased incentives to promote allied professionals, over osteopath practitioners:

> *It's [ACC funding is] usually physio driven. Physios get the work.* (Practitioner 3) And,
> *The biggest deterrent is the General Practitioners also, unless rural patients ask to see an osteopath the General Practitioners automatically refer them to a Physio. So many times they had to ask to go see an osteopath before the General Practitioners would refer them.* (Practitioner 5) And,
> *In addition, Doctors are not referring to anyone outside of their practice because those practitioners, whether it be a physio etc. is helping to pay their rent.* (Practitioner 1)

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[75] Note that all three disciplines (Physiotherapy, Osteopathy and Chiropractic) have many commonalities.

There is a sub-text here which relates to the way in which osteopath practitioners are philosophically distinct from bio-medicine. Osteopathy history may be perceived as being in conflict with western medical models, even though historically osteopathy is arguably well aligned to these models. Thus, while the osteopath may represent potential competition for the General Practitioners existing in-house providers, osteopath practitioners may be viewed not so much as *complementary* medicine but rather as a less-well-trained competitor. For example, in-house providers might look down on osteopath practitioners, due to a lack of understanding of osteopathy as a treatment option.

Practitioners discussed facing unexpected strong external competition from private medical practices. If an osteopath chose to align themselves to any one medical practice, this could limit referrals from other medical centres and subsequently, patient numbers into the osteopath practitioners clinic:

> *But it does limit the numbers of people they (osteopath* practitioners*) get as well. I worked at a medical centre for five years and I found that as soon as I moved in there, other General Practitioners would stop sending me referrals because I was working from a particular medical centre. It was a jealousy thing among the General Practitioners they didn't want their patients going to another [General Practitioners] practice.* (Practitioner 1), And,
>
> *I think… you could limit your osteopathy practice by going into a one-stop-shop (community-based health centre).* (Practitioner 7)

Because practitioners relied on referrals from various different medical practices, aligning with one practice lead the osteopath to be perceived as a threat by competing General Practitioners, despite the General Practitioners having referred patients to osteopath practitioners in the past. There was a perception that despite efforts to calm concerns of the referring General Practitioners, that General Practitioners worried that other General Practitioners would be *stealing* their patients from a competitor's (General Practitioners) medical centre. This raised the issue of patient ownership and highlighted the, "*jealousy*" (Practitioner 1) and/or turf issue and questions, whether osteopath practitioners encroach on the referring health providers' turf.

Some General Practitioners had reputations of limiting osteopathy practice by being adamant patient owners. Moreover, these gatekeepers, in essence mandated and validated a culture of patient ownership. For instance, the situation was complicated if patients requested that they be referred to competing medical centres,

after attending the osteopath there. Nevertheless, most patients believed that they had the right to choose their General Practitioners or osteopath practitioners.

Practitioners highlighted that osteopath practitioners could be viewed by other health care practitioners as competition, "*as soon as I moved in there*" (Practitioner 1). This tended to emphasise a pluralistic system resorting to compartmentalised care; in which patients used public and private health services alternatively or simultaneously, with increased risks. For example, if rural patients travelled to distant communities to receive care from many different providers who had poor communication between them, ultimately this might lead to fragmented and inefficient care. The emergence of large medical groups were perceived by practitioners to pose a major threat to the financial viability of individual osteopath practitioners rural health practice.

There were other key factors also, which contributed to unsustainable rural practice. These practitioners related to high rates of competition, particularly if osteopath practitioners lacked the ability to access lucrative subsidies like other allied health practitioners, such as physiotherapists. There were conflicts intra-professionally between osteopathy-other health professionals. These ranged from environmental adversity (the working environment was less than ideal), to cultural dissonance and generalised frustration, which lead to a lack of coherence (poor team environment).

Osteopathy and medicine are noted as being caring professions with strong traditions, externally characterised by mutual respect and well regarded by the public whom they profess to serve. Although osteopathy is typically characterised as caring, and medicine as curing, both are essentially healing disciplines combining art, science and craft and comprising caring treatment and curative functions. Thus, there are many more similarities and commonalities than cosmetic differences. However, practitioners discussed that while the relationship between osteopathy and medicine always tended to be cordial and collaborative, there were tensions that simmered beneath the surface of an apparently healthy partnership between the two.

As practitioners put it, within the context of working from a General Practitioners rural medical centre such as renting a room in a rural General Practitioner's surgery, the Osteopath practitioner-General Practitioner relationship could be strained, "*The rooms [I had in the medical centre were] a little bit off*" (Practitioner 1). This comment highlighted that the multi-disciplinary model of practice could be problematic, if practitioners were divided by professional rivalry, due to a real or imagined power imbalance, with General Practitioners being seen by osteopath practitioners as dominating and coercive.

The challenges of working with other practitioners tended to be exacerbated, if the osteopath practitioner entered into a hierarchical relationship and lacked, in terms of having strategies to bridge the powerful disciplinary divide (barriers between professions to work together collaboratively):

Even with the [rural town] health centre, [osteopath practitioner] was going in there, he was going to have this nice little room at the front as part of a General Practitioners and complementary health practitioners working together but reality was he was shoved into a back room and it turned out to looking like an us and them situation, than working together. (Practitioner 7) And,

I wouldn't do it [go into a one-stop-shop] again. Have you spoken to [osteopath practitioner]? I think he worked for a Doctor (rented rooms in a Doctor's clinic) for a while, he would have find that he was limited, the rent was a problem. In the end with me the General Practitioners *put my rent up so high it was untenable. They were trying to get us out when they wanted the room.* (Practitioner 1) And,

I suppose the physio is helping the General Practitioners to pay the rent as well so it is very much in their best interests for the General Practitioners to keep them busy. To ensure they've got that rent coming in. (Practitioner 7)

Practitioners noted conflict and tensions, due to historical ideological and historical differences between the professions. This was further hindered by ethical and financial tensions, in relation to renting medical rooms and inter-professional patient referrals. Conflict and tension was noted at an intra-professional (osteopath practitioner to osteopath practitioner) level:

But then the boys in [small town] moved in straight away or the girls (osteopath practitioners*) did and I thought they've moved in so I moved out … so I was very careful not to step on toes up there. I didn't want to be seen to be moving up there and stepping on toes. It really was just to service my own patients, but of course that wasn't enough … so I moved away and left them all to it.* (Practitioner 1)

Practitioners discussed that osteopath practitioners tended to work in silo, which created a lack of communication and common goals.[76] There were power differentials and perceived hierarchies, which potentially encouraged the flow of practitioners away from working in rural areas. This highlighted that efforts to improve work across the silo in rural areas needed to be addressed, such as improving communication to reduce the perceived effects of rural isolation for osteopath practitioners.

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[76] Silo refers to health care systems that work independently of each other and cannot exchange information with other related systems. To work across the silo means exchanging information with other groups and keeping everyone in the loop.

The theme of isolation was extended as practitioners discussed that living and working rurally, could lead to a sense of isolation on a personal and professional level. One example was given of professional isolation in terms of attending peer group meetings, *"two hours travel to meet with … peer group" (*Practitioner 7). *That's exactly what the Council (Osteopath Council of New Zealand) says to us – it's your fault for living there if you cannot get to the courses* (Practitioner 5).

Working in rural places was felt to lead to professional isolation, and made it difficult to attend continual professional development training.[77] At a profession level there was a need to investigate a benchmark of what constituted a desirable approach to peer group learning for rural practitioners. This ideally would involve a degree of flexibility of the osteopathy professions' continual professional development objectives.[78] At another level a tone of negative peer culture was noted in practitioner data. This related to the design of continuing education and professional development programmes. These had failed to meet the needs of rural osteopath practitioners in the past; and were felt to be inccessible from where they lived and worked and so threatened to support osteopath practitioners retention of living and working in a rural location.

The theme of *isolation* continued as practitioners discussed one of the threshold effects of operating an outreach clinic, was the presence of rural ethical conflicts, these involved concerns of privacy, confidentiality, trust, professional duties and boundaries:

> *The problem with providing osteopathy treatment in rural communities is the lack of osteopath* practitioners *willing to work in isolation. Being a health practitioner in a rural setting is very lonely. Because you treat the community you have to keep a professional barrier even at social occasions.* (Practitioner 6)

In addition to concerns about isolation, rural neighbourhoods tended to be composed in a way in which most people were relatively well-known to each other. Rural residents tended to know many of the details of each other's lives, which could lead to confidentiality issues. This posed boundary issues, due to living and working in the same rural community. Osteopath practitioners could meet their patients outside the clinic setting. In osteopathy health care, respecting confidentiality and

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[77] Continual professional development training refers to maintaining skills and knowledge attained for osteopathy practice, through continual learning and ongoing training after registration as an osteopathic practitioner.
[78] Continual professional development refers to the ongoing commitment required of osteopathic in New Zealand's in relation to the learning process through which osteopathic not only maintain their competence to practice but also continue to enhance their professional skills and knowledge.

privacy was not only a legal mandate but also a key to the trust that underpinned the patient-osteopath practitioner relationship. Therefore, working in a small rural community, where everyone knew everyone else was related potentially to a sense of isolation on a personal and professional level.

Accessibility

Practitioners discussed the ability of patients to obtain osteopathy at the right place and the right time, based on respective needs, could be hampered *physically* and *financially*. In relation to the *physical* barriers of accessing osteopathy care, practitioners discussed innovative approaches, which they undertook to improve rural people's access. There were innovative examples of the way in which practitioners spearheaded the development of osteopathy services, by implementing rural outreach clinics (i.e. osteopath practitioner travels to the rural community), *"During the petrol crisis for example two or so years ago, my patients that were in around [rural area], found it difficult to come in because of cost, so I moved to [rural area]"* (Practitioner 1). Practitioners conveyed the osteopath practitioner, who identified the need for and undertook the implementation of services to facilitate access assumed the role of *rural champion*.

Other practitioners took up the challenge of increasing the development of osteopathy services rurally by implementing rural clinics by way of piloting a mobile bus service to a rural community, *"[It was] good to work from [a] bus .. situated [on a] Marae … in Ruatoria. It was really busy, farmers, families"* (Practitioner 8). The benefits cited for the service included improved access for rural Māori populations and disadvantaged rural community groups.

Patient expenditure

Practitioners perceived that their rural patients found it more difficult to pay for osteopathy care than their urban patients, *"Well that [affordability] would be one of the barriers to Māori … what should we do to make allowances for them"* (Practitioner 1)? While this comment indicated uncertainty as to what action was warranted to remedy the problem of cost for rural patients, there was a note of requirement to meeting the national call for equity in health and needing to strive for equal access to affordable osteopathy. Practitioners acknowledged that there was a need for more osteopathy resources for specific groups such as rural health users and rural osteopathy health care practitioners specifically. The inference was that national health depended on rural health. To meet the national call for equity in health, all allied health professionals needed to strive for equal access to quality, affordable health care for

those in equal need of health care. With the levels of inequality in New Zealand society, this required more resources for specific groups and services: rural health users and rural osteopathy health care specifically. Without rural health, New Zealand could not have a healthy nation.

Practitioners were asked to consider the underpinnings of the problem of cost barriers to treatment and offer suggestions to better understand these issues. They were asked in relation to cost, *"do Māori patients have ready access to osteopathy services"* (Interviewer)? An exasperated tone was noted, *"Yeah [right]"* (Practitioner 1)! Practitioners increased volume of speech, combined with a speedier response, tended also to convey anger or frustration. This was put down to the economics of cost disparities. This practitioners suggested was complex and controversial. Complex in terms of cost disparities being not only an economic and health concern and controversial as being an extraordinary moral and ethical dilemma for the New Zealand nation. For instance, even where osteopathy services were available, the cost of seeking care (such as surcharge fees) were perceived to weigh much heavily on poor households:

> *That's how I found it. I found it difficult to extract money from people. I don't like doing it. So I had to doctor my prices [or lower my prices] just to get people back… there are some patients that I do knock a little bit off the bill because they're coming in from a long way to see me.* (Practitioner 1)

Practitioners suggested that even low cost access fees could be unaffordable for some patients. A tension morally, *"I don't like doing it. So I had to doctor my prices [or lower my prices] just to get people back"* and financially, *"I found it difficult to extract money from people"* (Practitioner 1) is noted. Morally, there is a desire to ensure rural patients' equity in terms of accessing osteopathy (by reducing their fees) to encourage participation among poorer households. However, this potentially *hurt* osteopathy practice financially and lead to an unsustainable provision of services.

Patient fees were also related to encouraging the supply of quality services, *"Often patients will miss an appointment, if they don't have to pay for it"* (Practitioner 3). User fees influenced both supply and demand, since they operated at the nexus of the osteopathy clinic, practitioner and the consumer, to ration services.

Practitioners discussed that patients fees could not be separated out as a variable. Cost interacted with demand barriers and affected wellness in the process:

> *People say I will pay for three and get 70% better – that [back pain] is manageable and I am happy with that [level of pain] in terms of my mobility. But I say you probably*

only need two more treatments and you will be 90% better and won't have to come back in nine months. (Practitioner 1)

From a wellness perspective, practitioners emphasis was to engage an upstream, preventative approach (i.e. putting a fence at the top of a cliff than stationing an ambulance at the bottom). However, this could be less than effective from a longer-term health outcome perspective. For instance, when patients were unable to complete the course of necessary treatments (i.e. patients often cut short their treatment) for socio-economic reasons. Patients tended to choose services, which represented the best value for money.

The poor sustainability of service provision, due to the imposition of user fees resembled an important barrier to utilising osteopathy services, *"Then you won't see them for another month because they can't make it back (due to cost). You say, how we going to get you better Bro"* (Practitioner 4). There was evidence that user fees lead to delays in care seeking and reduction in attendance at osteopathy clinics, especially among the poor and marginalised.

Socio-economic status

Practitioners discussed that rural Māori patients' use of osteopathy services, tended to be heavily influenced by their circumstances, *"Rural communities tend to be poorer"* (Practitioner 5). This comment insinuated that a lower socio-economic position might diminish rural patients' access to osteopathy care services. To bridge the socio-economic status of patients, practitioners mentioned the use of koha as a payment system,[79] which is a common feature of much Māori tradition. In this particular case practitioners were providing osteopathy treatment on a marae in Ruatoria, where being hospitable and looking after visitors was given high priority, *"I was working by koha. I did it for the love of the people and being there … but have to pay the mortgage"* (Practitioner 8). There is a tension which practitioners touch upon here between *hosting* and *financial limitation*.

In relation to hosting, in isolation, the use of koha as a system of payment is part of the process of maanakitanga.[80] If practitioners were seen as failing to manaaki their patient,[81] then this could result in the loss of mana within the Māori community as the host has shown that they are incapable of attending to the needs of others. There was great benefit therefore not only in utilising a koha system but also

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[79] Koha refers to offering, contribution.
[80] Manaakitanga refers to Māori hospitality.
[81] Manaaki refers to support.

in socialising, even briefly because this assisted in developing rapport and building an effective therapeutic relationship. Also, that Māori invited an osteopath practitioner to utilise the wharenui to provide treatment,[82] signalled that the practitioner was held in high esteem.

The process of acknowledging the welcome was noted as being beneficial for fostering and nurturing relationships. The wellness of the patient was just as paramount to the development of this relationship, as was the mana of the practitioner.[83] The tension between *hosting* and *financial limitation* or *financial insustainability* was that such a system, if not supported by alternative funding, could potentially impact on a practitioners personal financial situation, if this was their primary source of income.

Osteopathy practice could be unsustainable for practitioner and patients alike. Practitioners spoke of rural patients' ability to access osteopathy as being socio-economically restricted, *"there is a monetary barrier to treatment"* (Practitioner 5). The suggestion was two-fold. Firstly that socio-economic position impacted upon patients' ability to access osteopathy treatment and secondly that this position negatively geared patients' wellness.

Distance of travel

Practitioners indicated that at the interface of rural osteopathy, the dispersed nature of the rural population placed heavy cost burdens on patients, due to the distances that they were required to travel to access osteopathy, *"From your perspective what are some of the barriers which prevent rural patients from accessing your services"* (Interviewer)? *"Distance, obviously"* (Practitioner 1). For many patients, the cost of travel was a major barrier to health care. Poor roads and lack of public transport represented the most immediate problem. However, not all practitioners agreed with the cost of travel being a major barrier to health care, rather it was discussed as being a lifestyle choice:

> *That's the lifestyle choice you make – a cheerful way of living, you have to be prepared to travel. You know – it's like me for [medical] specialist I have to travel to Wellington – you have to expect that.* (Practitioner 4)

Reference is made here of enjoying the lifestyle that a rural environment provided; the inconvenience that distance presented (i.e. diesel and other costs) was worth the experience of the rural idyll.

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[82] Whare nui refers to main building of the marae or traditional Māori meeting area.
[83] Mana refers to prestige.

The benefit of participating in community-based health centres

Within the context of practitioners wanting to combine the availability of osteopathy health care and other health care services in one location, to ease the access of services in rural areas, practitioners discussed working within an integrated rural health centre model. There were practical benefits to participating in a one-stop-shop (i.e. community-based health centre) approach of rural health delivery, the key feature being a concept of integration of services, *"It should help. It would mean there would be more coordination of service providers, a central locality for the patients to go to, thus ensuring access and better health care"* (Practitioner 1). Practitioners related that rural peoples' access would be improved in the simplest way for patients because services would be spatially and/or logistically integrated – this would make for easier healthcare *shopping*.

Equity

Maintaining effectiveness and legitimacy of osteopathy, were seen as an opportunity to improve the optimality of osteopathy services rurally. Beyond traditional methods of ensuring equity for rural people, osteopathy practice was not considered as being within the realms of providing rural people's access to critical services (such as emergency care). Rather the need here was to maintain effectiveness and legitimacy of osteopathy care, while improving the equity, or access for rural people to osteopathy services. In this section practitioners discuss these aspects and their perceptions of the ways in which osteopathy promoted health equity and better health. That there was room for improvement lead to some practitioners wanting to highlight the political agenda. This is discussed under the auspices of, *Lobbying for change*, to increase the services of osteopathy health care to rural communities of New Zealand.

Lobbying for change

There was a fairness of service provision required for rural people in terms of their access (which was considered, should not be based upon their geography, socio-economic status or ethnicity). Ensuring equity for rural populations, workforce (recruitment, retention, training) and cultural competence was considered as requiring action at every level of the osteopathy health care system. Lobbying, campaigning and advocacy was a valid concept, to drive policy decisions and address inequalities relating to the osteopathy profession in New Zealand society, *"[we can improve the way that we provide services to rural communities] if we [osteopathy profession] lobby"* (Practitioner 7).

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Practitioners felt that to provide good quality osteopathy services, it was important for governments and policy-makers to develop strategies which supported this. Practitioners proposed that the osteopathy profession needed to, *"lobby"* (Practitioner 7), as a means of encouraging funding mechanisms. These could take into account an overall mix of methods, both public and private, and examine how these interacted to finance the health sector as a whole. A major weakness was seen to be the tendency to ignore the role of household spending in relation to financing health care services, which were privately funded, *"You're not going to get government funding for every patient. The government pays rural General Practitioners more than city General Practitioners just for being in the country. It's never going to be the case with us"* (Practitioner 1). In contrast to the mainstream medical system, practitioners perceived it a barrier, that the osteopathy profession was not privy to funding, due to the use of mainstream funding criteria and health priorities.

The perceived lack of public funding for osteopathy services, tended to signal a lack of integration of osteopathy into an inclusive team approach with other health professionals.[84] Also, the absence of representation of allied health professions within the Ministry of Health (MOH) and District Health Boards (DBHs), was seen as a significant barrier to their involvement in the implementation of the Primary Health care Strategy (MOH, 2001b). Essentially osteopath practitioners felt that had no voice or point of contact to engage with the primary health care sector. There was also an awareness of the nationally agreed set of indicators based on health priority areas for DHBs and that under this current regime osteopathy seemed to be relatively low on the list, when there were other more pressing priorities for example, death attributable to diabetes in New Zealand (Hawke's Bay District Health Board, 2011).

Efficiency

Systematic approaches, effectively deploying cost-efficiency strategies while maximising the use of expertise, knowledge and skills to ensure sustainable services was passionately detailed by practitioners in the set-up costs and overheads (rent) of starting up rural practice. Consistent approaches were considered essential in developing osteopathy rurally, as the profession responded to the changing health needs of the rural population. For efficiency and coordination gains, workforce (recruitment and retention) was perceived as potentially promoting public participation

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[84] Other health professionals refers to general practitioners, Nurses, Allied Health Professionals and other stakeholders such as Non-Governmental Organisations and secondary care specialists.

and influence. These enhancing factors, facilitated action and implementation, and increased efficiency of osteopathy practice.

In this section practitioners discuss the ways in which osteopathy promoted efficiency in their delivery of rural health care by way of, *Set-up costs* and, *Public safety*. Practitioners sought greater efficiency in rural health care delivery, by adapting in order to survive. They discussed the challenges faced in the health care sector rurally and described the various ways in which they went about attempting to strengthen rural osteopathy delivery systems and ensure access to osteopathy services, particularly for low-income populations. The experiences of practitioners highlight universal concerns in the rural health care sector and show a diversity in approaches. These included, *Set-up costs* and *Overheads (rent).*

Set-up costs

Practitioners pointed out that there were cost efficiency implications of setting up an outreach clinic. The focus of cost recovery and financial sustainability being at the forefront of the process, *"This was a pilot, we didn't want to spend too much money for this"* (Practitioner 1). There were benefits portrayed towards adopting a least cost path analyses of the travel time and costs involved in set-up. Practitioners discussed keeping the fixed and variable efficiency costs as low as possible:

> *Had I been paying overheads, I would have been losing money.* (Practitioner 1) And,
> *I would have made a loss had I had premises, but I did enjoy the people I was working with.* (Practitioner 1) And,
> *Physios started in Wairoa and all gone into working from their homes.* (Practitioner 5)

There was a perceived value in working autonomously with minimal staff involvement and no fixed salary to pay, such as a receptionist. The comment above, *"Had I been paying overheads, I would have been losing money"* (Practitioner 1) refers the benefits of community involvement, which enabled utilising rooms rent-free. This also avoided the need to acquire equipment (such as furniture), which did not make significant difference in the quality of osteopathy provided. Another option was mentioned in terms of cost reduction such as working from home as a means to bringing costs under control, while ensuring sustainability of rural osteopathy practice.

Practitioners discussed issues of cost efficiency in relation to osteopathy practice in rural areas. These included the important issue of volume and whether the osteopath practitioner in a rural area could tend to enough patients to make their practice viable, or whether they were placing stress on a system already challenged:

Here is a much bigger base of patients but [rural town] is quite different. There's practitioners who are feeling the squeeze. I don't know if they're struggling but they need every bit of work they can get and here I was walking in as a part-time one day a week osteopath sort of thing, taking away a little bit of the cream. (Practitioner 1)

Just going back to rural practice from an osteopathy point of view, unless you are in a situation where you have a secondary income coming in and you enjoy going out into the rural areas, it's never really going to [work]. (Practitioner 1)

Practice viability in relation to patient load was a major factor affecting the attractiveness of rural practice for osteopath practitioners, a primary component of viability was economic, (with income from the number of patient consultations being conducted as critical).

Practitioners discussed the option of operating a one-stop-shop such as a community-based health centre, where patients accessed a range of health, and other related services:

[Osteopath] and I have talked about this. As the physios have gone, more of them have centralised their practices so you get multiple practitioners in one location. Also, if you had for example a house with five or six osteopath practitioners, you might then well be able to open a satellite rural clinic of which you all served your time at, one day a week. So that rural practice was serviced but you didn't have to go there every day. If you have one day a week. (Practitioner 1) And,

It [operating a one-stop-shop] should help. It would mean there would be more coordination of service practitioners, a central locality for the patients to go to, thus ensuring access and better health care. (Practitioner 6)

Practitioners discussed the logistical operation of maintaining a one-stop-shop arrangement, to ensure the continual unimpeded flow of osteopathy practice to rural communities. There is a distinct note of *do-ability* here from practitioners, if osteopath practitioners pooled their resources.

Practitioners noted technology as potentially compensating for the distance of rural osteopathy practice, although this was mostly associated with administrative applications:

The appointment system could actually work quite well. Even though it would have been a toll call they didn't mind ringing. We're using Quickas [Osteopathy practice management computer software] at the moment so that would have been OK if you took the computer up there, straight away you'd know [when an appointment had been booked in]. (Practitioner 1)

The use of modern telecommunications technology, to connect practitioners with their colleagues and the running of appointment schedules, to enhance clinical practice were restricted to utilising the most basic functions, due to poor availability of fast internet access, a lack of information technology knowledge and skills, cell phone coverage and broadband internet.

Safety

Formulations such as better health, increased participation, a safe and secure message of what osteopathy could offer rural people, appeared in the practitioners visions and goals. Although there were still no explicit objectives or visions with regard to increased safety, several kinds of actions and strategies were being implemented. Safety, which was conventionally regarded as a dimension closely related to efficiency was considered distinct from it in its emphasis on the prevention of unintentional adverse events for patients. Rather, practitioners were explicit in their expression of a desire for rural communities to feel that osteopathy was a safe health care community, which patients would feel that they would want to grow up with and utilise for wellness and health of their families. In this section practitioners discuss, *Public safety*, such as perceptions of the ways in which a clear safety message may be relayed to rural communities.

Public safety

There was a strong desire for the Council (Osteopath Council of New Zealand) to promote public awareness of the Council's responsibilities in relation to the Health Practitioners Competence Assurance Act (HPCAA) (2003) and benefits of rural people utilising the Osteopathy profession:

> *An advertising campaign [is] needed [by the Council in terms of health and safety, HPCAA, posters … out to rural communities] … like seat belts – go see your osteopath … Just the other day a patient said – should I be here? I'm not sure if I should – I've been to see Doctor, Chiropractor, Surgeon, Physiotherapist – should I see you now?* (Practitioner 5) And,
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> *Chiropractors are always in the national papers – they give comment… You ring the Osteopath Council and ask why aren't we in there – they say welll… Oh! Oh! Oh!* (Practitioner 3)

Practitioners were keen for the Osteopath Council of New Zealand to promote the osteopathy profession and raise public awareness of the profession. For instance, the Council could make the public aware of their functions. These included, establishing a register of osteopath practioners and monitoring this register to ensure

that those registered were fit and competent to work as a registered health practitioners and that the public could trust that those on the register practiced safely and maintained their competence.

Summary

The findings from this project were generated from semi-structured interviews, with eight osteopath practitioners working in Hawke's Bay on the topic of rural Māori health. The primary research question asked, *How can osteopath practitioners contribute to rural Māori well-being (with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand)?* Secondary aims were to ascertain the sources of information used and accessibility of osteopathy health services, as well as identifying the tensions and factors associated with rural osteopathy practice.

The main references made by participants in their discussions about Māori health indicated that practitioners were committed to enhancing Māori well-being, and the philosophy of osteopathy which supported treating the entire patient. This included taking account of a patients' socioeconomic and cultural background and the relevance of the Treaty of Waitangi to osteopathy practice. This aligned well with a Māori perception of wellness.

There was uncertainty relating to key explanatory forms of prevalence and causality of Māori access issues and rationales for specialised practices, when working with Māori. In particular, these related to how osteopath practitioners accounted for Māori cultural needs or applying the Treaty to osteopathy practice. A discussion relating to the data and analysis of this section follows, where further examination and interpretion of the results highlight new findings, in relation to the data and analysis which has been presented.

Chapter Five: Discussion/Recommendations

He whiringa ngātahi, Ka raranga, Ka mau

If you weave together, it will hold.

The potential for collaboration is high, between Māori knowledge and the osteopathy scientific tradition. Weaving these two together may provide significant contribution to the field of osteopathy practice.

This chapter discusses the findings and reflections of the research journey, making comparison and contrast with the current literature in this field. The main themes are explored in relation to researching the question, *How can osteopath practitioners contribute to rural Māori well-being with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand?*

This chapter is structured around three interrelated themes which emerged from the data as, *Strengthening Māori,* placed in primary position because it influenced the emergence of subsequent themes, *Equity,* and a discussion on, *A New Zealand osteopathy context*. This is followed by *Limitations of the research*, *Recommendations for future research* and the, *Conclusion.*

Strengthening Māori

The data revealed that osteopath practitioners viewed engagement and effective relationship building as vital to their clinical practice with rural Māori, "*But when they come into the clinic, see that's a Māori handshake – soft – it's a whole different thing. I swing my questioning slightly different, I ask questions that they might understand more*" (Participant 1).

Practitioners related that having cultural awareness and sensitivity was required when working on the basis of mutual respect and understanding. On closer examination of the data, it appeared that practitioners had difficulty discussing the cultural differences between Māori and non-Māori. Cultural competency was perceived as having, *"grey areas"*.[85] This raised questions as to whether practitioners and the osteopathy profession have had the opportunity to explore their professional and organisational culture/s.

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[85] Cultural competency refers to the skills, knowledge and attitudes to safely and satisfactorily deliver osteopathic.

Hera (2011) advocates that by increasing the awareness of the values of members and groups within an organisation, can improve an awareness of the differences between Māori and non-Māori. By gaining an awareness of these differences may assist a profession to work out how the roles and behaviours shape interactions with Māori, in the context of Māori culture and differentiating between the two cultures. For the osteopathy profession undertaking a self-analysis could lead to greater change. Ultimately the aim of the exercise being to improve Māori health outcomes, within the context of osteopathy practice.

The data could be compelling at times, when practitioners highlighted uncertainties and a lack of confidence regarding how to implement the Treaty of Waitangi into osteopathy practice, *What really does it [clinical competency/The Treaty of Waitangi] have to do with osteopathy anyway* (Practitioner 5)? The State Services Commission (State Services Commission, 2004) supports that a lack of Treaty awareness will lead to a lack of confidence, versus Treaty awareness which can empower people (ibid).

An exclusive focus on Māori patients' similarities and wanting to veer away from discussing ways of implementing the Treaty into clinical practice suggests that there is scope for skills acquisition. This data highlights that there is good grounds for this. Gernat, Hammar & Utsey (2005) support the reasons for not discussing the Treaty may stem from fear of being perceived as offensive or being dismissive of the realities of living in a society as diverse as New Zealand (ibid). The risk is that a failure to implement the Treaty in osteopathy practice may inadvertently foreclose potential healing experiences for Māori and thereby negatively impact therapy process and outcome (DeSouza, 2008).

Recommendations:

- These findings have implications for a wide range of people including osteopath practitioners, whānau (Māori patients and the wider Māori community), educators, communities, health providers, health professionals, health promoters and policy makers. Encouraging practitioners to communicate with local Māori as part of strengthening osteopathy educational approaches and osteopathy health care delivery, may bolster osteopath practitioners confidence in practice and better meet the needs of Māori.[86] This could include educating about the shared colonised history of New Zealand and the impact political

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[86] Local Māori refers to Māori patients, local iwi, Māori health providers.

decision-making can have on Māori health.   Also, acknowledging inequalities based on ethnicity may encourage a focus on reducing inequalities.

Whānau well-being

The data emphasised practitioners placed great value on engagement and effective relationship building.   Consequently this emerged as a specific but integrated theme underpinning, *Strengthening Māori*.   This was highlighted in the data as practitioners spoke that when attending the osteopathy clinic for treatment, *"usually the whole family will come"* (Practitioner 4).   Closer inspection of the data showed a lack of data relating to strategies being utilised to support Māori within the context of their whānau and the wider primary health care sector.   There is value in promoting a whānau centred approach to osteopathy care.   The Ministry of Health (2002c) supports that whānau is a vital element of Māori society.[87]   He Korowai Oranga (Māori Health Strategy) (ibid) defines Whānau Ora as Māori families being supported to achieve their maximum health and well-being (MOH, 2002b).   The whānau can assist the osteopath practitioner to address positive health gains, within the context of the patients whānau.

Recommendations:

- Within the context of strengthening Māori, the main recommendation for the osteopathy profession is to encourage practitioners working with Māori to utilise health resources.   These can help to frame osteopathy practice within the context of building on the strengths and assets of whānau, hapū, and iwi Māori.   The aim is to empower whānau to achieve their own health and development goals by raising awareness of the inequalities between Māori and non-Māori and there are resources which practitioners can research within the context of osteopathy care. These include frameworks (Whānau Ora Taskforce, 2010), tools and strategies (MOH, 2001b; 2002a), which are aimed towards primary health care professional utilisation (Whānau Ora Taskforce, 2010).

Māori participation

Findings showed that practitioners desired a stronger professional identity to be promoted by the profession to raise public awareness from a safety aspect about the osteopathy profession's capacities as a health care modality.   Literature of the

[87] Whānau refers to family and the wider community.

history of osteopathy medicine pinpointed the example of confusion around United States trained osteopathy physician practice rights and qualification equivalency by the British Medical profession (Baer, 1987). There were mis-understandings of the profession at a high level. But practitioners discussed that the profession was mis-understood at the patient level also. For Māori, the lack of information is not helpful.

The data has highlighted a potential risk area for rural Māori as many practitioners perceived that there was considerable role confusion by the public as to what an osteopath did and the difference between osteopathy care, Physiotherapy and Chiropractic. The risk is that rural Māori may have a lack of knowledge about osteopathy and this can impact on them accessing these valuable services. Accessing health care can be a daunting task for Māori (ACC, 2004; MOH, 2002a; Davis, Pearce & Sporle, 2002; McCredie & Skegg, 2002), particularly if they have a lack of information about health care services (ACC, 2004). Making health services easier to access, may help reduce some of the barriers Māori face (ibid).

Bacal et al. (2008) support in their study, *Māori experiences of health services,* that Māori patients are only too ready to emphasise the need that Māori themselves need to take more interest in their own health and be less reluctant to ask for help, *"It's only the squeaky wheel that gets the oil. That's what we have to be. We just can't be too proud."* (p.53). The reasons Māori are less likely to participate with the health system have been noted as being due to personal attitudes towards the health system which relate to past negative experiences. At the level of the profession which is influential in the health system (the Osteopathy Associations and Council), it is important that Māori voices are not overlooked and discounted but are incorporated into decision-making and policy levels, to encourage safe clinical practice, which is encouraging of Māori participation.

Missing from the data was practitioners referencing their work in relation to specific details of their local statistical demographic profile of Māori health, or making references to information provided by their District Health Board (DHB) or Primary Health care Organisation (PHO). For instance, the data lacked references to issues which are important for Māori health, such as the associated risks of gout as causing damage to the joints with the potential for kidney damage if left untreated (The Counties Manukau DHB Māori Gout Action Group, 2011).

Osteopathy healthy lifestyle interventions and care could consider focusing on gout among other musculo-skeletal disorders as a health promotion strategy, considering the high rates of musculo-skeletal disorders, particularly gout among Māori within the rural region of Hawke's Bay (HB DHB, 2010a). Statistics New Zealand (2004) outline that profiling health is a useful analysis tool (ibid). Beyond the

demographic, practitioners can transition towards focusing on Māori participation by becoming familiar with the distinctive nature of Māori demographic patterns, within the context of osteopathy practice.

From a practitioner perspective, what is not so evident in the literature is a description of how practitioners make the transition from commencing private practice to participating in and becoming familiar with their local Māori communities. This can be a powerful way of encouraging Māori participation in osteopathy care. There are accounts of transitioning care between rural general practitioners with Māori populations (Kara, Lawrensen, Smyth & Thomson, 2010) but little is written on the ways in which osteopath practitioners can make these transitions.

Regardless, there was inspirational data on practitioners spearheading the development of osteopathy services into rural communities, by implementing outreach clinics. Even though these tended to be unsustainable due to insufficient funding, there was powerful data relating to the involvement of rural communities, creating innovative solutions to promote osteopathy access to rural communities.

Recommendations:

- The role confusion that patients may counter with osteopathy must be improved. This is an issue that can be addressed in a number of ways. Encouraging whānau, marae, schools, the provider of osteopathy training and other tertiary institutes and work places to participate in the process of information dissemination about osteopathy health care and how it can help. This could speed up the process of informing Māori about osteopathy. Osteopathy information would need to be relevant and interesting for Māori and include concepts of Māori health. Brochures could be developed by Osteopathy Associations in Te Reo Māori for members to distribute in their communities. This will drive a welcoming environment for Māori and their whānau.

Listening to Māori

Māori are an important part of the health care community and need to be recognised as an important partner in decisions, which are made at a policy level. They affect Māori and can have ramifications upon a people with the worst health care statistics. Listening to Māori may encourage building a sense of community through shared decision making.

Recommendations:

- Practitioners and high level osteopathy organisations could engage with local iwi/Māori leaders, Māori health providers and people in Māori health to ensure that osteopathy care is addressing the needs of the Māori community. Some ways of accomplishing this would be for the profession attending/promoting osteopathy at local hauora (health) days, supporting the osteopathy profession to undertake a Memorandum of Understanding with local iwi Māori providers and osteopath practitioners to strengthen Māori health by advocating for osteopathy to be engaging with Marae to promote osteopathy care to Māori. The process may be assisted by engaging with Māori providers to ensure that their voice is recognisable within osteopathy practice resources because Māori will be able to relate to this.

- A commitment to prioritising the needs of the populations which osteopath practitioners work within is assisted, by knowing the basic demographics of national, local and practice populations. Accessing local statistical demographic Māori profiles could be helpful to osteopathy practice. Osteopathy Associations could guide practitioners in the ways of scoping out the key features of practitioner populations, with guidance towards how to access statistical information and health profiles. These include local DHB Service Plans and Strategic Plans or Primary Health care Organisations (PHO). Often attached to the DHB is a Māori Health advisor and/or Hauora unit and to the PHO a Māori Liaison provider, who can direct practitioners to statistics. These can enable analysis of musculo-skeletal disorders and general health status. Attached to these statistics is a raft of information relating to lifestyle factors and health issues that can assist osteopath practitioners.

- How practitioners make the transition from commencing private practice to participating in and becoming familiar with their local Māori communities could be encapsulated into a guide for rural practitioners to reference. The process could be assisted by seeking Māori input and acknowledging the strengths of this, while directing practitioners to these resources.

Equity

The data highlighted cost as a major barrier to Māori accessing osteopathy care, especially rural Māori:

And she used to tell me that [small town] is dying. The meat works – if that closes, people will either have to wither and just use public funding for existence or move away … So that's really quite tough up there. (Practitioner 1)

The inference made by the data was that a low socio-economic could prevent patients from accessing care. This is supported by Burton (1999) who says that rural Māori are more likely to come from a lower socio-economic background (ibid). The data showed Māori often cut short their treatment for socio-economic reasons. Structural barriers that hinder access to osteopathy health care, such as cost must be addressed for Māori, as they are a population group shown to be at high risk.

Overlapping the data within the theme of, *Strengthening Māori* (see p.130) is references to *grey* areas. These relate the cultural differences between Māori and non-Māori. Furthermore there is in the theme of, *Māori participation* (see p.132) mention that the reason many do not access services is because they have had negative experiences, felt overlooked and discounted. Therefore a strong theme within equity is for the osteopathy profession, to promote equity for Māori accessing care, by signposting the profession towards useful resources. They can utilise these to self-check their practice, in terms of being aware of the barriers, which Māori may face when accessing services.

Recommendations:

- Minimising barriers such as affordability, through the provision of free osteopathy health care for rural Māori who need this, could be explored through partnerships with Iwi and/or Māori health provider services.

- The Osteopathy Associations could also assist by guiding the profession with discussions around understanding the barriers to accessing osteopathy care for Māori, such as transport, their ability to pay and work out innovative approaches to bridge these gaps.

- Sources of information which practitioners could be directed to includes the Ottawa Charter (WHO, 1986), He Korowai Oranga Māori Health Strategy (MoH, 2002a), Whakatātaka Tuarua (MoH, 2006b), Primary Health care Strategy (MoH, 2001b), and practitioners local District Health Board's Māori health plan. In addition, District Health Boards, Tikanga (Māori procedure) Best Practice Guidelines, which are often available and Iwi/Māori Provider policies, may help to provide insight into how practitioners can conduct practice, which encourages equitable access.

Osteopathy training

A review of the History of Osteopathy medicine, reframed traditional accounts of osteopathy history and provided greater understanding of the environment and position in which osteopathy has developed and its potential for furthering Māori health and development. Dr. Still's preference was for holistic care.[88] Today, The WHO (2007), highlights that while holism is an important aspect of patient-centred care (Chila & Fitzgerald, 1991) on its own, *holistic* care does not meet the broader challenges required of health care practice today.

Hera (2011) supports that a patient-centred approach supports health care practitioners who work with Māori, because it requires the professional to be culturally competent (ibid). Durie (2001) supports that appreciating the impact of culture on clinical practice may assist in the correct diagnosis and management of Māori patients. The Māori Cultural Responsiveness Project Team (2010) also promotes Māori centred cultural responsiveness as the key to health professions improving Māori health, and suggests that this requires a commitment by primary health care providers to ensure culturally responsive health care practices.

In Chapter Two the literature supported that osteopathy training programmes can facilitate students' knowledge and understanding of culturally safe practice, for all patients, and for Māori in particular. This was discussed as ensuring that osteopathy appealed to Māori as a profession, which was respectful of Māori culture. The literature also raises questions of the critical role of the provider of osteopathy training in producing a health professional workforce that is prepared to meet the challenge of addressing Māori health. While cultural competence is an important aspect of this, combining Māori health with other components of the curriculum (Unitec Institute of Technology, 2011) may not be sufficient. Māori health is an educational domain in its own right, with distinct learning objectives and educational approaches. The lack of a stand alone curriculum component suggests the possibility that the information which is being delivered to osteopathy students, is dominated by western views. This may narrow the focus of osteopathy for students. Particularly if Māori health knowledge is being delivered from a medicalised discourse of biological processes and disease perspectives.

By drawing on local initiatives and existing concepts of Māori health models could help osteopath practitioners further in their work to improve overall health outcomes. Bishop & Graham (1997) have provided guiding principles from the perspective of Māori development. These are thought to enhance courses of study,

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[88] Dr. A.T. Still refers to Dr. Still (who coined osteopathic).

as they originate from the perspective of Māori communities. Emphasis is placed on respecting Māori students for who they are. This includes a careful consideration within the curricula content as to the relevance of a Māori world view (ibid). Within the osteopathy educational context, Māori participation could be fostered by creating an environment which is inviting to Māori students who access the osteopathy training programme. This can reinforce to them that the training institution is up to date and of the highest quality, within a culturally reinforced environment.

Undergraduate osteopathy students could be encouraged to review information on local populations and use this to guide their practice and Māori cultural responsiveness learning activities, within osteopathy practice settings. Thesis research projects could be encouraged which utilise research skills that identify populations and encourage students to know data sources and use statistics to inform them of the health needs of populations.

Osteopathy students of the provider of osteopathic training could be encouraged to assess population profiles of Māori in relation to their clinical practice and utilise this contextually in their undergraduate research projects. Part of this process could be to work with local communities by assessing their needs, undertaking consultation hui with target groups, developing an osteopathy strategic plan or a Māori health plan, to address the health needs of the Māori community. To support students confidence in the process and ensure that they are being culturally responsive throughout, they could undertake peer review support. At a staff level, the provider of osteopathy training could develop an organisational training plan which supported this, with specific Māori cultural training.

Recommendations:

- Osteopathy training programmes must facilitate students' development of the knowledge and understanding that encourages safe practice, culturally for all patients, and for Māori in particular.
- Osteopathy must appeal to Māori as a profession which is respectful of Māori culture.
- A stand alone curriculum component of Māori Health at the undergraduate level must allow students the ability to broaden their focus of Māori health knowledge.
- Osteopath practitioners can further their work with Māori by drawing on local initiatives and existing concepts of Māori health models.
- Careful consideration within the osteopathy curricula content as to the relevance of a Māori world view must be made by the osteopathy training

institute. This wil ensure Māori students are reinforced and confident that the training institution is up to date and of the highest quality, within a culturally reinforced environment.

- Undergraduate osteopathy students could be encouraged to review information on local populations health needs, such as profiling Māori health in relation to their clinical practice, and utilising this contextually in their research projects.

- Ongoing peer support should be available to support students journey into rural health. Osteopathy strategic plans can address the health needs of the Māori community.

The inclusion of Māori health concepts

In Chapter Two, the literature revealed patient-centred and holistic philosophy pervading all of the principles and practices of osteopathy health care. The models of Māori health aligned well to osteopathy practice.   A broad-based approach that utilises Māori models can help to support whānau (Binns, 2003; New Zealand Guidelines Group, 2003; Waitemata District Health Board, 2010).   There is a need also, to consider community dynamics, as this can sustain a safety net (ibid).

Patient-centred care is described as a way of placing the needs of the patient at the centre of the health care interaction (Clarke & DeGannes, 2008). Through bringing the concept of unconscious bias into individual awareness, practitioners can begin a process that can regulate bias, while trying to put into perspective what it is like in the patient's situation (ibid). Contextually, patient centred practice involving Māori requires the practitioner to be able to reference Māori values, concepts or beliefs, within their osteopathy practice. This would include being able to discuss the impact of colonisation on Māori identity and how this relates to the way Māori define their health in contemporary society.   Closer inspection of the data questioned whether practitioners were referencing in this way.

The data highlighted that there were benefits when practitioners visited marae. The potential benefits of marae visits are to assist in cultural competency. This was noted in the literature as potentially promoting a practitioners understanding of Māori health (Māori Cultural Responsiveness Project Team, 2010; Mauri Ora Associates, 2010).   The reasoning being that these will assist the practitioner to recognise the diverse realities, as determined by Māori.   The resources to achieving this are Māori, local kaumātua/kuia (elders), local Māori providers, visiting the local marae and a range of internet resources (see Table 14, p.155).

Recommendations

- The attendance to cultural competence training, which includes Māori cultural perspectives, must be a fundamental component of the New Zealand osteopathy training curriculum. This requires consultation with Māori and ongoing continual professional development of the osteopathy profession.

- All undergraduate and post-graduate osteopath practitioners, must experience a noho (stay over the night) at a local marae within the context of cultural competence learning.

Collaboration and partnership

The data revealed practitioners felt osteopathy lacked identity for the public and other health professions. The implication of this was a weakening of inter-professional realtionships. There was role confusion by the public as to which musculo-skeletal professionals (i.e. Chiropractors, Osteopath practitioners or Physiotherapists) treated what disorder better, *"Some people say can you click me neck?*[89] *Other people … Physio – want to come 20 times, every day? No not I'm not a chiropractor, what drugs?"* (Practitioner 5)? Essentially, practitioners related that people perceived an *overlap* in roles which needed to be clarified through an improvement in the provision of information.

Role ambiguity contributed to intra-professional tension in the health care marketplace and potentially resulted in a lack of trust among professionals. This lack of trust was perceived as hindering effective collaboration and teamwork. Within the context of Māori wellness, literature (Durie, 2001) highlighted that poor intra or inter-professional teamwork was unhelpful because if health care professionals did not trust, respect, and collaborate with one another, there was more likely to be a mistake made which could negatively impact the safety of patients (ibid).

There were gaps in the data, when comparing the literature which discussed Māori advancement in health as being influenced by a range of domains such as social, economic, cultural and political. This suggested that practitioners had very little interaction with these sectors. The Counties Manukau DHB Māori Gout Action Group (2011) has highlighted that a collaborative health workforce is a skilled workforce. According to Durie (2001) health programmes in isolation appear to be falling short of the mark, and need to be more strongly linked to Māori-specific health service provision with collaborative networks to support these.

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[89] Role confusion refers to the perception of role overlap.

Recommendations

- Osteopathy Public health information strategies must be aimed at strengthening a professional identity with culturally appropriate messages aimed at promoting musculo-skeletal health and well-being. This has the potential to have significant long-term benefits for whānau, hapū and iwi as well as economic benefits for the health sector.
- Osteopathy approaches which support Māori to navigate their environment towards well-being, across a wide range of domains including individual, social, community, educational and health aspects is an important component of a comprehensive approach to osteopathy health care.

Data collection

The findings clearly recognise an issue with the accuracy of musculo-skeletal health data of rural Māori. To accurately reflect the incidence and prevalence of these disorders and other aspects of osteopathy care, it is imperative that statistics are collected from all osteopath practitioners, including ethnicity data. This is particularly important for osteopath practitioners, who are located in highly populated areas, and treat a high number of Māori. Mandatory data collection from ACC already takes place and this could be made available to assist the osteopathy profession, particularly in relation to funding.

Recommendations:

- Funding decisions are frequently based on evidence such as statistical data. Therefore capturing this information accurately is important so that appropriate funding can be directed to osteopathy services and population groups which have the greatest need.

Workforce development

Osteopathy workforce development in terms of capacity is a critical component to improving access to osteopathy for Māori. This project has shown non-Māori osteopath practitioners have low level awareness of Māori health and the Treaty in practice. Also studies show that Māori have a clear preference to being treated by Māori health professionals and yet there tends to be a poor Māori workforce composition (few Māori health practitioners) (Barwick, 2000; Baxter, 2002; Mauri Ora Associates, 2010).

The literature review in Chapter Two suggested allied practitioner-led services could provide continuity of service in rural communities, in the face of the loss of General Practitioners (London, 2001). Potentially, the osteopathy profession could look for ways to assist in bringing about population-level health gains for Māori, by developing the rural Māori osteopathy workforce.

Ongoing professional development in the area of Māori health and how the Treaty is utilised in osteopathy practice and cultural competence is needed for osteopath practitioners. It is critical practitioners are effectively engaging with this diverse demographic group. It is evident that rural osteopath practitioners working in this specialty need to be highly skilled and culturally competent, in order to provide an environment in which Māori feel welcome, valued and respected.

Māori have a clear preference to be treated by Māori health professionals. Increasing comparative numbers of Māori osteopath practitioners and attracting them into rural practice is a powerful way of enhancing osteopathy practice with the clinical and cultural expertise they bring. Other areas to be highlighted in assisting Māori workforce development (MOH, 2006a) are bridging and access programs with seats for Māori students, reflecting regional demographics. Universities can assist students, by ensuring they have access to supports, which are known to contribute to attrition rates, if not mediated. Mentoring has also been highlighted as beneficial to Māori learners.

Recommendations:

- Attracting Māori into the osteopathy profession will require a concerted effort at all levels. The Osteopath Council of New Zealand, in association with the provider of osteopathy training, could seek to increase the number of Māori osteopaths. This could be assisted by approaching Government Ministries with a view to establishing a fund to support scholarships for Māori to engage in training that contributes to registration, as an osteopath practitioner.
- Wherever necessary osteopathy professional associations and Council could advocate changes to Acts or policies governing osteopathy registration, training and practice to ensure that a culturally appropriate and safe standard of practice, within the context of New Zealand practice, is being established and maintained.
- Osteopathy workforce development in terms of capacity is a critical part of improving access to osteopathy health care for rural Māori.

- Bridging and access programs must be undertaken with seats for Māori students, reflecting regional demographics.
- Universities must assist Māori students by ensuring they have access to supports, which are known to contribute to attrition rates if not mediated.

A New Zealand osteopathy context

Osteopathy medicine was created to address the lack of preventive care and to focus on the whole body as a system. Osteopath practitioners are well placed within New Zealand's primary health care context to assist disorders such as musculo-skeletal (Bossley & Miles, 2009). An epidemic is expected to increase as the world's population ages (Pfleger & Woolf, 2003). While there has been no osteopathy research undertaken to understand the burden of the potential impact of rising musculo-skeletal injury and disorders for rural Māori, there has been a gradual shift in health policy towards a strengths-based approach rather than the prevention of isolated issues (MOH, 2002a, 2002b).

A strengths-based approach is problematic for many complementary health professions. However osteopathy is based on a strengths-based approach, although there is a need to strengthen linkages between policy development, scholarship investment, employment creation, funding streams, regulation and overall communication within and throughout the rural health care sector to realise the potential of osteopathy practice.

There is value in increased dialogue with the regulatory body, the Osteopath Council of New Zealand, and for Associations to be pro-active. Encouraging the strength of Māori osteopath practitioners, who are already registered members of the osteopathy profession could be undertaken - to form an interest group. Particularly if the osteopathy profession wishes to promote a strengths-based approach. These practitioners may enlighten the profession by debating what are the competencies which are directly related to cultural competency, knowledge, skill and patient safety. Numerous reports (Goodyear-Smith & James, 2006; National Health Committee, 2010; New Zealand Institute of Rural Health, 2009) attest to the need for such innovative approaches.

Practitioner data highlighted that the effects of globalisation led to practitioners effectively working with a range of cultures, "*In the United Kingdom (UK), [I saw Indian families] …*" (Practitioner 3). While this demonstrated practitioners utilised reflective processes, questions raised were as to whether practitioners would benefit from a framework which they could utilise to reflect and evaluate their own practice, using this to check their own behaviour and its effect on patients.

Māori-specific interventions is one strategy for improving access to health services for Māori (The Māori Cultural Responsiveness Project Team, 2010). Changes in legislation which have centralised the Treaty of Waitangi in health policy is another strategy at the national level which can reduce disparities in outcomes. Legislation alone, however, will be insufficient to enhance the well-being for Māori, if the osteopathy profession does not support these with additional measures. It is important that osteopath practitioners are educated about the shared colonised history of New Zealand and the impact which political decision-making had, and still has, on the poor socio-economic positions Māori occupy in New Zealand society.

The osteopathy curriculum could present a balanced view of New Zealand history so that osteopath practitioners have greater awareness and understanding of this shared history. In addition, the impact of Māori society and how a negative stereotyping and unbalanced power relationships of Māori may be perpetuated in health care and throughout New Zealand society could also be given a place for discussion within the osteopathy training curriculum. In this context Treaty of Waitangi workshops would have substantial benefits for practitioners.

Attending a Treaty workshop could be a first step towards understanding how negative stereotypes of Māori are perpetuated in our society. This would assist practitioners to build an awareness of where institutional and personally-mediated racism is evident, such as within the health care setting. Ritchie (n.d.) has highlighted the benefits as bringing a greater level of awareness of the need for practitioners to reflect on their own journeys, where they are from, their connections to their work and cultural identity (ibid). While it is a reality that practitioners have busy clinics, there is no excuse for not keeping their osteopathy practice up to date within a New Zealand context, and this is an opportunity to discuss and think about these aspects.

A Treaty workshop may provide practitioners with the opportunity to expand their awareness of the importance of applying the principles of the Treaty to osteopathy practice within the context of themselves, in terms of their personal journey into osteopathy practice and in relation to those of whom they work with. These aspects may assist the practitioner to gain an understanding of various Māori forums and established groups/networks which may assist their own practice settings in the process. Through these forums, the profession may be guided appropriately towards initiating communications with Māori, local Kaumātua/Kuia, local Iwi/Māori Providers, local Marae, whānau, hapū and iwi.

The Osteopathy Associations and Council can provide online guidance and material on the Treaty of Waitangi. Table 14 (p.155) provides examples of online

resources, which could be assessed further, to help osteopathy users find authoritative information that is relevant to their needs.

Table 14. List of resources

Name of website	Resources available	Website location
Treaty of Waitangi.	Resource manual in the form of a PDF e-book.	http://asaha.com/ebook/DMDE1NjE-/Treaty-of-Waitangi-Resource-Manual.pdf.The.pdf
Waitangi Associates.	Treaty of Waitangi workshops.	www.waitangi.co.nz/
Te Rau Matatini.	Māori health workforce development.	www.matatini.co.nz
Mauri Ora Associates.	Māori health education research.	www.mauriora.co.nz
Te Korowai Aroha.	Indigenous education and training.	Tekorowai.org/
Te Wānanga o Aotearoa.	Māori training courses.	www.two.ac.nz/
Te Wānanga o Raukawa.	Māori training courses.	www.wānanga.com/
School of Māori studies Massey University.	Post-graduate training.	www.massey.ac.nz
Health Promotion Forum.	Training tools.	www.hpforum.org.nz/Tuha-nz.pdf

Recommendations

- Osteopath practitioners could be taught skills which assist them to negotiate rural environments and push the boundaries of their practice and research, by writing about and publishing the effects of institutional and personally-mediated racism in health care settings and osteopathy practice.

- The New Zealand osteopathy education curriculum could present a balanced view of New Zealand history, so that osteopath practitioners form a greater awareness and understanding of this shared history.

- Practitioners could reap the benefits by attending a Treaty workshop as a first step towards understanding how negative stereotypes of Māori are perpetuated in New Zealand society. The osteopathy profession could consult on the profession attending Treaty workshops, as being a compulsory pre-requisite to re-certification every two years.

- The osteopathy profession must act collaboratively to reduce the burden of disability and protect the long-term benefits for whānau, hapū and iwi as well as economic benefits for the health sector.
- An overview of the status of Māori in New Zealand and relevant demographic features of the Māori population nationally, including a profile of rural Māori in Hawke's Bay, New Zealand is needed.
- Osteopathy approaches can support Māori development and rural Māori to develop the capacity to navigate their environment across the health care domain including individual, social, community as these are important components of a comprehensive approach to osteopathy education.
- The osteopathy profession must advocate to strengthen linkages between policy development, scholarship investment, employment creation, funding streams, regulation and overall communication within and throughout the rural health care sector.
- Osteopathy organisations need to be pro-active by encouraging Māori osteopath practitioners, who are members, to form a Māori interest group.
- The osteopathy profession could support practitioners use of a framework which applies Māori-specific interventions, for example Māori mentoring processes (teina/tuakana models), peer supervision/mentoring and other general interventions such as journal writing, peer review processes, satisfaction surveys, professional supervision and audit tools. Collaboration with the Māori community could also assist this process.

The Research Journey

This project was restricted in scope by influences such as time and resources, inherent of this level of graduate research. Therefore the depth, breadth and saturation of the findings is limited. Approximately 15 hours of formal interviewing was undertaken and it was during the phases of analysis of the data and subsequent writing that I was aware of certain gaps in the data and aspects which could have been explored. This was put down to the use of a semi-structured interview schedule which could be limited and also brings attention to my inexperience.

Developing my skills such as interviewing and other techniques has enabled me to start honing a set of valuable skills, these could be developed further as they ensure coverage of all the main areas and topics of interest, which may be expanded on during the interview phase. This suggests that in this project, saturation could

have been extended. Also, the fact that I am an emerging researcher, in Māori development and Māori centred research principles and qualitative design, although I had an added benefit of undertaking research in a topic area well within my expertise, as an osteopath practitioner.

Nevertheless, these factors compounded the intensity of the phase when it came to writing up the project and impacted on the project completion time. Toward the end of my learning journey I had the opportunity to interview more Māori health practitioners as part of a separate project, which has drawn my attention to various unpublished New Zealand reports, which I had not accessed earlier. Perhaps this may have helped me better to contextualise local issues in Hawke's Bay.

Interviewing osteopath practitioners is also an area that requires special expertise, to ensure a safe space was created to encourage each interviewee to openly discuss their clinical practice, while keeping them engaged. The use of the cultural values, researcher guidelines which I had developed during the methodological phase of the project was invaluable, particularly kia māhaki (being humble). Being humble and not flaunting my Māori or other knowledge lead me towards finding ways to create contexts for practitioners to access this and there were times when answering practitioner questions (seeking out the knowledge) helped me to share my knowledge. This lead to a supportive environment which was transformative for the interviewer and interviewee, as we learned from each other.

The project sample was not representative and as a result can not be generalised to all osteopath practitioners. Nevertheless the research does capture the rural osteopathy voice which is important as this perspective is absent in the Māori health literature. Another limitation was that I had not thought to clarify prior to the interview that practitioners treated rural Māori patients, as I assumed that all of the practitioners worked in an area which has a high Māori population and I had not thought to ascertain this during the interviews, potentially isolating those who identified otherwise and potentially influencing the interpretation of some data. However, all practitioners had perspectives of Māori patient care so it was subsequently thought not to be a major limitation. Subsequently, readers are invited to determine the applicability of these findings within the context of these influential factors.

Future research

The practitioners in this project have provided a *snapshot* of the realities they perceive when considering Māori health and well-being in relation to rural osteopathy services. However, this project was limited in its scope and has only captured a small

part of the context, in which these practitioners work. To have a broader understanding of the socio-cultural influences of rural Māori, it would be interesting to conduct interviews with Māori who use osteopathy in addition to key people in the rural community including peers, doctors, Māori health educators, Iwi, governmental health ministers, and other health professionals located in the clinical settings, tying in the key priorities of Māori health in relation to osteopathy practice. This could build a more comprehensive description of the influences that impact on the training, knowledge, attitudes and behaviours of osteopath practitioners and their rural patients access to osteopathy care.

The main finding of this study was that osteopath practitioners viewed engagement and effective relationship building as vital to their clinical practice with rural Māori. The potential for collaboration between Māori health perspectives and the osteopathy scientific tradition was high as they were shown to share a number of philosophical positions. Osteopath practitioners exhibited a willingness to acknowledge culture and recognise the Treaty of Waitangi in their daily practice, but often sought clarity on how this could be achieved. Furthermore, for interventions to be successful it is essential that Māori communities including rural Māori are an integral part of creating positive osteopathy solutions.

Bibliography

Abbott, A. (1988). *The system of professions: An essay on the division of expert labour*. Chigao, IL: University of Chicago Press.

Abel, S., Borell, B., Gregory, M., Kaiwai, H., McCreanor, T., Moewaka-Barnes, A., Nairn, R., Rankine, J., & Taiapa, K. (2011). Reading news about Māori: responses from non-Māori audiences. *AlterNative, 7(1), 51-64. A280.*

Access Economics. (2005). *The economic cost of arthritis in New Zealand*. Canberra, Australia: Access Economics.

Accident Compensation Corporation. (2004). *Summary guidelines on Māori cultural competencies for providers.* Wellington, New Zealand: Accident Compensation Corporation.

Accident Compensation Corporation. (2007). *Annual Report 2007*. Wellington, New Zealand: Accident Compensation Corporation.

Accident Compensation Corporation. (2011). *Annual Report 2011*. Wellington, New Zealand: Accident Compensation Corporation.

Adams, L. (1974). A Tainui whakapapa. *Ohinemuri Regional History Journal 18, June 1974*, *11e*, 2-3. from http://www.ohinemuri.org.nz.

Ahmadi, K., Goldstein, G., Need, A., & Spector, T. (2006). Obesity is associated with genetic variants that alter dopamine availability. *Ann Hum Genet. 70*(3), 293-303.

Ajwani, S., Blakely, T., Bonne, M., Robson, B., & Tobias, M. (2003). *Decades of disparity: Ethnic mortality trends in New Zealand*. Wellington, New Zealand: Ministry of Health & University of Otago.

Alcaraz, J., Anderson, J., Kaplan, R., & Weisman, M. (1996). Quality-adjusted life years lost to arthritis: effects of gender, race,and social class. *Arthritis Care Res*, *9*(6), 473-482.

Allee, B., Malnar, K., & Pollak, M. (2005). Survey of osteopathy and allopathic residents' attitudes toward osteopathy manipulative treatment. *J Am Osteopath Assoc*, *105*(12), 551-61.

Allied Health Professional Associations Forum. (2011). *Minutes of the meeting of the Allied Health Professional Associations' Forum on Wednesday 5 October 2011*. Retrieved from http://www.alliedhealth.org.nz.

Alton-Lee, A. (2003). *Quality teaching for diverse students in schooling: Best evidence synthesis*. Wellington, New Zealand: Ministry of Education.

American Academy of Osteopathy. (1977). *Still, A. T. Philosophy of Osteopathy.*

Retrieved from: www.academyofosteopathy.org.

Akert, R., & Archer, D. (1984). Problems of context and criterion in nonverbal communiction: A new look at the accuracy issue. In M. Cook (Ed.), *Issues in person perception.* New York: Methuen.

Associate Minister of Health & Minister of Health. (2006). *Whakatātaka Tuarua: Māori* Health *Action Plan 2002–2005*. Wellington, New Zealand: Ministry of Health.

Australian Osteopathic Association. (2011). *Shortage Occupation List 2012.* . Retrieved from: www.awpa.gov.au.

Bacal, K., Crengle, S., & Jansen, P. (2008). *He Ritenga Whakaaro: Māori experiences of health services*. Auckland, New Zealand: Mauri Ora Associates.

Badley, E., DesMeules, M., Lagacé, C., & Perruccio, A. (2003). The impact of arthritis on Canadians. *Health Canada*, *2*, 7-34.

Baer, H. (1987). Divergence and convergence in two systems of manual medicine: Osteopathy and Chiropractic in the United States. *Medical Anthropology Quarterly*, *1*, 176-193.

Baker, M., Harris, R., Purdie, G., Robson, B., Wright, C., & Zhang, J. (2007). Estimating Māori hospitalisations and cancer registrations: Appendix 3. In: B. Robson & R. Harris (eds), *Hauora: study of the years 2000–2005*. Wellington, New Zealand: Te Rōpū Rangahau Hauora a Eru Pōmare.

Balzer, M. Barnett, A., Thompson, K., Turinui, M., & Wātene, N. (2007). *Whakatau mai ra: The impacts of gambling for Māori communities: A national Māori collaborative approach*. Retrieved from: http://terunanga.org.nz.

Banks, C., & Banks, J. (1995). Equity pedagogy: An essential component of multicultural education. *Theory into Practice*, *34*(3), 152-158.

Barnett, R., & Brabyn, L. (2004). Population need and geographical access to general practitioners in rural New Zealand. *New Zealand Medical Journal*, *117*, 1199.

Barwick, N. (Ed.). (2000). *Clinical counselling in schools*. London: Routledge.

Baxter, J. (2002). *Barriers to health care for Māori with known Diabetes: A literature review and summary of issues*. Wellington, New Zealand: National Working Group on Diabetes and Te Roopu Rangahau Hauora A Ngai Tahu.

Binns, E. (2003). *A model of community partnership and physiotherapy delivery that is culturally appropriate*. Paper presented at the meeting of Neurological Physiotherapy Conference, Manly Pacific Hotel, Sydney, Australia.

Bishop, R. (1996). *Collaborative research stories: Whakawhānaungatanga*. Palmerston North, New Zealand: The Dunmore Press.

Bishop, R., & Graham, S. (1997). *Implementing Treaty of Waitangi charter goals in tertiary institutions: A case study*. Wellington, New Zealand: Syndicate of Educational Development Centres of NZ Universities.

Bjorntorp, P., Bouchard, C., & Rosmond, R. (2002). C-1291G polymorphism in the 2A-adrenergic receptor gene (ADRA2A) promoter is associated with cortisol escape from dexamethasone and elevated glucose levels. *Journal of Internal Medicine*, *251*, 252-257.

Black, T., Christensen, I., Durie, A., Durie, M., Fitzgerald, E., Potaka, U., & Taiapa, U. (1995). Te Hoe Nuku Roa framework: A Māori identity measure. *ASSR News*, *1*, 6.

Blunt, A. (1994). The future of adult education research. In D. Garrison (Ed.), *Research Perspectives in adult education* (pp. 167-209). Malabar, Fl: Krieger.

Boddy, J., Budge, C., & Carryer, J. (2011). Rural nurse to nurse practitioner: An ad hoc process. *Journal of Primary Health Care*, *3*(1), 23-28.

Boje, D. (2001). *Narrative methods for organisational and communication research*. London: Sage.

Bolton, T., & Segal, L. (2009). *Issues facing the future health care workforce: the importance of demand modelling.* Adelaide: Health Economics and Policy Group, Division of Health Sciences, University of South Australia.

Bonner, A. Francis, K., & Mills, J. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, *5*, 1. Retrieved from: http://www.ualberta.ca.

Borell, B. (2005). Living in the city ain't so bad: Cultural identity for young Māori in South Auckland. In J. Liu, T. McCreanor, T. McIntosh, & T. Teaiwa (eds.), *New Zealand Identities: Departures and destinations.* Wellington, New Zealand: Victoria University Press.

Bossley, C., & Miles, K. (2009). *Musculoskeletal conditions in New Zealand. 'The crippling burden'. (Report No. 6)*. Wellington, New Zealand: The Bone & joint Decade 2000-2010.

Bowden, R. (1987). The history and development of osteopathy in Australia and New Zealand. *J NZ Reg Osteopathy*, *1(1):*, 4–6.

Brown, L. (1993). *The New Shorter Oxford English Dictionary*. Oxford, England: Clarendon Press.

Bruner, J. (1990). *Acts of meaning*. Cambridge, Ma: Harvard University Press.

Bryman, A., & Burgess, R. (1994). *Analysing qualitative data*. London: Routledge.

Burkhart, D., & Tunanidas, A. (2005). American Osteopathy Association commitment to quality and lifelong learning. *J Am Osteopath Assoc, 105*(9), 404-407.

Burton, J. (1999). *Rural health care in New Zealand - RNZCGP recommendations. Royal New Zealand College of General Practitioners (Occasional Paper Number 4)*. Wellington: Royal New Zealand College of General Practitioners.

Butters, S., Coffey, B., Geraghty, P., Hocking, G., Meyers, N., Pettit, C., & Weston, M. (2011). Exploring the potential of knowledge brokering to enhance natural resource management: Findings from the Catchment Knowledge Exchange Project in Victoria. *Australasian Journal of Environmental Management, 18*(4), 233-247.

Cameron, C. (2010). *Does anybody like being disabled? A critical exploration of impairment, identity, media and everyday experience in a disabling society.* (Published thesis). Retrieved from http://etheses.qmu.ac.uk.

Canadian Arthritis Society. (2004). *Revealing the impact of arthritis on the lives of Canadians*. Ottawa, Canada: Canadian Arthritis Society.

Carlisle, S. (2001). Inequalities in health: contested explanations, shifting discourses and ambiguous policies. *Critical Public Health*, *11*, 3.

Carter, A., & Moritz, S. (2004). *Identifying the major issues of rural osteopathy practice from the practitioners perspective.* Victoria University, Melbourne, Australia.

Castaneda, C., Morrow, S., & Raksha, G. (2001). *Qualitative research methods of multicultural counseling. In J. Ponterotto, J. Casas, L. Suzuki, & C. Alexander (eds.). Handbook of multicultural counseling (2nd ed.) (pp. 575-603)*. Thousand Oaks, Ca: Sage Publications.

Charansonney, O., & Després, J. (2010). Disease prevention: Should we target obesity or sedentary lifestyle?. *Nat Rev Cardiol*, *7*(8), 468-72.

Charmaz, K. (1994). *Discovering chronic illness: Using grounded theory*. Mill Valley, Ca: Sociology Press.

Charmaz, K. (1995). *Grounded theory. In J. Smith, R. Harré, & L. Langenhove (eds.). Rethinking methods in Psychology*. London: Sage.

Charmaz, K. (2000). *Grounded theory: Objectivist and constructivist methods. In N. Denzin & Y. Lincoln (eds.). Handbook of qualitative research*. Thousand Oaks, Ca: Sage.

Chen, W., Yu, I., & Wong, T. (2005). Impact of occupational stress and other

psychosocial factors on musculoskeletal pain among Chinese offshore oil installation workers. *Occupational and Environmental Medicine*, *62*(4), 251-256.

Chila, A., & Fitzgerald, M. (Eds.). (1991). *Foundations of Osteopathy medicine. 3ʳᵈ. ed.* Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Ching, H., & Tsou, I. (2002). The Bone and Joint Decade 2000-2010: For prevention and treatment of musculo-skeletal disease. *Annals Academy of Medicine*, *31*(1), 69-70.

Clarke, M., & DeGannes, C. (2008). *Introduction to Cultural Competency*. Retrieved from www.medscape.com.

Coleman, A., Dixon, S., & Maré, D. (2004). *Māori economic development – Glimpses from statistical sources*. http://motu-www.motu.org.nz

Collings, S., & Ellis, P. (Eds.). (1997). *Mental health in NewZealand from a public health perspective*. Wellington, New Zealand: Ministry of Health.

Consedine, R., & Consedine J. (2001). *Healing our history: The challenge of the Treaty of Waitangi*. Auckland, New Zealand: Penguin Books.

Cooper, S., & Ensor, T. (2004). Overcoming barriers to health service access: Influencing the demand side. *Health Policy and Planning*, *19*(2), 69-79.

Corbin, C., Corbin, W., Lindsey, R., & Welk, G. (2001). *Fundamental concepts of fitness and wellness*. New York: McGraw-Hill.

Corbin, J., & Strauss, A. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, Ca: Sage Publications.

Cowan, C., Higgins, N., Phillips, H., & Tikao, K. (2009). Kāpo (blind) Māori in the ancient world. MAI Review. *MAI Review*, *2*(4), 1-14.

Cram, F. (2001). Rangahau Māori: Tona tika, tona pono. In M. Tolich (ed.), *Research ethics in Aotearoa* (pp.35-52). Auckland, New Zealand: Longman.

Cram, F. (2010). *Shifting Māori health needs: Māori population trends, health service needs, and medical workforce requirements issues arising*. Wellington, New Zealand: Ministry Of Health.

Cram, F., & Smith, L. (2003). Māori women talk about accessing health care. *He Pukenga Kōrero*, *7*, 1-8.

Crawford, R. (1980). Healthism and the medicalisation of everyday life. *International J. Health Services*, *10*, 365–88.

Creswell, J. (1998). *Qualitative Inquiry and Research Design: Choosing among five traditions*. Thousand Oaks, Ca: Sage.

Crutchlow, E., Dudac, P., MacAvoy, S., & Madara, B. (2002). *Quick look nursing pathophysiology*. Thorofare, New Jersey: Slack.

Cunningham, C. (1998). *A framework for addressing Māori knowledge in research, science and technology*. Te Oru Rangahau: Māori research and development conference session presented at the meeting of Massey University, Palmerston North, New Zealand.

Cunningham, C., Fitzgerald, E., Holdaway, M., Ngata, T., Stannard, S., Stevenson, B., & Triggs, S. (2009). *Estimated outcomes for Māori: Te Hoe Nuku Roa, Māori in Nelson-Marlborough*. Palmerston North, New Zealand: Massey University Research Centre for Māori Health & Development.

D'Alonzo, G., Glover, J., Korr, I., Osborn, G., Patterson, M., Rogers, F., Selfinger, M., Taylor, T., & Willard, F. (2002). Proposed tenets of osteopathy medicine and principles for patient care. *J Am Osteopath Assoc., 102*, 63-65. Retrieved from http://www.jaoa.org.

Davidson, F. (1984). Infant feeding in New Zealand: A review of infant feeding practices from the 1890s to the present day. *Proceedings of the Nutrition Society of New Zealand, 9*, 6-17.

Davis, P., Pearce, N., & Sporle, A. (2002). Social class mortality differences in Māori and non-Māori men aged 15-64 during the last two decades. *N Z Med J, 115*, 1150.

Dawson, S. (2000a). *General practitioners perceptions of the success of models of general practice in rural communities in New Zealand*. Christchurch, New Zealand: National Centre For Rural Health.

Dawson, S. (2000b). *Rural nurses' perceptions of the success of models of service delivery in rural communities in New Zealand*. Christchurch, New Zealand: National Centre For Rural Health.

De Groot, M., & Samson, J. (1994). The evaluation of two measures of quality of life in patients with Type I and Type II Diabetes. *Diabetes Care, 17*(4), 267-274.

DeSouza, R. (2008). Wellness for all: the possibilities of cultural safety and cultural competence in New Zealand. *Journal of Research in Nursing, 13*(2), 125-135.

Dew, K. (2003). *Borderland practices: Regulating alternative therapies in New Zealand*. Dunedin, New Zealand: University of Otago Press.

Dillman, D. (2000). *Mail and Internet surveys: The tailored design method*. New York: John Wiley & Sons.

Doebbeling, B., Kolluri, S., Mitchell, T. Rohrer, J., Saag, K., & Wallace, R. (1998). Arthritis health service utilisation among the elderly: the role of urban-rural

residence and other utilisation factors. *Arthritis Care Res*, *11*, 177–85.

Duke, K. (2005). A century of Complementary Medicine (CAM) in New Zealand: A struggle for recognition. *Complement Ther Clin Pract*, *11*(1), 11-16.

Durie, M. (1994). *Whaiora: Māori health development*. Auckland, New Zealand: Oxford University Press.

Durie, M. (1996). *Characteristics of Māori health research: A paper presented at the Hui Whakapiripiri: Hongoeka.* Hongoeka, New Zealand.

Durie, M. (1998a). *Te Mana, Te Kawanatanga: The Politics of Māori Self-Determination*. Auckland: Oxford University Press.

Durie, M. (1998b). *Whaiora: Māori health development*. Auckland, New Zealand: Oxford University Press.

Durie, M. (1999). Te Pae Mahutonga: A model for Māori health promotion. *Health Promotion Forum of New Zealand Newsletter*, *49*, 2-5.

Durie, M. (2001). *Mauri Ora: The dynamics of Māori health*. Auckland, New Zealand: Oxford University Press.

Durie, M. (2003). *Ngā Kāhui Pou: launching Māori Futures*. Wellington, New Zealand: Huia.

Durie, M. (2009). *Pae Ora: Māori health horizons*. The Paerangi Lectures: Māori Horizons 2020 and beyond, Palmerston North, New Zealand: Massey University.

Dyson, R. (2003). *New Zealand Injury Prevention Strategy*. Wellington, New Zealand: Accident Compensation Corporation.

Elers, D. (2007). *Safe Community Programme Outline*. Waipawa, New Zealand: Central Hawke's Bay District Council.

Emigrate New Zealand. (2011). *Health care for migrants*. Retrieved from http://www.emigratenz.org.

Esdaile, J., & Peschken, C. (1999). Rheumatic diseases in North America's indigenous people. *Sem Arthritis Rheumatism*, *28*(6), 368-91.

Ezzati, M., Jamison, D., Lopez, A., Mathers, C., & Murray, C. (2006). Global burden of disease and risk factors. *Oxford University Press*, *45*, 250.

Fahy, J. (1984). *Accident Compensation coverage: The administration of the Accident Compensation Act*. Wellington, New Zealand: Accident Compensation Corporation.

Fairweather, J., Henley, M., Poharama, A., Simmons, D., & Smith, A. (1998). Tourism *Research and Education Centre: The impact of tourism on the Māori community in Kaikoura*. Christchurch, New Zealand: Lincoln University.

Fanon, F. (1967). *The Wretched of the Earth.* Great Britain: Penguin Books.

Fennell, J., & Magnusson, J. (2011). Understanding the role of culture in pain: Māori practitioner perspectives of pain descriptors. *New Zealand Medical Journal*, *124*, 1328.

Finch, J. (1984). *It's great to have someone to talk to: The ethics and politics of interviewing women*. London: Routledge & Kegan Paul.

First Nations Centre. (2005). *First Nations regional longitudinal health survey 2002/2003: Results for adults, youth and children living in First Nations Communities*. Ottawa, Canada: First Nations Centre at the National Aboriginal Health Organisation.

Gardiner, D., & Pihama, L. (2005). *Building Baseline Data on Māori, Whānau* Development *and Māori Realising Their Potential: Literature Review: Developing Leadership*. Auckland, New Zealand: Auckland UniServices Limited.

Gernat, C., Hammar, L., & Utsey, S. (2005). Examining white counselor trainees' reactions to racial issues in counseling and supervision dyads. *The Counseling Psychologist*, *33*, 449-478.

Gevitz, N. (1996). *The history of osteopathy medicine. In C. Sirica, Osteopathy medicine: past, present, future*. New York: Josiah Macy, Jr. Foundation.

Gevitz, N. (2004). *The D.O.s: Osteopathy medicine in America*. Baltimore: Johns Hopkins University Press.

Goddard, M., & Smith, P. (2001). Equity of access to health care services: Theory and evidence from the UK. *Social Science & Medicine*, *53*, 1149-1162.

Goodyear-Smith, F., & James, R. (2006). *The 2005 Rural Health Workforce Survey*. Wellington, New Zealand: Ministry of Health.

Grace, P., & Kahukiwa, R. (2000). *Wahine Toa: Women of Māori myth*. Auckland, New Zealand: Penguin Books.

Graham, L. (1994). *Surveying through stories*. London: Routledge & Kegan Paul.

Gray, K. (2006). *Tāniko: Public participation, young Māori women, & whānau health*. Palmerston North, New Zealand: Massey University.

Groot, S. (2006). Cultural vehicles and the Māori print media: What cultural concepts are used to communicate health messages to Māori? Intern Research Report 5. *MAI Review*, *1*, 1-16. Retrieved from http://review.mai.ac.nz.

Guba, E., & Lincoln, Y. (1981). *Effective evaluation* .San Francisco: Jossey Bass.

Guglielmo, W. (1998). Are D.O.s losing their unique identity? . *Medical Economics*, *75*(8), 200-209.

Hall, L., McPherson, K., Smeets, T., & Taylor, W. (2004). The burden of rheumatic disorders in general practice: Consultation rates for rheumatic disease and relationship to age, ethnicity and small area deprivation. *New Zealand Medical Journal*, *117*(203), 1098-2003.

Harris, E., Ruddy, S., & Sledge, C. (Eds.). (1998). *Kelly's Textbook of Rheumatology. 6th ed*. Philadelphia, PA: WB Saunders Company.

Harris, R., Jeffreys, M., Karlsen, S., Nazroo, J., Tobias, M., & Waldegrave, K. (2006). Effects of self-reported racial discrimination and deprivation on Māori health and inequalities in New Zealand: cross-sectional study. *The Lancet*, *367*, 9527.

Hawke's Bay District Health Board. (2010a). *Healthy people healthy places: Health status review: Demographics*. Retrieved from http://www.hawkesbay.health.nz.

Hawke's Bay District Health Board. (2010b). *Healthy people, healthy places HBDHB Health Status Review 2010: Musculoskeletal Conditions*. Retrieved from http://www.hawkesbay.health.nz.

Hawke's Bay District Health Board. (2010c). *Musculo-skeletal disorders.* Retrieved from http://www.hawkesbay.health.nz.

Hawke's Bay District Health Board. (2011). *Tū Mai: Māori Health Strategy 2007 – 2012*. Retrieved from http://www.hawkesbay.health.nz.

Hawken, S., Henning, M., Jones, R., Pinnock, R., & Shulruf, B. (2011). Students' and clinical teachers' perceptions of the clinical learning environment. *New Zealand Medical Journal*, *124*(1334), 63-70.

Henkel, G. (2008). *The Bone and Joint Decade at the 4/5ths mark: Missions accomplished?* Retrieved from http://www.therheumatologist.org.

Henry, E., & Pene, H. (2001). Kaupapa Māori: Locating indigenous ontology, epistemology and methodology in the academy. *Organisation*, *8*(2), 234-242.

Hera, J. (2011). Cultural competence and patient centred care. In I. St George (Ed.), *Cole's Medical Practice in New Zealand*. Wellington, New Zealand: Medical Council Of New Zealand.

Hingangaroa-Smith, G. (1990). *Research issues related to Māori education: Special Interest Conference*. Paper presented at the meeting of New Zealand Association for Research in Education, Auckland: University of Auckland.

Hingangaroa-Smith, G. (1997). *The development of Kaupapa Māori: Theory and praxis.* Unpublished doctoral dissertation, The University of Auckland, Auckland, New Zealand.

Hiroa, T. (n.d.). *Medicine Amongst the Māoris, in Ancient and Modern Times*. Retrieved from New Zealand Texts Collection, from http://www.nzetc.org.

Hochberg, M., & Scott, J. (1998). *Arthritis and other musculoskeletal diseases*. Washington: American Public Health Association.

Hodgetts, D., Masters, B., & Robertson, N. (2004). Media coverage of 'Decades of Disparity' in ethnic mortality trends in Aotearoa. *Journal of Community and Applied Social Psychology*, *14*, 1-18.

Hopkirk, J. (2010). *Culture and Occupational Therapy: A Māori case study* Massey University). Retrieved from http://Palmerston North, New Zealand.

Howden-Chapman, P., & Tobias, M. (2000). *Social Inequalities in Health: New Zealand 1999*. Wellington, New Zealand: Ministry of Health.

Huberman, A., & Miles, M. (1994). *Qualitative data analysis (2nd edition)*. Thousand Oaks, Ca: Sage Publications.

Human Rights Commission. (n.d.). *Human Rights in New Zealand Today Ngā Tika Tangata O Te Motu.* Retrieved from: www.hrc.co.nz.

Hurst, J., & Kelley, E. (2006). *Health care quality indicators project conceptual framework paper. OECD Health Working Paper No. 23. Paris, France: Organisation for Economic Co-operation and Development*. Retrieved from http://www.oecd.org.

Institute of Medicine. (1993). Committee on monitoring access to personal health care services. In: M. Millman (ed.), *Access to Health Care in America*. Washington, DC, USA: National Academy Press.

Irwin, K. (1994). Māori Research Methods and Practices. *Sites (Autumn)*, *28*, 25-43.

Jahnke, H., & Taiapa, J. (1999). Māori Research. In C. Davidson and M. Tolich (eds.), *Social Science Research in New Zealand: Many paths to* understanding (pp. 39-50). Auckland, New Zealand: Longman.

James, C. (Ed.). (2000). *Building the Constitution*. Wellington: Institute of Policy Studies.

Janz, T., Seto, J., & Turner, A. (2009). *An overview of the health of the Métis population*. Retrieved from http://www.statcan.gc.ca.

Jobling, P., Merna, T., & Smith, N. (2006). *Managing risk in construction projects* . Oxford, UK: Blackwell Publishing.

John Fraser Health Services Research Centre. (2006). *Rural Health: A literature review for the National Health Committee* . Wellington, New Zealand: Victoria University.

Jones, T. (2001). Definition of stress. In J. Robert-McComb (ed.), *Eating disorders in*

women and children: Prevention, stress management and treatment. Boca Raton, FL: CRS Press.

Kaplan, K., & Wadden, T. (1986). Childhood obesity and self-esteem. *J Pediatr*, *109*(2), 367-370.

Kara, E., Lawrenson, R., Smyth, D., & Thomson, R. (2010). Rural general practitioner perspectives of the needs of Māori patients requiring palliative care. *Journal of the New Zealand Medical Association*, *123*, 1315. Retrieved from http://journal.nzma.org.nz.

Kawachi, I., & Woodward, A. (1998). *Why should we reduce health inequalities? Reasons for acting on the social, cultural and economic factors that cause ill-health. (Background paper no.2)*. Wellington, New Zealand: National Health Committee, Health Determinants Programme.

Kerr, S. (n.d.). *Kaupapa Māori theory based evaluation*. Retrieved from http://www.whariki.ac.nz.

King, A. (2001). *The New Zealand Health Strategy*. Wellington: Ministry of Health.

Kingi, T. (2005). *Evaluation and the measurement of cultural outcomes*. Paper presented at the meeting of Aotearoa New Zealand Evaluation Conference, Taupo, New Zealand.

Kirk, C. (2004). *Mark Twain: A biography*. Connecticut: Greenwood Printing.

Kiro, C. (2009). *Literature review to inform Māori analysis for guidelines for weight* management *in children and young people and in adults*. Wellington, New Zealand: Ministry of Health.

Li, S. (2006). *Health care financing and policies of Australia, New Zealand and Singapore*. Retrieved from http://www.legco.

Litchfield, M. (2002). *The successful design and delivery of rural health services: the meaning of success*. Christchurch, New Zealand: Centre for Rural Health.

London, M. (2001). *New Zealand Annual Rural Workforce Survey 2001*. Christchurch, New Zealand: Centre For Rural Health.

Lunt, H., & Moore, P. (2000). Diabetes in New Zealand. *Diabetes Research and Clinical Practice*, *50*, S65–S71.

Lupton, D. (1994). *Medicine as culture: Illness, disease and the body in Western Societies*. London: Sage.

Mahuika, R. (2008). Kaupapa Māori theory is critical and anti-colonial. *MAI Review*, *3*, 1-16.

Manning, J. (2011). *The Cartwright Inquiry: Learning the lessons*. Retrieved from http://www.lawfoundation.org.nz.

Māori Cultural Responsiveness Project Team. (2010). *Māori Cultural Responsiveness in Practice*. Palmerston North, New Zealand: MidCentral District Health Board Communications Unit.

Mara, D. (1998). *Pacific Islands school parent community liaison project: An independent evaluation report*. Wellington, New Zealand: Council for Educational Research.

Maré, D., & Sin, I. (2004). *Māori Incomes: Investigating differences between Iwi*. Retrieved from http://motu-www.motu.org.nz.

Marshall, C., & Rossman, G. (1999). *Designing qualitative research*. Thousand Oaks, Ca: Sage.

Masten, A., & Obradovic, J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences*, *1094*, 13–27.

Mauri Ora Associates. (2010). *Best health outcomes for Pacific peoples: Practice implications*. Wellington, New Zealand: Medical Council of New Zealand.

McCredie, M., & Skegg, D. (2002). Comparison of cancer mortality and incidence in New Zealand and Australia. *New Zealand Medical Journal*, *115*, 1153.

McNamara, K. (2008). *Enhancing the livelihoods of the rural poor through ICT: A knowledge map. Tanzania country study. InfoDev Working Paper No. 9*. Retrieved from www.infodev.org.

McNeill, M. (1995). *Intellectual property law refom and marginalisation of Māori, M.A. Thesis*. Auckland, New Zealand: University of Auckland.

Mental Health Foundation of New Zealand. (2009). *New Zealand. Like Minds, Like Mine*. Auckland, New Zealand: Mental Health Foundation of New Zealand.

Metts, R. (2000). *Disability Issues, Trends and Recommendations for the World Bank (Social Protection Discussion Paper No. 0007)*. Washington, DC: World Bank, Human Development Network.

Ministry for the Environment. (2000). *The New Zealand Biodiversity Strategy*. Wellington, New Zealand: Ministry for the Environment.

Ministry of Disability Issues. (2001). *The New Zealand Disability Strategy.* Wellington: Ministry of Disability Issues.

Ministry of Health. (2000). *Social inequalities in health: New Zealand 1999*. Wellington: Ministry of Health.

Ministry of Health. (2001). *The Primary Health Care Strategy*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2002). *He Korowai Oranga Māori Health Strategy*. Wellington: Ministry Of Health.

Ministry of Health. (2002a). *He Korowai Orangi: Māori Health Strategy*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2002b). *Implementing the Primary Health Care Strategy in rural New Zealand: A report from the Rural Expert Advisory Group to the Minister of Health*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2002c). *Reducing Inequalities in Health*. Wellington: Ministry of Health.

Ministry of Health. (2005). *Decades of Disparity II: Socioeconomic mortality trends in New Zealand, 1981-1999*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2006a). *Raranga Tupuake Māori health Workforce Development Plan*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2006b). *Whakatātaka Tuarua: Māori Health Action Plan*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2007). *Whānau Ora Health Impact Assessment*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2008). *A Portrait of Health. Key Results of the 2006/7 New Zealand Health Survey*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2011). *Overview of the health system*. Retrieved from http://www.health.govt.nz/system/files/documents/pages/structure-new-zealand-health-sector.pdf.

Ministry of Social Development. (2004). *Family, Child, Youth and Community Research and Evaluation Unit. Evaluation of the Heartland Services Initiative. Prepared for the Centre for Social research and Evaluation*. Wellington, New Zealand: Ministry of Social Development.

Ministry of Social Development. (n.d.). Heartland Services. Retrieved from: http://www.heartlands.govt.nz.

Miskelly, P. (2006). *Healing pluralism and responsibility: An Anthropological study of patient and practitioner beliefs. Unpublished doctoral dissertation.* University of Waikato, Hamilton, New Zealand.

Moeke-Pickering, T. (1996). *Māori identity within whānau: A review of literature*. Hamilton: University of Waikato.

Moewaka Barnes, H. (2000). Kaupapa Māori: explaining the ordinary. *Pacific Health Dialog, 7*. 13-17. A134

Moon, P. (2003). *Tōhunga Hohepa Kereopa*. Auckland, New Zealand: David Ling Publishing Limited.

National Health Committee. (2010). *Rural health: Challenges of distance;*

opportunities for innovation. Wellington, New Zealand: National Health Committee.

National Institute of Arthritis, Musculoskeletal and Skin Diseases. (2009). *Exercise and Bone Health*. http://www.niams.nih.gov

New Zealand Guidelines Group. (2003). *Evidence-based best practice guideline: Management of Type 2 Diabetes*. Wellington: New Zealand Guidelines Group.

New Zealand Health and Disabiilty Ethics Commitees. (2007). *Ethical review in New Zealand*. Retrieved from http://www.ethicscommittees.health.govt.nz.

New Zealand Health Information Service. (2009). *Osteopath Workforce*. Wellington, New Zealand: Ministry of Health.

New Zealand Health Information Service. (2010). *Osteopathy Workforce*. Wellington, New Zealand: Ministry of Health.

New Zealand Institute of Rural Health. (2009). *Rural health: Challenges of distance opportunities for innovation*. Retrieved from http://www.rgpn.org.nz.

New Zealand Qualifications Authority. (2007). *Te rautaki Māori me te mahere whakatinana a te mana tohu mātauranga o Aotearoa: The Māori strategic and implementation plan for the New Zealand Qualifications Authority 2007–2012*. Wellington, New Zealand: New Zealand Qualifications Authority.fb

New Zealand Studies Association. (n.d.). *The Urban and the Rural - New Zealand Studies Association*. Retrieved from www.nzsa.co.uk.

Newbold, K. (1998). Problems in search of solutions: health and Canadian Aboriginals. *J Community Health*, *23*(1), 59-73.

O'Connor, T. (2007). *Governing bodies: A Māori tradition in a bicultural state.* The University of Auckland). Retrieved from http://https://researchspace.auckland.ac.nz.

Orange, C. (1987). *The Treaty of Waitangi*. Wellington, New Zealand: Allen & Unwin Port Nicholson Press.

Osteopath Council of New Zealand. (2011a). *What is Osteopathy medicine?*. Retrieved from http://www.osteopathcouncil.org.nz.

Osteopath Council of New Zealand. (2011b). *Scopes of practice*. Retrieved from http://www.osteopathcouncil.org.nz.

Osteopath Council of New Zealand. (2011c). *Capabilities for Osteopathy practice*. Retrieved from http://www.osteopathcouncil.org.nz.

Palmer, K., & Walker-Bone, K. (2002). Musculoskeletal disorders in farmers and farm workers. *Occup Med (Lond)*, *52*, 441-50.

Parsons, T. (1951). *The Social System*. Glencoe, IL: Free Press.

Patton, M. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park, Ca: Sage.

Pearson, W. (1958). Attitudes to the Māori in some Pakeha fiction. *The Journal of the Polynesian Society*, *67*(3), 211-238.

Pere, R. (1997). *Te Wheke: a celebration of infinite wisdom.* Wairoa, New Zealand: Ao Ako Global Learning New Zealand Ltd.

Pfleger, B., & Woolf, A. (2003). Burden of major musculoskeletal conditions. *Bulletin of the World Health Organisation, 81(9)*, 646-656.

Pihama, L. (2001). *Tīhei mauri ora: Honouring our voices, mana wahine as a kaupapa Māori theoretical framework,* Doctor of Philosophy in Education. University of Auckland, Auckland, New Zealand.

Pohatu, T. (2004). Growing respectful relationships. *He Pukenga Kōrero*, *8*(1), 1-8.

Pollock, K. (2011). *Alternative health therapies: Chiropractic, Osteopathy and Massage*. Retrieved from http://www.teara.govt.nz.

Pool, I. (1990). *Te Iwi Māori a New Zealand population past, present and projected*. Auckland: Auckland University Press.

Price Waterhouse Coopers. (2008). *Price Waterhouse Coopers*. Wellington, New Zealand: Price Waterhouse Coopers.

Raerino, K. (2007). *He tirohanga a Ngāti Awa uri taone mo ngā ahuatanga Māori: An urban Ngāti Awa perspective on identity and culture.* Auckland University of Technology. Retrieved from http://aut.researchgateway.ac.nz.

Rameka, R. (2006). *He Arakanihi ki te Oranga: Report of Health Research Council Rangahau Hauora Award*. Wellington, New Zealand: Te Ropu Rangahau Hauora a Eru Pomare.

Ramsden, I. (2002). *Cultural safety and Nursing education in Aotearoa and Te Wai Pounamu. Unpublished thesis.* Victoria University of Wellington, Wellington, New Zealand.

Rangahau. (n.d.). *Principles of Kaupapa Māori*. Retrieved from http://www.rangahau.co.nz.

Rankin, K., & St. John, S. (2009). *Escaping the welfare mess?* Auckland, New Zealand: Economics Department, University of Auckland.

Reid, P., & Robson, B. (2007). *Understanding health inequities. In: B. Robson, & R. Harris, (eds.). Hauora: Māori Standards of Health IV A study of the years 2000-2005*. Wellington, New Zealand: Te Ropu Rangahau Hauora a Eru Pomare.

Renwick, W. (Ed.). (1991). *Sovereignty and indigenous rights: The Treaty of Waitangi in international contexts*. Wellington, New Zealand: Victoria University Press.

Riihimāki, H. (1991). Low-back pain, its origin and risk indicators. *Scand J Work Environ Health*, *2*, 81-90.

Ritchie. (n.d.). *Enacting Tiriti-based practice in early childhood education in Aotearoa*. Retrieved from http://unitec.researchbank.ac.nz.

Roberts, R., & Roberts-Thomson, P. (1999). Rheumatic diseases in the Australian Aborigine. *Ann Rheum Dis*, *58*, 266-270.

Ross, J. (1998). Advanced rural nursing practice. *Primary Health Care*, *1*(1), 36-38.

Roulston, K. (2010). *Reflective interviewing: A guide to theory and practice*. London: Sage.

Rowe, A. (1825). *The Columbian Class Book: Consisting of geographical historical and extracts*. Worcester: Dorr & Howland.

Ryan, W. (1976). *Blaming the victim*. New York: Vintage.

Shank, G. (2002). *Qualitative research: A personal skills sproach. Qualitative Research. A Personal Skills Approach*. New Jersey: Merril Prenticehall.

Smith, L. (1992). Māori women: Discourses, projects and mana wāhine. In S. Middleton, & A. Jones (eds.), *Women and Education in Aotearoa 2*. Wellington, New Zealand: Bridget Williams Books.

Smith, L. (1999). *Decolonising methodologies: Research and indigenous peoples.* Dunedin: University Of Otago Press.

Smith, L. (2005). *On tricky ground: Researching the native in an age of uncertainty. In N. Denzin & Y. Lincoln (eds.)*. Thousand Oaks, Ca: Sage.

Smith, L. (2006). Researching the margins: Issues for Māori researchers a discussion paper. *Alternative: An International Journal of Indigenous Scholarship*, *Special Supplement 2006*, 5-27.

Sorrenson, M. (1956). Land purchase methods and their effects on Māori population 1865-1901. *The Journal of the Polynesian Society*, *65* (3), 183-199.

State Services Commission. (2004). *Treaty of Waitangi awareness research - A qualitative and quantitative study by UMR Research*. Retrieved from http://www.ssc.govt.nz.

Statistics New Zealand. (1998a). *A regional profile - Hawke's Bay*. Wellington, New Zealand: Statistics New Zealand.

Statistics New Zealand. (1998b). *Ethnic projections based on 2001 Ethnic Affairs, Ethnic Perspectives in Policy*. Wellington, New Zealand: Statistics New

Zealand.

Statistics New Zealand. (2002a). *Rural New Zealand*. Retrieved from http://www.stats.govt.nz.

Statistics New Zealand. (2002b). *Towards a Māori statistics framework: A discussion document*. Wellington: Statistics New Zealand.

Statistics New Zealand. (2004). *Older New Zealanders 65 and beyond*. Wellington, New Zealand: Statistics New Zealand.

Statistics New Zealand. (2006). *Census regional summary tables*. Retrieved from http://www.stats.govt.nz.

Statistics New Zealand. (2008). *NZ Population Classifications*. Retrieved from http://www.stats.govt.nz.

Statistics New Zealand. (n.d., a). *Defining Urban and Rural New Zealand*. Retrieved from http://www.stats.govt.nz.

Statistics New Zealand. (n.d., b). *New Zealand: An Urban/Rural Profile*. Retrieved from http://www.stats.govt.nz.

Statistics New Zealand. (n.d., c). *National Ethnic Population Projections: 2006 (base) – 2026 update*. Retrieved from http://www.stats.govt.nz.

Stephens, M. (2001). *A Return to the Tohunga Suppression Act 1907*. Retrieved from http://www.austlii.edu.au

Still, A. T. (1899). *Philosophy of Osteopathy*. Indianapolis, United States: American Academy Of Osteopathy.

Still, A.T. (1902). *The philosophy and mechanical principles of Osteopathy*. Kirksville, Mo: Osteopathy Enterprises.

Still, A.T. (1992). *Osteopathy Research and Practice*. Kirksville, Mo: Eastland Press.

Sue, D., & Sue, D. (2002). *Counselling the culturally diverse: Theory and practice*. NY, United States Of America: John Wiley & Sons.

Tapsell, R. (2009). *Māori Health*. Wellington: Medical Council of New Zealand.

Te Awekotuku, N. (1991). *Mana Wahine Māori*. Auckland, New Zealand: New Women's Press.

Te Puni Kōkiri. (2010). *Beyond 2020: Population projections for Māori*. Retrieved from http://www.tpk.govt.nz

Te Rau Matatini. (2006). *Kia Puāwai Te Ararau: Māori Mental Health Workforce Development Strategic Plan 2005–2010*. Palmerston North, New Zealand: Te Rau Matatini.

Te Rōpū Rangahau Hauora a Eru Pomare. (2000). Counting for nothing: understanding the issues in monitoring disparities in health. *Soc Policy J NZ*,

16, 1-16.

The Counties Manukau District Health Board Māori Gout Action Group. (2011). *Proceedings of Outing Gout 3. Mate Kauti. Me haere tātou. Ki te manawa teenei take. The Gout: Let's get to the heart of the matter*. Paper presented at the meeting co-hosted by: Ngati Porou Hauora & Counties Manukau DHB Māori

The Hawke's Bay & East Coast Community Response Forum. (2011). *Report to the Minister*. Retrieved from http://www.communityresponse.org.nz

The Mental Foundation of New Zealand. (2006). *A Stock-take Report for SPINZ - July 2006.* Wellington: The Mental Foundation of New Zealand.

The Ministry of Social Development. (n.d.). *Northern region*. Retrieved from http://www.familyservices.govt.nz

The Museum of Osteopathy Medicine & The International Centre for Osteopathy History. (2000). *Dr. Andrew Taylor Still*. Retrieved from http://www.atsu.edu

Thornley, A. (2007). *Measuring and fostering the progress of societies developing indicators for local communities: The New Zealand experience*. Paper presented at the meeting of Istanbul World Forum, Istanbul, Turkey.

Tomlins-Jahnke, H. (2005). *He Huarahi Motuhake: The politics of tribal agency in provider services.* Massey University). Retrieved from http://mro.massey.ac.nz

Trowbridge, C. (1991). *Andrew Taylor Still, 1828-1917*. Kirksville, Missouri: Thomas Jefferson University Press.

Unitec Institute of Technology. (2011). *Osteopathy*. Retrieved from http://www.unitec.ac.nz.

Vote Health. (2010). *The estimates of appropriation 2011/12*. Wellington, New Zealand: Ministry of Health.

Voyce, M. (1989). Māori Healers in New Zealand: The Tōhungaa Suppression Act 1907. *Oceania*, *60*, 99-123.

Waitemata District Health Board. (2010). *Mental health and addictions plan*. Waitemata: Waitemata District Health Board.

Walker, S. (1996), *'Kia tau te rangimarie. Kaupapa Māori theory as a resistance against the construction of Māori as the other'.* Unpublished Masters Thesis, The University of Auckland.

Wardle, B. (2011). *The cultural genogram: Enhancing the cultural competency of Social Work Students*. London, UK: Routledge Taylor & Francis Group.

Watt, I. (1997). Basic differential diagnosis of arthritis. *Eur Radio*, *7*, 344-351.

Wepa, D. (Ed.). (2005). *Cultural safety in Aotearoa New Zealand.* Auckland, New Zealand: Pearson Education New Zealand.

Werner, E. (1982). *Vulnerable but invincible: a longitudinal study of resilient children and youth*. New York, NY: Mcgraw-hill.

Whānau Ora Taskforce. (2010). *Report of the Taskforce on whānau-centred initiatives*. Wellington, New Zealand: Ministry of Social Development.

White, K. (1991). The sociology of health and illness [trend report]. *Current Sociology*, *39*(2), 1-134.

Wiersma , W. (1995). *Research methods in education: An introduction*. Boston: Allyn & Bacon.

Wilson, D. (2006). The practice and politics of Indigenous health nursing. *Contemporary Nurse*, *22*(2), 10-13.

Woolf, A. (2000). The bone and joint decade 2000-2010. *Annals of Rheumatic Disease*, *59*, 81-2.

World Bank. (2003). *World Development Report 2004: Making services work for poor people*. Washington, DC, USA: Oxford University Press for the World Bank.

World Health Organisation. (1986). *Ottawa Charter*. Retrieved from http://www.who.int

World Health Organisation. (2000). *Global Burden of Disease*. Retrieved from http://www.who.int

World Health Organisation. (2005). Promoting mental health, concepts, emerging evidence, In H. Herrman, S. Saxena, & R. Moodie (Eds.), *Substance Abuse* (pp. 2-5). Carlton, Melbourne: The Victorian Health Promotion Foundation and The University Of Melbourne.

World Health Organisation. (2007). *People-centred health care: A policy framework* . Retrieved from http://www.wpro.who.int

World Health Organisation. (2009). *Increasing access to health workers in remote and rural areas through improved retention*. Retrieved from http://www.who.int

Yin, R. (2003). *Case study research design and methods*. United States: Sage.

Appendices:

Appendix A: Glossary

Māori Terms

Aotearoa	New Zealand
hapū	sub-tribe
hauora	health
Hinenuitepō	well-known Māori character of narratives.
hui	gathering
Io	the parentless one, the supreme being.
iwi	Tribe
kaupapa Māori	Māori focused
koha gift	donation
Kuia	elder women
mana	authority
manaakitanga	caring
Marae	traditional focal and social place of learning, celebration, ceremony and meeting of Māori community.
Maui	well-known Māori character of narratives.
noa	free from restriction
Pākehā (non-Māori)	New Zealander's, usually of European descent
Rarohenga	well-known Māori character of narratives.
tapu	prohibition, restriction
te ao Māori	Māori world
Te Pae Mahutonga	Southern Cross Star Constellation
te reo	the language
te taha hinengaro	thoughts and feelings
te taha tinana	physical
te taha wairua	spiritual
te taha whānau	family and community
te Whare Tapa Whā	four walls of a house
te Wheke	octopus
tikanga	Māori procedure, custom
whakamā	shy, embarrassed
whakanoa	to free from tapu
whakapapa	genealogy

whakatauki	proverb, saying
whānau	family
whānaungatanga	kinship relationship

Osteopathy Terms

Accident Compensation Corporation (ACC)	A New Zealand (no- fault) Insurance company
Adrenal cortex	a part or structure of the kidney
Arthritis	inflammation of the joints
Autoimmune diseases	immune response of the body
Bone and Joint Decade	world-wide awareness campaign
Chronic back pain	Spine, muscle, intervertebral disc strain/sprain
Cortisol	a steroid (natural)
Musculo-skeletal diseases and disorders	a diverse group linked by the feature of pain
One-stop health shops	network of health services
Osteoarthritis	wear and tear degenerative arthritis
Osteopathy medicine	osteopathy medicine / Osteopathy
Osteopathy	a patient centred health care system
Osteoporosis	a progressive loss of bone density
Rheumatoid arthritis	auto-immune disease
Somatic dysfunction	impaired function of the body's structures
Stress	circumstance interrupting physiological or psychological functioning of an individual

Appendix B: Notice to attract practitioners

Covering Email:

Tena koe

Research project: How can osteopath practitioners contribute to rural Māori well-being with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand?

I have drawn your contact details from the public register of osteopath practitioners of Osteopathy Associations websites and/or from my community contacts.   I recently phoned your clinic and this email is the result of having checked with your staff/yourself that the email address is correct and acceptable for me to utilise it for this purpose.   Please find a Participant Information Sheet and Interview Schedule attached which explains the research project further.

Kia ora

Sharon Awatere

Appendix C: Interview Schedule

1. Tell me about your rural work setting?   Tell me about your Māori patients/community?

2. Where has the knowledge that you have about Māori health come from? Are there other sources of information you know about but may not use?

3. What is your experience in rural osteopathy?

4. Where did you train? What is your age?

5. How often would you work with Māori?

6. Where is your clinic based?

7. From your perspective do Māori patients have ready access to your services? What do you see as being key characteristics of good quality osteopathy that encourage that access?

8. What are some of the barriers? What do you think about affordability?

9. Do rural Māori patients have ready access to your services? How well do you think your training prepared you to work with Māori? How did you learn about the Treaty of Waitangi?

10. What are some of the barriers? How important is the way the osteopath appears to work with rural patients in terms of there being any difference to urban patients? Do you think that it is important for the osteopath to arrange for practical e.g. childcare or other support? What about the attitudes of rural patients, did you feel that there were any things which you had to tweak to gain trust from patients? How do the bulk of patients access your practice (e.g. word-of-mouth or otherwise)? Did you experience cultural or language barriers when working with Māori patients?

11. How can we improve the ways that we provide services to rural Māori communities? What is your view of advertising, in terms of reaching rural Māori?

12. What do you think about operating a whānau ora/one-stop shop model approach for providing services to rural Māori communities?   What do you think about osteopaths offering a range of services in addition to osteopathy, acupuncture etc.? Do you think it's necessary?

13. Is there anything else that you can think of that would make a difference in improving the access of rural Māori to osteopathy?

14. What holistic perspectives do think osteopathy holds, which may be in sync with Māori health and well-being?

15. What are your views of Māori health models? How was this knowledge was gained?

16. What are your views relating to the provision of informtion to rural communities which tie into Māori health and accessibility issues?

Appendix D: Ethical Approval

**Health
and
Disability
Ethics
Committees**

18 August 2010

Sharon Awatere
Massey University Student

Dear Sharon

Thank you for submitting an application for review which was received by our office on 12 August 2010. Upon review of your application, I can confirm that ethical approval for your study is not required under section 11.9 of the Ethical guidelines for observation studies. Your proposed study meets the exception of this clause, where ethical approval is not required for the collection of non-sensitive data in a health or disability setting in which participants remain anonymous, where undertaken by people employed or contracted by the service provider.

Please do not hesitate to contact me should you have any queries.

Yours sincerely

Claire Lindsay
Administrator
Multi-region Ethics Committee

Appendix E: Practitioners Information Sheet

Participant Information Sheet

Project: How can osteopath practitioners contribute to rural Māori well-being with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand?

Tena koe

I would like to invite you to participate in this project that will look at issues to do with your knowledge, attitudes and behaviours in relation to osteopathy practice and rural Māori patients. Upon completing this project I will be submitting the final report for consideration for my Masters thesis to complete my studies toward a Master of Health Science at Massey University. Your participation is entirely voluntary and you may withdraw from the project at any time without any penalty.

What is the purpose of this research?

The New Zealand Government has recently warned that many rural areas are currently under-served by the health system. Basic information about the way in which osteopathy practice is being delivered to rural patients of New Zealand (Hawke's Bay), may assist with improving health care for rural populations.   Recent research tells us that rural Māori have poor access rates to health care and poor health, like musculo-skeletal disorders.   However, not much is known about osteopathy knowledge, experiences and opinions of rural Māori patients in relation to these.   This project aims to find out what osteopath practitioners think about rural Māori patients accessing osteopathy care – to improve access rates for Māori to see that our clinics and health information being provided is appropriate and easily accessible for rural Māori.

How were you chosen for this invitation?

I have drawn your contact details from the public register of osteopath practitioners of Osteopathy Associations websites and/or from my community contacts. I recently phoned your clinic and this email is the result of having checked with your staff/yourself that the email address is correct and acceptable for me to utilise it for this purpose.

What will happen in this research project?

I would like to invite you to become a part of this process with an interview that will take up to 2 hours. Basically, this means we will sit down and have a chat discussing your views, what you think, and your opinions on issues related to Māori health. There are no right or wrong answers, I am interested in your honest opinion. I will be recording the interview so that I can type it up after we meet. Only my Project Supervisor and I will listen to the material. You will be given a typed version of the transcript.

What are the potential discomforts or risks to me?

As we talk, there might be information you share that is personal or sensitive and because of this anything you wish to tell me is to remain totally confidential. If you find the interview raises matters which are of interest to you then I can support you by helping to arrange further literature about Māori health for you free of charge.

What are the benefits?

The information you share with me will go directly toward recommendations that may lead to improvements in osteopathy rural health services, and educational material, for rural Māori. This in turn will contribute to reducing musculo-skeletal disorders and ultimately improve Māori health. You will also get a koha for your participation.

How will my privacy be protected?   All information that may personally identify you, like your name, address, phone number etc. will remain confidential and private at all times. Only my Project Supervisor and I will have access to identifying data. Identifying data will not be included in any research reports or presentations, and you will not be named. No one will know you have participated in the study unless you choose to tell them. Your personal details will only be used for this study.

What are the costs of participating in this research?

The only cost is your time, the interview will take up to 2 hours of your personal time.

What opportunity do I have to consider this invitation?

If you are interested in participating, pls return an email or text otherwise I will contact you again and I can tell you more about the study and you can ask me any questions. If you agree, we will schedule a time for an interview for sometime that week, or the following week. You are welcome to change your mind and withdraw from the project at any time without penalty – just contact me (phone, email or text) to let me know.

How do I agree to participate in this research?

You can let me know – Sharon Awatere - that you would like to participate in the study by phone, text, or email (see below for details). You will also need to sign and complete a consent form. I'll bring this for you to sign at the time of the interview.

Will I receive feedback on the results of this research?

On the consent form you can tick if you would like a copy of the report. If you tick 'yes', then I will send you a copy of the report at the end of the project, probably early 2012.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified (see details below).

Whom do I contact for further information about this research?

Contact Details for Researcher:

Sharon Awatere

sharonawa@2b23f.com

Mob. 0211 836 894

Contact Details for Project Supervisor:

Margaret Forster

Palmerston North. Telephone. (06) 356 9099 extn 7091.

Email, M.E.Forster@massey.ac.nz

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the Massey University's Human Ethics Committees. The researcher named above is responsible for the ethical conduct of this research If you have any concerns about the conduct of this Masters thesis research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director, Research Ethics, telephone 06 350 5249, email humanethics@massey.ac.nz.

Appendix F: Consent form

Consent Form

Project's focus: *How can osteopath practitioners contribute to rural Māori well-being with a specific focus on the knowledge, attitudes and behaviours of osteopath practitioners practicing in New Zealand?*

Project Supervisor: Margaret Forster
Researcher: Sharon Awatere

★ I have read and understood the information provided about this research project in the information sheet.

★ I have been given the chance to ask questions and have had these answered.

★ I have understood the interviews are to be recorded and transcribed.

★   I can withdraw from this project and the information which I provide at any time prior to the data collection being completed, without any problems.

★   If I do withdraw, all relevant information including tapes, transcripts and anything pertaining to this will be destroyed.

★ I agree to take part in this project.

★ I would like to receive a copy of a report from the research
Pls tick:

                              Yes   ❏   No   ❏

     Participant signature:

     Name (pls print)

     Contact details (if you would like a copy).

     Date: