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The interaction and tensions between Traditional Chinese
medicine and Western medicine: Biomedical ontologies and
epistemic authority in New Zealand

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Brittany Laurel Palatchie

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Abstract

In 2010, traditional Chinese medical groups put forward an application to become a regulated profession in New Zealand, sparking debates over the place of traditional Chinese medicine (TCM) in New Zealand's healthcare sector. This thesis examines this debate over regulation as a lens through which to understand the epistemic tensions between biomedicine and TCM, and the challenges TCM practitioners face in their practice in New Zealand. Theoretically, I draw on Neo-Weberian frameworks of social closure and Bourdieu's framework of symbolic violence to examine the material and symbolic forms of social closure that western medicine utilises to create boundaries between western and TCM.

I carried out semi-structured interviews with five TCM practitioners in Auckland, New Zealand and analysed these interviews to elucidate the ways that TCM practitioners understand and navigate the challenges of practicing in New Zealand. I also carried out an extensive document analysis of all thirty-five submissions made to the Ministry of Health regarding TCM's application for regulation under the Health Practitioners Competence Assurance Act of 2003 (HPCA Act). My document analysis found that western medicine maintains dominance in New Zealand's medical sphere through material and symbolic forms of social closure. All forms of social closure are underpinned by the public safety discourse associated with positivist frameworks of medicine; however, the symbolic forms of social closure also illustrate the ethnocentric prejudice working against TCM.

The western medical sector has questioned whether TCM fits the safety and efficacy criteria of evidence-based medicine, which depend on randomised control trials to establish whether medical treatments are safe and effective. This public safety discourse aligns with positivist epistemologies of health and has largely worked against TCM. Positivist methodology has been deemed as the "gold standard" which has undermined TCM practice, with western practitioners questioning the safety, efficacy, and in turn the legitimacy of TCM. These forms of social closure impose Eurocentric standards of practice on TCM that have created numerous challenges for TCM practitioners in their daily practice.

My interviews with TCM practitioners revealed the different ways practitioners navigate the challenges of working in a biomedical society. While tensions between western and TCM are evidenced in the divergent epistemologies of health, tensions have also emerged within the Chinese medical community as younger and older generation practitioners navigate the challenges they face as a consequence of the various forms of social closure enacted upon them. These tensions are exacerbated due to the different understandings younger and older TCM practitioners have around TCM's place in New Zealand society and the precariousness of modernity.

I conclude that while regulation is unlikely to resolve the epistemic tensions between western and TCM, it is a step toward overcoming the epistemic hierarchy and the subsequent challenges that stem from New Zealand's medical hierarchy. As regulatory discussions are ongoing, this research is timely and could assist in policy discussions by highlighting the different challenges and perspectives of TCM practitioners, particularly given that the hegemony of western medicine and its positivist rhetoric that has largely undermined TCM's legitimacy and the voices of TCM practitioners.

While regulation is often seen as a way to manage both systems, existing regulatory systems have catered to the management of western medical practice, not TCM. Thus, incorporating TCM into mainstream healthcare frameworks may not necessarily lead to a more pluralistic healthcare system and needs to be carefully considered; particularly due to the different opinions from both western and TCM practitioners around what is best for TCM moving forward in New Zealand.

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Abbreviations

ACC - Accident Compensation Corporation

CAM – Complementary and Alternative Medicine

DHB – District Health Boards

EBM – Evidence Based Medicine

HPCA Act – Health Practitioners Competence Assurance Act (2003)

MACCAH - Ministerial Advisory Committee on Complementary and Alternative Health

MoH – Ministry of Health

NZNO - New Zealand Nurses Organisation

PHARMAC - Pharmaceutical Management

PHOs - Primary care organisations

RCT's – Randomised Control Trials

TCM – Traditional Chinese Medicine

Chapter One - Introduction

1.1 Background of the Study

With discussions proceeding between the Ministry of Health (MoH) and western and Chinese medical sectors around regulating TCM in New Zealand, the role of complementary and alternative medicine (CAM) being initiated into public healthcare has become increasingly debated. One of the key debates argued by western practitioners, is that CAM should follow the same scientific public safety discourse as western medicine. This involves undertaking randomised control trials (RCT's), which are considered "gold standard" to determine the safety and efficacy of CAM treatments. This scientific discourse is based on positivist epistemology, and more often than not it is positivist frameworks that guide mainstream healthcare systems worldwide. However, many CAM modalities have different ways of knowing whether their treatments are safe and effective, such as through rigorous personal studies, individual life experiences, and anecdotal evidence through the personal testimonies of patients. In comparison, CAM epistemologically aligns with holism as its evidence base is pragmatic rather than scientific. These epistemic differences have created tensions between different medical professions as the pressure to conform to positivist frameworks may be conceptually incompatible with certain CAM modalities. Subsequently, CAM modalities may struggle to have their knowledge validated, and in turn their practice is undermined and claimed to have not met the same safety and efficacy standards as western medicine.

This thesis sought to determine whether epistemic tensions exist between western and TCM in New Zealand and whether these epistemic tensions have created any challenges for TCM practitioners working in New Zealand's biomedical society. This thesis examines the different ways that western medicine has come to dominate New Zealand's mainstream healthcare sector, drawing on Neo-Weberian frameworks of social closure and Bourdieu's framework on symbolic violence, to provide a lens for the material and symbolic forms of social closure that western medicine utilises to create boundaries between western and TCM. Although multiple forms of social closure are unpacked throughout the thesis, they all relate back to the public safety

discourse of positivism. The social closure that is enacted against TCM practitioners has created challenges for them in their daily practice. In trying to navigate these challenges, tensions that were once expressed between western and TCM have now emerged within the TCM community as younger and older generation practitioners have different views on TCM's place within New Zealand. This thesis examines these tensions and provides insight into the complexity of being an alternative medical provider in a biomedical society. While regulation is often seen as a way to manage both systems, existing regulatory systems have catered to the management of western medicine, not TCM. Thus, incorporating TCM into mainstream healthcare frameworks may not necessarily lead to a more pluralistic healthcare system and needs to be carefully considered.

1.2 Research aims and objectives

This study aims to examine how TCM practitioners practising in New Zealand have navigated working in a biomedically dominant society where positivist epistemologies are endorsed in mainstream medicine. Moreover, it seeks to determine whether TCM practitioners have encountered any challenges in their time practising TCM in New Zealand. The specific research questions include:

- What challenges, if any, do TCM practitioners face in their practice in New Zealand?
- Do TCM practitioners feel there are epistemological struggles between TCM and western medicine, and if so, what are these struggles?
- What political determinants in New Zealand work in favour of, or against, TCM?

The research for this thesis focuses on the epistemic tensions between western and TCM practitioners in context to New Zealand. Medical epistemologies and existing research around epistemic tensions are relayed within the literature review.

1.3 Research gap

Research on medical epistemologies, and the tensions between different medical systems due to epistemic differences, has primarily been explored outside of New Zealand. Literature on medical epistemologies has explored numerous areas of interest, exploring how professional knowledge is relayed to patients and how patients can become knowledgeable through online epistemic communities. For example, online forums that discuss medical diagnoses and information (Bellander & Landqvist, 2020). Additionally, research has explored the development of health social movements, as patient advocacy groups are challenging existing medical authorities and epistemic claims. This has led to a form of counter-expertise as new medical knowledge emerges from CAM communities (Hess, 2004; Salamonsen & Ahlzen, 2017). Alongside this, research has looked into the ways CAM has been forced to follow an evidence-based approach and how epistemic tensions are navigated in university departments, as described in a study by Brosnan (2016) looking at osteopathy and Chinese medical departments across five Australian universities.

Moreover, researchers have examined the challenges associated with the regulation of CAM due to the epistemic tensions between western medicine and indigenous knowledge systems (Ijaz & Boon, 2017), and have discussed how regulatory processes will have to be adapted if traditional medicine is regulated within an evidenced based regulatory structure (Cloatre, 2019). Lastly, Chinese medical epistemology has been evaluated across time, with literature looking at how historical changes have affected TCM's epistemology as western medicine became the world's largest medical authority and became legitimised due to its alliance with evidence-based epistemics (Chiang, 2015).

New Zealand-based literature is limited, with only one study having looked at epistemological tensions through the health disparities that exist between Māori and Pākehā populations. The authors of the article argued how health disparities for Maori were a consequence of western practitioners lacking the cultural competency necessary to address Maori healthcare needs (Cram et al., 2006). However, New Zealand CAM studies that spoke to this research more broadly, include studies that focus on the benefits of CAM for specific ailments (Smith et al., 2014), the

demographics of New Zealand CAM users and those in the CAM workforce (Leach, 2013), the use of CAM in New Zealand's child populations (Wilson et al., 2007), the regulation of CAM in New Zealand (Ghosh et al., 2006), patient perspectives regarding their use of CAM (Evans et al., 2008; Nicholson, 2006; Trevena & Reeder, 2005), discussions regarding the emergence and growth of CAM in New Zealand (Duke, 2005; Gilbey, 2009), the co-optation of CAM in New Zealand (Baer, 2015), and general practitioners attitudes toward CAM (Poynton et al., 2006). Each of these areas of interest speak to the role of a CAM modality, such as TCM, being utilised in a western society.

To my knowledge, this research is the first to examine the epistemic tensions that exist in New Zealand between western and TCM, along with the different ways that western medicine has come to dominate New Zealand's mainstream healthcare sector through the various forms of social closure enacted against alternative medical modalities, such as TCM. Moreover, it is the first study to draw on the perspectives of TCM practitioners, to determine the challenges of working in a biomedical society where different medical epistemologies are being upheld and practiced. Not only does this research contribute to existing literature on medical epistemologies, but it newly adds to these conversations due to its theoretical framework.

1.4 Structure of Thesis

Chapter Two: is a review of the literature and is presented in two main sections. Part one defines the ontologies and epistemologies of western and TCM making the differences between both medical systems clear. Its purpose for distinguishing these differences is in order for the reader to see how western medicine has been granted epistemic authority in New Zealand and is privileged over other medical models with different epistemological viewpoints. Part two looks at the structural factors that have led to the dominance of western medicine in New Zealand. For example, the historical actions taken by colonists that bolstered the use and acceptance of western medicine in New Zealand, as well as aspects of the political economy, such as New Zealand's funding mechanisms which favour the use of western medicine through legislative endorsement.

Chapter Three: introduces the methodological framework of this study. In this chapter I explain my qualitative research and the inductive interpretivist approach I utilised when conducting my semi-structured interviews and document analysis. The document analysis consisted of information obtained through my Official Information Request from the MoH. It also included secondary data obtained from the MoH, involving thirty-five submission documents that were compiled from various medical organisations in New Zealand, detailing their responses on whether it is appropriate to regulate TCM under the HPCA Act.

Chapter Four: is the first results chapter and examines how western medicine maintains dominance in New Zealand's medical sphere through material and symbolic forms of social closure. I analyse and apply neo-Weberian theory to examine the three primary ways that social closure occurs materially. I then analyse and apply Bourdieu's theory of symbolic violence to examine the three ways social closure occurs symbolically. All forms of social closure are underpinned by the public safety discourse that comes with positivist frameworks of medicine, however, the symbolic forms of social closure also illustrate the ethnocentric prejudice that is at play against TCM. These material and symbolic forms of social closure were largely determined through my analysis of the MoH submission responses.

Chapter Five: documents the second set of results and examines how, in trying to navigate the challenges of working in a biomedical society, tensions have emerged not only between western and TCM practitioners, but within the Chinese medical community. This chapter lays out four challenges faced by the Chinese medical community and will document how different TCM practitioners navigate these challenges. Because TCM practitioners have different personal experiences practising in New Zealand the challenges they face can differ. This has resulted in contrasting opinions regarding TCM's place within New Zealand's medical sector, particularly between younger and older generation practitioners. The findings from this chapter were largely determined through my analysis of the interview transcripts.

Chapter Six: concludes the thesis and provides the MoH with potential recommendations around the regulation of TCM in New Zealand. I conclude that while regulation is unlikely to resolve the epistemic tensions between western and TCM, it

is a step toward overcoming the epistemic hierarchy and the subsequent challenges that stem from said medical hierarchy.

Chapter Two – Literature review

2.1 Introduction

Western medicine has become the dominant medical model used across the world, with its ontological and epistemological frameworks often been held in higher regard by western practitioners in comparison to other medical modalities. When looking at the ontologies of healthcare, the idea is to try and understand what different medical systems exist and what these different medical systems look like. As for the epistemological frameworks, this refers to the bodies of knowledge different medical modalities abide to and the different frameworks of understanding that different healthcare practitioners follow. Understanding the ontological and epistemological diversity in medicine is critical in understanding the foundations of different medical systems. Part one of this literature review discusses the ontologies and epistemologies of western and TCM and illustrates how tensions between each healthcare profession have arisen due to their ontological and epistemological differences. Following this, part two will explore how western medicine has asserted dominance over New Zealand's mainstream healthcare sector.

Part one: The ontologies and epistemologies of medicine

2.2 The ontology of western medicine: What is western medicine?

Western medicine, also known as biomedicine, orthodox medicine, modern medicine, conventional medicine and allopathic medicine (Amzat & Razum, 2014), is a medical system that in contemporary society follows western, experimentally validated frameworks. These frameworks are highly regarded by western medical professionals, and oftentimes the public, due to scientific tests that have been conducted through randomised control trials (RCT's) that validate its use. Before exploring western medicine's place in contemporary society, it is useful to examine the historic moments that have led western medicine in the direction of a scientific ontology of health.

Prehistorically, what is now known as western medicine, took a prescientific, holistic, and spiritual approach to medical care, much the same as other medical modalities at the time. A patient's disease manifestations were often treated holistically with plants and herbal remedies, and consideration was given to the spiritual elements of disease. However, spiritual viewpoints were challenged, and in 400BCE, Hippocrates, also known as the father of western medicine, proposed the idea of disease being the result of natural not supernatural phenomenon. In his medical works, "On the Sacred Disease", Hippocrates claimed, "it [disease] appears to me to be nowise more divine nor more sacred than other diseases but has a natural cause from which it originates like other affections" (Mantri, 2008, 177). Such an idea was considered radical and was not widely accepted by others, however, at the time there were restrictions on cadaver dissections which could help prove Hippocrates's case. Mantri (2008) discusses this limitation:

"The dissection of human cadavers was forbidden on religious grounds. Instead, physicians relied primarily on logic and philosophy to explain disease. The central tenet of the theory was the belief that illness resulted from imbalances among the humors – blood, black bile, yellow bile, and phlegm. The physician's role was to diagnose the problem and tell patients how to restore their humoral balance and thus heal themselves" (177).

The humoralist system of medicine was later advanced by Galen, a Roman anatomist who studied pigs and, as stated by Mantri (2008), is credited for:

"Associating each humor with a personality. Certain temperaments were considered to be predisposed to illnesses of their humoral type, especially if the illness seemed to be triggered by emotional shock. Hippocratic-Galenic medicine was integrative, proposing a synergistic and individual relationship between each patient's body, mind, and personality and the outside world" (177).

The Hippocratic-galenic approach dominated medicine until approximately 1539, when Andreas Vesalius, a Belgian physician, was legally granted permission to

“dissect executed criminals” (Mantri, 2008, 177). Subsequently, anatomical understandings grew following the empirical studies that were conducted and as Mantri (2008) explains, “the mind-body-personality connection that was so fundamental to Hippocratic-Galenic medicine was rapidly abandoned” (p. 178). Philosophical and traditional discourses of medicine were overcome by scientific discourses, particularly following technological advancements which further changed how pathologic and morbid anatomy was understood. This shift toward science was evident during the enlightenment period during the 1700’s, although grew rapidly during the 19th century; as stated by Hess (2004):

“The relationship between medicine and modernity can be traced back to the rise of empiricism and experimentalism in the 17th century, but it is more often associated with the rise of institutionalised biomedical research in the late 19th century, its adoption by a medical profession, and the development of state support for the hegemony of biomedical research” (p. 695).

Mantri (2008) argues how “scientifically grounded explanations [have] sparked an era of experiment-based medical progress, [which has enabled] the physician [to] take an active role in treating disease” (p. 178). This acceptance of science saw western medicine become biomedicine, as its scientific orientation ruptured and rejected past medical philosophies and traditions. Moreover, this shift toward a scientific ontology of healthcare is evidenced in one of many pivotal moments in western medicine’s history and modernisation, the discovery of the germ theory of disease (Daniels & Nicoll, 2011).

The germ theory of disease states how specific microorganisms, which are unseen to the naked eye but are visible through the use of microscopic tools, can grow and multiply within the human body causing disease (Magner, 2009). Knowing this, scientists and medical professionals sought to determine how to avoid microbes from coming into contact with people, changing the way diagnostics and treatments were conducted in western medicine. Disease prevention measures were identified with medical and surgical asepsis, also known as sterile techniques, becoming central to limiting the risk of infection and disease. Asepsis is the term used to describe an

absence from pathogenic microorganisms, “aseptic technique is the purposeful prevention of the transfer of organisms from one person to another by keeping the microbe count to an irreducible minimum” (Wound, Ostomy and Continence Nurses Society, 2012, p. S30-S31).

Achieving asepsis is a major part of western medicine and its pursuit of sterile clinical environments. When a patient visits their general practitioners office, or goes to hospital, these environments are well ordered and clean, with protocols in place to minimise the transmission of disease between people (Kaye, 2011). Asepsis is also pertinent in surgery where numerous protocols are in place to create a sterile field in order to protect patients from the transmission of microorganisms during surgery (Gruendemann & Mangum, 2001). Because scientists have a greater understanding of the etiology, cause or set of causes, of disease, patient treatments have changed through the likes of antibiotics which destroy microbes, as well as the creation of vaccines which have low or attenuated doses of a microbe to help challenge and build the body's immune system response to prevent systemic infection (Krasner & Shors, 2014).

The germ theory is essential in understanding the science behind communicable disease, and while the germ theory of disease still underpins contemporary medical inquiries and research, today there have been greater efforts to try and understand how western medicine can treat non-communicable diseases. These non-communicable diseases include cardiovascular disease, cancer, autoimmune diseases, and diseases that are brought on by lifestyle factors (Conrad et al., 1995). Pharmaceutical industries spend billions of dollars annually on scientific research and sales programs that are invested in creating viable medications for both communicable and non-communicable diseases, and ensuring they are made available to the public (Ho & Gibaldi, 2013). As well as pharmaceutical treatments, radiation and surgical treatments are the therapeutic foundations of western medicine. Before prescribing treatments, western practitioners will assess which treatment options are best for a patient based on their symptomology, and if required, will conduct laboratory testing such as blood or image tests to help determine the causal factor of illness. Western practitioners typically reduce a patients symptoms to a singular cause following their

evaluation, and from there, will decide which medical treatments are suitable to stop the progression of a disease in order to cure it.

In this respect, western medicine's diagnostic approach is reductive (Cooter & Pickstone, 2000), focussing primarily on the physical and biological determinants of health. As Baer (2015) argues, "the germ theory downplayed the role of political-economic and social-structural determinants of disease focusing on biological determinants" (p. 12). If these determinants are considered, it is generally done so by partnering western professions, such as psychologists, who are increasingly becoming aware of stressors to health that aren't biological (DeAngelis, 2017). Nevertheless, frontline western practitioners typically overlook such factors.

2.3 The ontology of Traditional Chinese Medicine: What is Traditional Chinese Medicine?

The ontology of TCM is complex, with various philosophical and diagnostic principles underpinning TCM practice. For the sake of simplicity, only the key principles illustrating TCM's ontological frameworks will be mentioned. TCM is a traditional holistic healing system developed by ancient Chinese people and is rooted in ancient philosophical thought around Tao and yin and yang (Kastner, 2009). Taoism, as relayed by Jing (2020), is understood as "the absolute principal underlying the universe, combining within itself the principles of yin and yang signifying the way, or code of behaviour, that is in harmony with the natural order of the universe" (p. 233). Early Chinese medical thought was greatly influenced by Tao and the yin and yang theory, with both emphasising harmony and co-operation with nature, and the idea that all relationships are complementary" (Leung, 2008, p. 1). The yin and yang theory describes elemental opposites, for example, "yin is a negative state associated with cold, dark, stillness and passivity while yang is a positive state associated with heat, light and vigour" (Kayne, 2009, p. 417).

In TCM the human body must remain in a balanced state otherwise disease or disharmony can occur due to the bodies internal imbalance of yin and yang. These imbalances within the body can lead to a blockage in the flow of qi, one's vital life energy, which is said to circulate through the bodies meridian system, the channels

that connect to the bodies organs and support the bodies overall functioning (Diamond, 2000). Stress to the flow of qi is considered the causal factor in any disease, when an individual's qi is deficient pathogens can enter the body causing disease. This is in contrast to western medicine where the causal factor of any disease are pathogens, not stress to one's qi (Chen, 2004).

Once an individual becomes sick, there are multiple factors that are said to have initiated the blockage. TCM practitioners will examine the whole person including one's mind, body and spirit when trying to establish the cause for disharmony in the body. Again, the idea is that all areas of one's life must be in balance in order for the body to be in a state of harmony and good health (Cohen et al., 2007). The most common determinant for disharmony, as stated by Chen (2004), is between the interior human body and the exterior environment. Interior and exterior are two principles that are used to measure disease, they are of great importance for identifying externally contracted diseases since disease rarely invades the interior without first passing through the exterior (Brand & Wiseman, 2008). For instance, where a person lives and spends the majority of their time can affect their health, along with the six atmospheric external forces that are also recognised in TCM for their role in health and wellbeing. These six atmospheric external forces include the wind, cold, summer heat, dampness, dryness, and fire (Lu, 2005). It is said that human beings acclimate to changes that happen in their external environment, this ability to acclimatise helps the body "maintain a dynamic balance between yin and yang to avoid the attack of pathogens" (Chen, 2004, p. 3-4).

TCM treatments include acupuncture, meditation, tai chi exercises, moxibustion, and herbalist medicines including plant derived teas, powders or capsules. These treatments will be selected depending on what the practitioner believes will bring the body back into a state of harmony (Zhaoguo et al., 2019). The diagnostic process of prescribing these treatments is inductive, with the practitioner taking into account various contextual factors of an individual's life prior to prescribing treatment (Leung, 2008). This is perhaps the biggest ontological difference between western and TCM that needs to be differentiated, western medicine's diagnostic process is deductive and TCM's diagnostic process is inductive.

2.4 The ontological influence on an individual's medical reality

Medical systems are a reflection of societal healthcare beliefs and practices, and they can “offer a particularly valuable perspective with respect to a society's collective world-views” (Baranov, 2008, p. 18). The ontology of western medicine has reduced “health-related phenomena almost exclusively to the natural world” (Baranov, 2008, p. 18). Johannessen and Lazar (2006) elaborate on this idea, stating how “in naturalistic ontology the human body as a natural medical object is disengaged from society, culture, emotion, and particular place and time” (p. 185). This is in contrast to the “worldviews expressed by the pluralistic medical systems” (Baronov, 2008, p. 18) such as TCM, that consider the intersections between the natural, supernatural and social worlds. By understanding the ontological differences in medicine, one can see how an individual's embodied medical reality may differ to someone else's. This is due to different people negotiating their health in different ways, often in line with their cultural world views and their respective healthcare system. Not all medical realities share the ontological commitments of western medicine; there are other ontologies of what health is and different worlds in which the health and disease process takes place. This is important to remember, particularly in western societies where western ontologies of health are mainstream and hegemonise the ontologies of TCM or other holistic medical modalities

2.5 Epistemological tensions between divergent medical modalities

Epistemological beliefs are the understandings that people have regarding knowledge claims and what can be known. Epistemology looks at the ways new knowledge is determined and how knowledge is “perceived and processed” (Roex & Degryse, 2007, p. 616). While ontology looks at the “what”, epistemology explores the “how”, such as how we come to know and understand different medical modalities and how we can prove the validity of certain medical treatments. As mentioned earlier, different medical modalities have different epistemological beliefs, western medicine is scientific in nature therefore epistemologically it aligns with positivism (Adams, 2013). TCM is rooted in philosophical and traditional worldviews, therefore epistemologically it aligns with holism (Jiuzhang & Lei, 2009). This subsection makes the distinction between positivism and holism and illustrates some of the tensions between these two different

ways of knowing. The tensions between these epistemic positions is central to this research, showcasing how positivism functions to undermine holistic ways of knowing and in turn holistic medical practice.

2.5.1 Understanding the epistemological conceptions of positivism

Positivist approaches are rooted in the sciences with researchers relying on quantifiable empirical evidence that can reproduce the same results (Ryan, 2018). These results are presented statistically and mathematically to confirm or deny particular hypotheses (Ryan, 2018). One of the key tenets of positivism is that there is always an underlying scientific principle that can explain a causal effect. Additionally, positivists consider themselves neutral observers who must strive for objective analysis and refrain from inserting moral judgements or subjective opinions (Ryan, 2018). This lack of association and interference with the research and its subjects is seen to strengthen the validity of scientific research findings. For the positivist, knowledge that hasn't gone through the rigor of quantifiable analysis cannot be considered reliable.

Positivist frameworks in contemporary medicine promote the randomised control trial (RCT) as the “gold standard” methodology for ascertaining whether specific treatments work. Participants are randomly assigned to one of two groups, one group will be the experimental group which will receive the intervention that is being tested, the other group, the comparison or control group, will receive an alternative or placebo treatment (Kendall, 2003). A follow up then occurs between each group to determine whether there were any differences between them in outcome. To reduce subjective bias, neither the researcher nor the subject knows which treatment they have received. Kendall (2003) explains that, “RCTs are the most stringent way of determining whether a cause-effect relation exists between the intervention and the outcome” (p. 164).

When researchers identify a causal link between a disease, a specific intervention, and a specific clinical outcome, the evidence is considered superior and is given hierarchal credibility over other sources of knowledge. One critique of positivism is that on occasion the best evidence is not entirely objective or experimental. Critics, including alternative practitioners, have argued that there are non-scientifically

measurable determinants that can impact an individual's medical reality, such as social, cultural, and institutional contexts. In the everyday practice of western medicine, these factors are ignored as positivism guides diagnostics, with western practitioners making a determination of a patient's disease by reducing a patient's symptoms to one proximate biologic cause. As Ahn et al., (2006) explain:

“A young immuno-compromised man with pneumococcal pneumonia usually gets the same antibiotic treatment as an elderly woman with the same infection. The disease, and not the person affected by it becomes the central focus. Our contemporary analytical tools are simply not designed to address more complex questions, and, thus, questions such as how do a person's sleeping habits, diet, living condition, comorbidities, and stress collectively contribute to his/her heart disease? remain largely unanswered” (p. 0709).

This is where critics call for psychosocial diagnostics in western medicine. George Engel's biopsychosocial model of care emphasises not only the standard biological determinants of health, but psychosocial determinants such as a patient's personal, emotional, spiritual, family and community circumstances. Smith (2002), argues that “by integrating these multiple, interacting components of the subject of our science, the patient, we also become more humanistic, we link science and humanism” (p. 309). However, there has been hesitancy toward integrating psychosocial factors into western diagnostic and therapeutic systems, with some doctors claiming that it is impractical (Sadler & Hulgus, 1992), goes beyond their role with “social problems, housing difficulties and welfare rights [being] deemed [as] inappropriate for presentation to and management by a general practitioner in general practice” (Dowrick et al., 1996, p. 107), or clashes the commitment western practitioners have toward evidence-based medicine (Summerskill & Pope, 2002).

Because many western practitioners are unwilling to incorporate a biopsychosocial model into their diagnostic frameworks, another criticism of western medicine is that it is instrumentally focused on medicalising society. Medicalising society serves the interests of western medicine, as it ensures that patients repeatedly return to western practitioners for treatment due to their conditions being treated medically. Additionally,

it benefits the industry financially with repeated clientele utilising western treatments. One argument against medicalisation, is that western practitioners are largely ignoring factors that could be at the core of an individual's health problems, psychosocial problems that may not need to be treated medically.

The medicalisation thesis posits that there is a growing number of conditions and experiences in daily human life that are being classified and understood through a medical lens, with medically related expertise guiding the assessment of these conditions (Bodea, 2016). Medicalisation can be seen in normal life cycle events such as birth, death, ageing, and menopause, all of which are increasingly being dealt with medically. Medicalisation has also been thought of as the over-medicalisation of medical problems, with medical practitioners controlling the course of patient care through drugs and surgeries (Conrad & Letter, 2003). The alternative diagnostic approach would be one that is de-medicalised, such as the aforementioned biopsychosocial approach. This would involve doctors considering alternative causal factors of illness, factors that may fall outside of the typical biological markers that western practitioners focus on. Instead, doctors may try to determine how a non-medicalised approach could better suit the patient, particularly if the root problem isn't biological. Moreover, de-medicalised approaches are known for the collaboration that occurs between both practitioner and patient, empowering patients to take ownership over their healthcare needs, rather than having patients rely on their doctors to make their decisions for them.

Conrad and Letter (2003), argue that "by expanding medical jurisdiction, medicalisation has increased the social control function of medicine" (p. 7). Philosopher Ivan Illich looks at this form of social control, with much of his work condemning the medical profession for causing the public to become unnecessarily dependent on western medicine. This dependency, Illich claims, serves the western medical sectors greater financial interests. Illich states how medicine has become a "capital-intensive commodity production ... a prolific bureaucratic programme based on a denial of each man's need to deal with pain, sickness and death" (Illich, 1975a; cited in Bunker, 2003, p. 927). Moreover, Illich (1976), argues that the medical profession has persuaded the general public that physicians are the gatekeepers of invaluable knowledge, and that they hold the expertise necessary to treat health

related matters. By placing confidence upon physicians, the medical profession has jeopardised the general public's ability to be seen as knowledgeable about their own health care. This has led to patient's becoming reliant on the scientific expertise of their doctor which in turn financially benefits the western medical sector by causing patient dependency.

CAM practitioners are known for their diagnostic approach which incorporates psychosocial factors into their analysis of patients. TCM is one of these modalities. However, CAM has come under scrutiny from scientific communities who claim that CAM practices are pseudoscientific quackery, that there is little or low-quality evidence to support the practices used, that CAM practitioners are driven by profit motives rather than the duty of care, and that there are risks to public safety with CAM use (Lewis, 2019). Wolpe (1999) raises an interesting point, claiming that scientific discourses have "allowed allopathy to create a monopoly over definitions of what is scientific" (p. 224), and subsequently what is considered legitimate medical knowledge and legitimate medical practice. Additionally, Winnick (2005) states that "as the sole arbiter of science, allopathic medicine is able to blithely dismiss competing philosophies and treatments as unscientific. More importantly, they are also able to align themselves with the state and seek its protection over their work" (p. 40). These last two sentiments of Winnick's regarding the monopoly of what is scientific, and the state's protection of western medicine and its alignment with evidence based medicine, can be explained through two different sociological theories. These theories, Neo-Weberian thought and Bourdieu's theory of symbolic violence, provide insight into how positivist ideologies dominate mainstream medicine.

Neo-Weberian theory has been used to understand aspects of professional development, such as how professional groups achieve market control against competing professions. According to neo-Weberianism, market control is achieved through social closure, which involves exclusionary efforts undertaken by certain groups as they impose certain limits on other professions (Saks & Adams, 2018). Some professional groups will acquire state approval and support through lobbying efforts which, Saks and Adams (2018) state, enables them to "maintain various forms of legal monopoly. This results in western medicine acquiring a privileged place in the

market for their services in terms of income, status and power” (p. 63). In medicine, social closure is witnessed in the boundaries created between western and TCM.

The formally established scientific ontologies of medicine have functioned to legitimise western medicine as a status community, and by gaining state support, western medicine has been able to professionalise in New Zealand by registering under the HPCA Act, through legislative public policies that endorse western medicine, and through the allocation of resources that the state provides to western medicine, the likes of which are not offered, or are only partially offered, to other medical modalities. Given that other medical modalities may not be able to practice under positivist discourses, they are shut out of New Zealand’s mainstream medical sector. Subsequently, other medical modalities do not have the same market control and monopoly that western medicine does as they are forced to practice outside of mainstream healthcare situations. The key premise of neo-Weberianism is the market closure initiated by groups of elite social status and subsequently the stratification that occurs between different social groups. Examples of social closure are elaborated in chapter four, but social closure has been mentioned here to illustrate that positivism excludes other medical modalities through the boundaries of scientific medical expertise.

As for Bourdieu’s theory of symbolic violence, his ideas complement Weber’s, in that Bourdieu “interprets Weber’s contrast between class and status in terms of a distinction between the material, or economic, and the symbolic. He maintains that these should not be viewed as alternative types of stratification giving rise to different types of social collectivities” (Weininger , 2005, p. 84). For Bourdieu, class analysis and stratified communities cannot be thought of entirely from the economic standpoint that Weber considers. This is because there are symbolic determinants that must also be accounted for, “roughly along the lines of the status communities referred to by Weber” (Weininger , 2005, p. 84). When referring to symbolic violence, Bourdieu is discussing forms of violence that are less conspicuous than overt forms of violence. While symbolic violence can still be detected by the oppressed it is generally considered less easy (Brown & Szeman, 2000). Roumbanis (2019) states how:

“Symbolic violence is fundamentally based on organisational structures of domination and asymmetrical social relations – an idea that Bourdieu and Passeron (1977) started from when they conducted their now famous study on the French educational system. In their study, they showed how teachers, by virtue of their given authority, reproduced class differences, that is, how they perpetrated symbolic violence through their everyday interaction and communication with their students” (p. 202).

In medicine, symbolic violence is enacted through the numerous ways western medicine undermines TCM through their own interactions. These interactions will be discussed in chapter five, but like neo-Weberian theory, is mentioned here to outline how positivist discourses create boundaries between the professions by demarcating expert knowledge from inexpert knowledge.

2.5.2 Understanding the epistemological conceptions of holism

The epistemological frameworks of holism are often thought of in opposition to positivism as holistic frameworks aren't typically scientific. Supporters of holism recognise that positivism cannot always explain the complexities of human experience given that scientific discourses try to minimise the human element in medicine (Regenmortel & Hull, 2002). Holism considers the whole person, as Diamond (2000) states, “the person is seen as an integrated whole, as body-mind-soul, an extended, more mystical and metaphysical concept of the whole, an integral part of his or her environment and surroundings including the universe” (p. 6). Because holism steers away from reductionism, its knowledge base differs from western medicine in that rather than knowledge being determined through curated experimental RCT's, holistic practitioners primarily rely on rigorous personal studies, individual life experiences, and anecdotal evidence through the personal testimonies of patients (Yang & Monti, 2017). Through these means of analysis, TCM practitioners have assessed TCM treatments across time, and have been able to establish the safety and efficacy of TCM treatments through repeated successful results or otherwise.

That is not to say that TCM doesn't have scientific evidence to support its medical treatments, as it does. In recent years, TCM practitioners have tried to produce scientific evidence alongside the growing demand from western practitioners for TCM to conduct scientific tests (Leung, 2015). Providing scientific evidence for TCM has been seen as a way to legitimise the profession (Brosnan et al., 2018). However, legitimising TCM in line with positivist frameworks showcases the hegemony of western medicine and the power western medicine has over the production of medical knowledge (Barcan, 2013). It also illustrates how TCM is currently viewed as illegitimate medicine because it doesn't meet the standards of evidence that western medicine expects of all medical modalities. What makes this all the more challenging for TCM practitioners, is that scientific methodologies are largely incompatible with TCM (Hong, 2016).

Because TCM is conceptually different to western medicine, it is sometimes difficult for TCM practitioners to follow positivist frameworks. For example, Shea (2006) explains how TCM diagnoses illness differently to western medicine, and can have multiple patterns and syndromes of what has caused illness. Subsequently, it can be hard for TCM practitioners to focus on one causal factor to undertake scientific experiments on, or could take considerable time to locate individuals who all happened to have the same syndromes. Shea (2006) states how:

“Diseases seen as distinct in biomedicine may be diagnosed as the same syndrome in TCM, and distinct syndromes in TCM may be diagnosed as the same disease in biomedicine. It is impossible to conduct valid RCT's on TCM because if syndrome differentiation was used, its radical individualisation would result in small numbers in the same treatment group, yielding results lacking statistical significance” (p. 258).

As Goldenberg (2006) argues, a clear medical hierarchy has been established by the western medical sector, creating divisions between different fields of medical research. Western medicine is at the top of this hierarchy, while TCM and other alternative modalities with their own bodies of knowledge are at the bottom.

Part two: The rise of western medicine and the role of western and alternative healthcare systems in New Zealand.

2.6 How the dominance of western medicine has come at the expense of alternative medicine: The role of western and TCM in New Zealand society

Part one of this literature review showed the ontological and epistemological differences between western and TCM and has discussed the epistemic authority that western medicine is granted in contemporary society. With medical knowledge aligning with western positivist frameworks, biomedical practitioners continue to “maintain a hegemonic status and use their authority to define health and illness, conversely, traditional practitioners cannot exert power at the same level. This shows the subordinate status of traditional medicine and its lack of legitimacy in biomedical-dominant systems” (Chang & Lim, 2017, p. 239). Because western medicine has been able to dominate healthcare systems across the world, it is important to understand how western medicine came to be New Zealand’s dominant healthcare model. Part two of this literature review looks at New Zealand’s medical landscape, evaluating the ways western medicine rose to dominance, and contrasts western and TCM’s place in New Zealand society.

2.7 Evidence based medicine in New Zealand: Colonialism and acts and initiatives that have supported western medicine’s growth

The history of New Zealand’s healthcare system offers insight into the progression of New Zealand’s biomedical landscape. Prior to being colonised, a traditional Māori healthcare system was utilised, known as Rongoā Māori. Māori healers known as Tohunga, practiced Rongoā Māori, a traditional healing system that “encompasses herbal remedies, physical therapies and spiritual healing” (Best Practice Journal, 2008, p. 32). The Best Practice Journal (2008) explains how:

“In early Māori history, Tohunga were seen as the earthly medium of the controlling spirits and influenced all aspects of life. Illness was viewed as a symptom of disharmony with nature. If a person was sick, the

Tohunga would first determine what imbalance had occurred, before the illness could then be treated both spiritually and physically” (p. 32).

While initially Rongoā Māori was informally utilised among the Māori people, when European colonisers arrived in New Zealand they too had their own medical system. Although, at the time, the healthcare treatments utilised by Europeans were no more advanced than Rongoā Māori. In early history there was no formal or coherent healthcare system as seen today. In fact, people oftentimes self-diagnosed themselves and turned to natural healing practices. As time progressed during early colonial days, more medical doctors arrived to New Zealand. However, the arrival of European settlers changed the country's ecology, bringing with them diseases that hadn't existed before in New Zealand (Ellison-Loschmann & Pearce, 2006). Devastatingly, Māori contracted these diseases and Māori mortality rates soared (Pool, 2015). While disease ravaged the country, both Rongoā Māori, and what has since come to be known as western medicine, were used in New Zealand; there were even Māori hospitals that were established in 1846 (Ministry of Health, 2017).

During the 19th century, New Zealand's colonial healthcare system was placed under pressure due to epidemic outbreaks such as smallpox, scarlet fever, whooping cough, and measles (Ministry of Health, 2017). These were some of the diseases that European settlers brought with them, which Māori had no previous exposure or immunity to. The introduction of these diseases prompted action around necessary health care measures to address public health and safety. Continued efforts took place during this time to prevent and eradicate disease. As Lundy and Janes (2016) comment, “scientific discoveries such as the identification of substances and vaccines that ward off the effect of pathogens greatly influenced the direction of biomedicine” (p. 410). In New Zealand, quarantine protocols had been established prior to this in 1854 and legislation around vaccinations was enacted in 1863 (Ministry of Health, 2017). Legislation during this time also delimited who was qualified to practice medicine under the Medical Practitioners Act of 1849 and the Pharmacy Act of 1880 (Ministry of Health, 2017). Hence, medical systems were developing to protect settlers and to ensure that formal protocols were established moving forward, protocols that aligned with biomedicine.

The development of western medicine during this time was strengthened due to colonial efforts, Voyce (1989) states how:

“Doctors were often seen by nineteenth century colonial authorities as vital part of their apparatus of authority and control. Western medicine being a means to weaken native culture and to promote allegiance to European institutions and thought. Most colonial powers passed legislation outlawing traditional medical practitioners” (p. 112).

This outlawing of traditional and alternative forms of medicine took place in New Zealand in the beginning of the 20th century, when two legislative acts passed making it a criminal offence to promote and practice traditional forms of medicine. The first outlawing of alternative medicine occurred in 1907 when the Tohunga Suppression Act was passed. This legislation was concerned with Māori Tohunga practitioners and the harm posed to patients. Rongoā Māori fell outside of biomedical models of health that had begun to gain traction during the 19th century. In fact, it was felt by some that Rongoā Māori was “an impediment to Māori progress by the medical fraternity” (Best Practice Journal, 2008, p. 33). Following the enactment of the Tohunga Suppression Act, legislation stated that:

“Every person who gathers Māori around him by practising on their superstition or credulity, or who misleads or attempts to mislead any Māori by professing or pretending to possess supernatural powers in the treatment or cure of any disease, or in the foretelling of future events, or otherwise, is liable on summary conviction before a Magistrate to a fine not exceeding twenty-five pounds or to imprisonment for a period not exceeding six months in the case of a first offence, or imprisonment for a period not exceeding twelve months in the case of a second or any subsequent offence against this act” (Lange, 1999, p. 281).

The Act specifically targeted Māori and their cultural healing practices, threatening them with fines and imprisonment. The Tohunga Suppression Act was seen as a way to subvert traditional forms of healing, and debates at the time discussed how Pakeha also had their share of quack doctors. Consequently, in order to placate criticism over

what was seen as a targeted move from parliament directed at Māori, a second separate piece of legislation was passed, the 1908 Quackery Prevention Act (Lange, 1999). The legislation stated how it is an offence to make:

“False statements in order to promote the sale of medicine, preparation, or appliance for the prevention, alleviation, or cure of any human ailment or physical defect, and which is false in any material particular relating to the ingredients, composition, structure, nature, or operation of that article, or to the effects which have followed or may follow the use thereof” (Quackery Prevention Act, 1908, p. 177).

The repercussions for those who committed an offence against the Act included, “a fine not exceeding one hundred pounds in the case of a first conviction for any such offence, and not exceeding two hundred pounds in the case of a second or any subsequent conviction” (Quackery Prevention Act, 1908, p. 177). Unlike the Tohunga suppression Act, those who committed an offence were not eligible for imprisonment, although they faced heftier fines. Both the and the Quackery Prevention Act and Tohunga suppression Act have since been repealed, although the effects of these Acts, in particular the Tohunga suppression Act, had already “offered opportunities for the Pākehā dominated legislature to reassert certainty in the face of uncertain medical technologies and millenarianism, and to exert political dominance over growing Māori autonomy” (Stephens, 2001, p. 469). It has been noted how New Zealand’s legal systems worked to assimilate Māori to Eurocentric ideologies, compromising Māori interests and their heritage (Durie, 2004). While the practices of reported Tohunga and Pakeha “quacks” were highlighted around this time, the narrative of quackery has found its way into contemporary medical debates around CAM treatments and the lack of scientific evidence available to validate its use.

While the 1800’s and early 1900’s saw the consolidation of western medicine and the passing of legislature that supported biomedical frameworks, the Medical Council Research Act of 1950 bolstered the use of positivist epistemologies. The Medical Research Council Act of 1950 supports “research into the problems of medicine and the allied sciences” (Medical Research Council Act, 1950, p. 56) and discusses how all funding is to be allocated to scientific research. Further, the Act lays out appropriate

council persons, the majority of whom are biomedical professionals who can contribute to New Zealand's scientific research endeavours. While nowadays, this scientific research would be considered a form of evidence based medicine (EBM), in the 1950's when the Act was first initiated, its scientific endeavours weren't formally classified as such. The two were, and still are, in separation to one another, although EBM is now one strand of western medicine and its epistemological positioning. EBM was officially coined in the 1990s, and is described as the incorporation of scientific research into medical practice, as Pope (2003) states:

"The idea that scientific research should be a component of medical knowledge was not new. Modern medical training draws heavily on the scientific knowledge of such disciplines as biology, anatomy and biochemistry. Latterly it has also incorporated the relatively newer science of epidemiology, the discipline concerned with the investigation of the causes and natural history of diseases in populations. In embracing epidemiology, medicine took on board a range of research methods for measuring disease in populations and evaluating the impact of medical interventions on groups rather than individuals, including one, the RCT, which has become especially significant within medical research" (p. 269).

In New Zealand, the paradigm of EBM is widely accepted, even hegemonic, within the health system. With legislation such as the Medical Council Research Act, considerable legal and governmental support was afforded to evidenced based medical research, and thus, the association between western medicine and EBM strengthened. The Medical Council Research Act of 1950 has since been dissolved and replaced by the Health Research Council Act of 1990 (New Zealand Legislation, 2014). This newest version is inclusive to research outside of the biomedical sciences, with mention of public health research which extends its focus to include social and behavioural determinants of health.

This shift to incorporate social and behavioural determinants of health into research agendas may be seen as a positive move, but it is not this Act alone that has bolstered the dominance of biomedicine in New Zealand. As briefly touched on earlier, there is

the HPCA Act, which regulates biomedical healthcare providers and functions to legitimise biomedical professions over self-regulated or unregulated professions (New Zealand Legislation, 2020). The state also supports western medicine through its allocation of funding resources. Moreover, there are public health care strategies and policies that have set the precedent for biomedicine's domination. Recent initiatives in New Zealand, such as the 2015 policy of zero-fee doctors' visits for children under the age of 14 (Ministry of Health, 2019), encourages the public to use biomedical healthcare systems, again helping upkeep biomedicine as New Zealand's mainstream healthcare provider.

2.8 The political economy: The state's role in managing medicine and its financial alliance with western medicine

Political economy explores the interconnection between economics, society, and political activity (Caporaso & Levine, 1992) and is a critical determinant in healthcare. This research primarily focuses on the funding mechanisms in medicine and the government's role in allocating medical funds. Thus, this research will only explore one small part of the political economy as a whole. With that said, institutional arrangements in New Zealand see the health and disability sector largely endorsing western medicine under governmental operation, with only a select few CAM treatments receiving subsidised funding. Because of this, the state has legitimised western medicine in acknowledging its potential to address New Zealand's healthcare objectives while refusing to legitimise other healthcare modalities in the same way. The select CAM modalities that receive funding from the Accident Compensation Corporation (ACC) include acupuncture, chiropractic, and osteopathic medicine (Health Navigator, 2019). Because ACC funding is available for these services, patients with accidental injuries will have their medical bills partially paid for, helping reduce the overall cost of their medical treatments. However, given that alternative therapies are unsubsidised for everyday or routine use, patients may forgo seeing an alternative practitioner due to the costs involved.

Funding is also available for Rongoā Māori services, however, Rongoā Māori treatments are not covered through ACC, instead, funding is provided by MoH who fund 19 Rongoā providers across the country (Ministry of Health, 2020). Rongoā Māori

is the only alternative treatment in New Zealand to directly receive public healthcare dollars, although its funding is limited, with Rongoā healers arguing how more funding is necessary to enhance their service delivery to the public (Ahuriri-Driscoll et al., 2008). Therefore, while acupuncture, chiropractic, osteopathic, and Rongoā Māori treatments receive some funding, the majority of New Zealand's healthcare funding is funnelled into New Zealand's mainstream, western healthcare system.

New Zealand's mainstream health and disability sector receives its funding from public taxation, ACC levies, and premiums. Each year the government decides how much money will be allocated toward healthcare expenditure, the money that is allocated is called "vote health" and for 2020 and 2021 approximately 20.27 billion dollars that will be put toward public healthcare (Ministry of Health, 2020). The MoH, New Zealand's public services department that is responsible for New Zealand's healthcare matters, states that "about three-quarters of vote health goes to fund New Zealand's 20 District Health Boards (DHBs). DHBs use available funding to plan, purchase and provide western health services for the population of their district" (Ministry of Health, 2019, p. 1). The distribution of funds to DHBs nationwide is meant to ensure the effective and efficient delivery of both primary and secondary biomedical healthcare services across New Zealand.

Primary healthcare covers a broad range of services, usually provided by "general practitioners (GPs), nurses, pharmacists, and other health professionals, such as physiotherapists, dieticians, psychologists, counsellors and occupational therapists" (Ministry of Health, 2014, para 1). In order "to increase access to primary care services, the government established Primary Care Organisations (PHOs). PHOs are not-for-profit, local organisations that are responsible for managing and improving the health of the enrolled population. PHOs are contracted to provide services by one of the 20 local district health boards DHBs in New Zealand. While medical providers are not required to contract with PHOs, they cannot access government funding without an affiliation to a PHO" (Downs, 2017, p.15). Hence, there is incentive for medical providers to practice at PHO's.

As for secondary healthcare services, this refers to any treatment received at hospitals or specialist clinics, typically care that cannot be received by primary healthcare

providers (West Coast District Health Board, 2018). Both primary and secondary healthcare services and organisations in New Zealand are biomedical, and remain separate from CAM clinics. The endorsement of biomedicine is largely structural and rests on the governmental systems that are in place that support its use. This support is provided as western medicine is seen as the most cost effective medical solution against other medical systems. As Saarni and Gylling (2004) explain:

“It has become commonplace to argue that increasing resources will not necessarily produce any good if not spent effectively. Thus, when more money is promised for health care, it is done on the condition that it can be proved that the money is spent on effective interventions” (p. 171).

It is this need for cost effective medical care that has fed into the need for medicines that are shown to be efficacious, reinforcing the ideological valorisation of western medicine being the better option to support with public funding. The image below illustrates how New Zealand's health and disability system is funded and the major organisations that interconnect to provide New Zealander's with primary and secondary healthcare services.

Overview of the New Zealand health and disability system

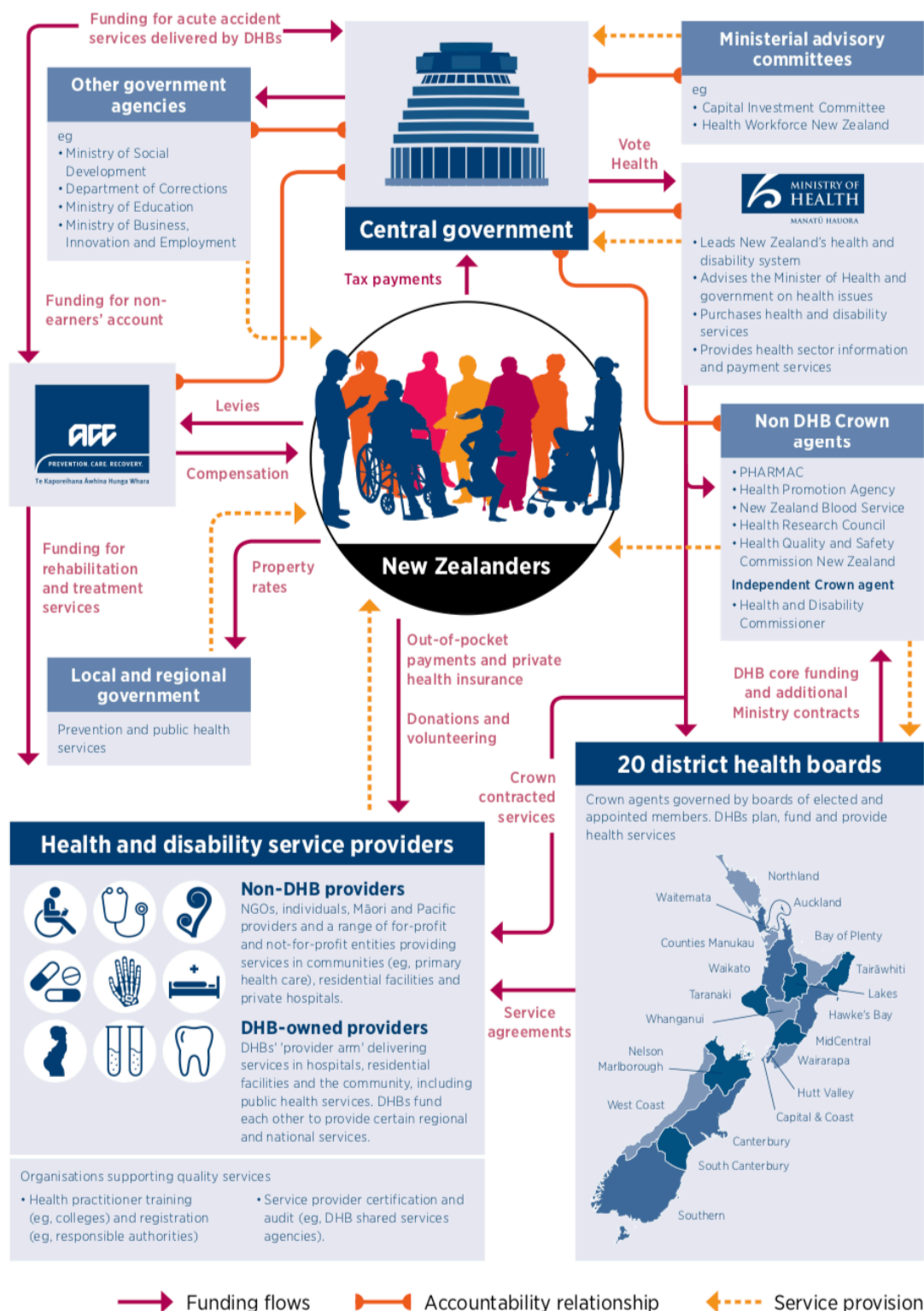


Figure 1 (Beehive, 2017, p. 2).

2.9 Traditional Chinese Medicine in New Zealand

Migratory flows of Chinese nationals entering New Zealand during the 19th century saw knowledge of TCM brought to the country. Many Chinese nationals originally migrated to New Zealand with hopes of “striking it rich during the gold rush of the 1860’s” (Halkias et al., 2016, p. 78). During this time, Chinese immigrants maintained their traditions, such as using TCM, having used acupuncture to treat ailments caused by their work in the mines. Its use at this time was informal (Tysoe, 2012), and the profession hadn’t established itself as it later would during the 20th century. Baer (2015) explains that regular medicine, prior to being acknowledged as western medicine, “increasingly assumed the guise of being scientific, it evolved into biomedicine and developed a link with corporate and state interests in the early twentieth century in both Australia and New Zealand” (p. 1). However, despite becoming the preferred medical system, alternative medical therapies in the 1970’s challenged biomedicine’s dominance. Baer (2015) explains, “what started as a popular health movement has evolved into the professionalised entity that is generally referred to as ‘complementary medicine’ in New Zealand” (p. 1).

Nowadays, alternative therapies, such as TCM, have professionalised their practice through the formal establishment of professional clinics across New Zealand. Formal colleges and universities have also been established to train future TCM practitioners. Whilst western and TCM practice in separation to one another, with TCM practitioners not practicing in mainstream healthcare situations, TCM has professionalised in much the same way as western medicine. Patel and Toossi (2016), remark how TCM is the most recognised and utilised CAM treatment in New Zealand, with acupuncture being the most commonly sought-after TCM treatment. Despite acupuncture being the most commonly used treatment, TCM clinics do offer a range of treatments besides acupuncture, including moxibustion, qigong, and Chinese herbal medicine. Moreover, Patel and Toossi (2016) mention how there is an “increase in the number of individuals graduating with formal qualifications in acupuncture and Chinese herbal medicine” (p. 49). Thus, despite TCM originally being practiced and utilised by Chinese nationals, in contemporary society it has expanded its use through its professionalisation.

Although its formal establishment has resulted in its growth in New Zealand, and worldwide, its place within a contemporary western society has, in some instances, changed how TCM is practiced. While TCM is known as an ancient medical practice rooted in tradition and historical principles, TCM has modernised largely due to its interaction with western medicine. Shea (2006) explains:

“Although represented as tailoring treatment to individuals and to multiple situational factors in a virtuoso-like manner, in clinical practice TCM is sometimes dispensed in a rather woodenly formulaic way. Observations in contemporary China show that some practitioners who work in busy clinics have little time to spend with each patient. ... In addition, some TCM practitioners in China today see incorporating more technology and laboratory tests into their practice as a way to advance TCM” (p. 258)

These remarks of Shea’s are important to acknowledge, as it shows the challenges and changes TCM faces in contemporary times. For example, the pressure to not only meet the growing demand for TCM with quick patient consults, but to conform to western standards of practice and to develop TCM in line with modern technologies. In fact, the modernisation of TCM has been debated between Chinese medical communities, Wang and Farquhar (2009) remark how:

“Chinese reformers in the early-to-mid-twentieth century advocated the abandonment of traditional Chinese worldviews along with the old imperial social-political structures. Chinese medical views of the world and the human body, seen at best as based on abstract, speculative, and inductive methods, were held to be essentially incongruous with modern scientific views; these were, in their turn, held to be based on concrete, quantitative, and deductive methods” (p. 64-65).

Again, tensions are witnessed between inductive and reductive epistemologies and the “legitimate” way to practice medicine. To the point that Chinese reformers are willing to abandon TCM’s inductive practising approach in order to be seen as more legitimate. However, the opposing view to this that TCM practitioners have noted, is

that the traditional principles of TCM must be upheld and not lost in the face of modernity. Such debates illustrate the precarious position of TCM in contemporary society, not only with western practitioners expecting TCM to scientise, but also the opposing opinions between TCM practitioners around the future direction of TCM and the protection of TCM's traditional medical values.

Currently TCM is a self-regulated profession in New Zealand, with two voluntary self-regulatory bodies, the New Zealand Acupuncture Standards Authority and Acupuncture New Zealand (New Zealand Acupuncture Standards Authority, 2020; Acupuncture New Zealand, n.d). While the profession is self-regulated there is no national standard set and TCM practitioners are not required to enroll with either of these self-regulatory bodies. However, the benefit of doing so is being entitled to ACC funding for the acupuncture services they provide (New Zealand Acupuncture Standards Authority, 2020). Chinese medical organisations are trying to regulate TCM under the HPCA Act which would require all practitioners to become regulated. The motivation behind becoming regulated will be discussed in chapter five, although reasons noted throughout this research include: regulation to create uniformity between practitioner qualifications, to ensure that the best and most qualified practitioners are practicing, to improve the reputation of TCM, to help expand the scope of practice of TCM, and to address issues around the co-optation of TCM treatments.

In September 2010, applications to regulate were put forward to the MoH. These applications, according to the Ministry of Health (2011), "were prepared by the New Zealand Register of Acupuncturists (Acupuncture New Zealand), with the New Zealand Register of TCM Practitioners Inc (The New Zealand Acupuncture Standards Authority and Acupuncture New Zealand), together with the New Zealand Association of Traditional Chinese Medicine" (p.1). All of these organisations are professional bodies for TCM in New Zealand and are trying to maintain good standards of practice for the profession, with the former two being TCM self-regulatory bodies, and the latter a TCM organisation that overlooks qualification control and regulatory standards. Despite submitting their application in 2010, as of 2020, the application process is ongoing.

Following their initial application, an expert panel appointed by the MoH was formed to ascertain whether TCM should be regulated (Official Information Request, 2019). After determining in April 2011 that it met criteria to be included, the MoH prepared a discussion document where feedback was sought from medical professionals in New Zealand. This was to determine what different medical organisations thought about regulating TCM under the HPCA Act. By May 2011, the discussion document received 35 response submissions. Some of these submissions will be analysed in results chapter four, although to provide insight, they each held varying views around whether it was appropriate to regulate TCM under the HPCA Act. Following the submissions in 2011, little progress was made until August 2015, when the executive chairman of the Health Workforce New Zealand, an advisory board that works in conjunction with the MoH, advised that the next step moving forward would be to create a blended authority with an existing regulated profession (Official Information Request, 2019).

A blended authority would require one medical profession, that is already regulated under the HPCA Act, to agree to join with TCM to create a blended regulatory authority (Official Information Request, 2019). As discussed within my interviews, that of which will be elaborated later, the creation of a blended authority would see both professions sharing a headquarters and secretarial resources; there is no expectation that the professions would actually work together or integrate their professions in any way. Initially the New Zealand Medical Council agreed to collaborate with a new Chinese medical authority in terms of the back-office functions that could be shared, for example, “this would potentially include administration, human resources, finance, information technology and legal services” (Official Information Request, 2019, p. 299). However, upon clarification from the MoH that TCM would need to be regulated and endorsed by an existing regulatory authority, the New Zealand Medical Council changed their mind stating that they “did not support a combined Council, but reiterated a willingness to provide administrative support for any new Chinese medicine profession to discuss governance options for regulating the profession” (Official Information Request, 2019, p. 300). Below is a diagram illustrating the possible structure the MoH would expect of a blended authority. This information was received from the Official Information Request I placed in September 2019.

Appendix: Possible Structure

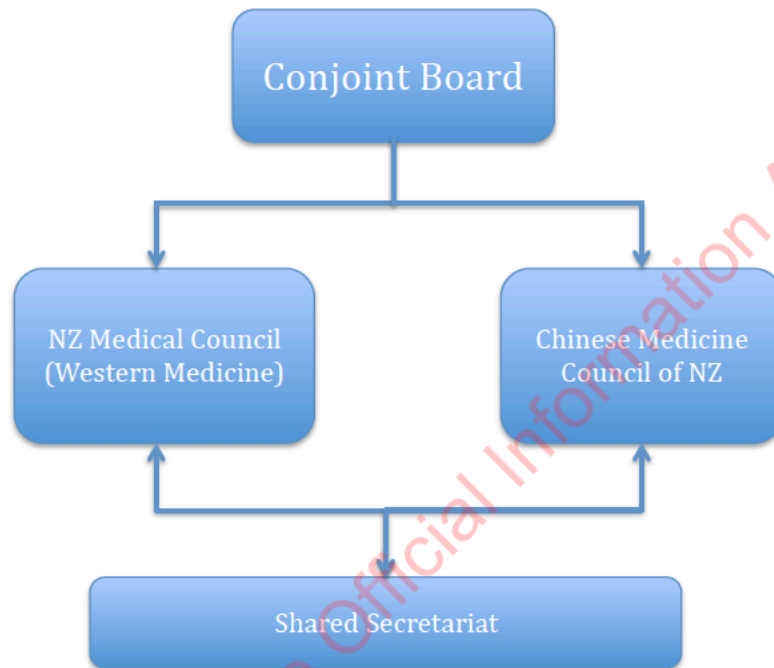


Figure 2 – The MoH’s proposed structure that would have occurred if the Medical Council had agreed to become a blended authority with TCM (Official information request, 2019, p. 200).

Recent developments to be discussed in chapter five, have seen the Nursing Council agree to create a blended authority with TCM. Both groups are awaiting further action from the Health Workforce New Zealand and the MoH to finalise their agreement.

Because TCM is not regulated under the HCPA Act, for now, it doesn't experience the same degree of oversight as western medicine. For this reason, it's easy to assume that TCM practitioners have considerable autonomy in their practice. The Medicines Act 1981, Clause 32, titled "Exemptions for natural therapists and others", illustrates this by stating how CAM practitioners are able to prescribe any treatment at the request of a patient providing it is safe and is not a prohibited medicine (The Medicines Act 1981, 2018). Additionally, in New Zealand, treatments provided by natural healthcare practitioners are classified as dietary supplements. Medsafe (2019), New Zealand's Medicines and Medical Devices Safety Authority, state how any dietary supplements "must comply with the Dietary Supplements Regulations 1985" (p. 1). Yet, while compliance is expected, Medsafe (2019) also remark how "there is no pre-approval process for dietary supplements, it remains the responsibility of the sponsor (the person legally responsible for placing the product on the market) to ensure the product is made to an acceptable quality, is safe to use and complies with the law" (p. 1).

This means that TCM practitioners are able to distinguish their own regulations and have the autonomy to practice within the perimeters of existing New Zealand laws. This is in contrast to western practitioners who strictly have their therapies overseen by medical bodies such as Medsafe. There is also the Pharmaceutical Management Agency (PHARMAC), who overlook all western medicines. PHARMAC "is a New Zealand Crown agency that decides, on behalf of District Health Boards, which medicines and related products are subsidised for use in the community and public hospitals" (Ministry of Health, 2014, p. 1).

Thus, although self-regulation offers a certain degree of autonomy to TCM practitioners, the lack of regulation and oversight of the profession can reinforce a public image of TCM as an unregulated or illegitimate profession with lower standards of practice than regulated professions, and may not be recognised for their contribution in public healthcare efforts (Olson, 2006). It also raises questions around the ways western medicine has professionalised their practice through regulation, whilst shutting out other professions from regulating. In this case, TCM remains semi-professionalised without full incorporation under the HPCA Act. Because regulation has functioned to strengthen governmental support for western medicine and has

enabled the profession to be New Zealand's mainstream medical provider, western medicine has been able to control New Zealand's medical sphere and have largely undermined other professions, as mentioned earlier, through forms of social closure. Regulating TCM may help with the professional status of TCM and offer greater state support.

2.10 The demand for Complementary and Alternative medicine

Despite New Zealand's structural systems favouring western medicine, there has been a growing demand for complementary and alternative medicine (CAM), including TCM. This increase in popularity has been attributed to a lack of satisfaction with orthodox western services due to people not having their needs met (Greene-Prabhu et al., 2009; Paltiel et al., 2001; Upchurch et al., 2008; Downer et al., 1994), and the idea that heterodox treatments would better serve people's medical problems, particularly for patients with chronic diseases (Spencer & Jacobs, 2003; Wetzel et al., 2003). Additionally, Bakx (1991) argues that there has been a shift in postmodern values, with the public becoming more sceptical of science and technology to address modern life problems. Other reasons for using CAM include regaining control over one's medical care (Truant & Bottorff, 1999), and an appreciation of the philosophy of CAM treatments which treat the whole person rather than solely focusing on pathogenic causes (Vincent & Furnham, 1996).

Western countries where CAM has become increasingly popular include, but are not limited to, Australia, Canada, The United States, the United Kingdom, and New Zealand. An Australian study conducted by Xue et al. (2007), found that in 2005 over 68% of the population had used at least one form of CAM in the previous 12 months with over 20% of those using TCM. The estimated number of visits to CAM practitioners by adult Australians during that period was 69.2 million, compared with 69.3 million visits to medical practitioners. In Canada, France and Rodriguez (2019) found that "70% of the Canadian population use some form of CAM" (p. 2). As for the United States, they've seen considerable growth with TCM use, with 2016 financial reports stating that "526 million USD worth of TCM was exported to the United States, accounting for 15.34% of TCM exports for China (Lin et al., 2018, p. 2). It has been forecast that "the United States will soon overtake Hong Kong and Japan as the largest

market of TCM exported from China” (Lin et al., 2018, p. 2). The United Kingdom’s CAM market is also growing, with Barnes (2003) stating that “in 2000, approximately £115 million was spent in the UK for complementary medicines, 57% of these being derived from herbal medicines” (p. 227).

Data from New Zealand, while scanty, has illustrated the high prevalence of CAM use in New Zealand, the multiple modalities used for personal treatment, and the variety of rationales for CAM use. One study conducted by Chrystal et al., (2003), obtained data from a questionnaire that was sent to cancer patients attending oncology outpatient clinics at either Palmerston North or Taranaki Base hospitals. The study highlighted the prevalence of CAM use in New Zealand, noting that “49% of cancer patients had reported using at least one form of CAM therapy” (p. 5). The most popular CAM therapies included taking vitamins (68%) and antioxidants (54%), using spiritual techniques (28%), using relaxation techniques (25%), taking herbal remedies (24%), and using naturopathy (20%) and massage (17%). Cancer patients’ reasons for utilising CAM services varied; for some, CAM was utilised to improve their quality of life (47%) and to lessen side effects of conventional treatment (43%). For others, CAM was used to prevent the recurrence of cancer (34%), to control their cancer symptoms (32%), and some held hope of a cure (30%). Interestingly, CAM is not only used to improve the quality of daily living, but it is also being sought as a more permanent solution for ones healthcare needs.

Similarly, a New Zealand study conducted by Evans et al., (2008), recruited patients from Gisborne Hospital from various inpatient wards to determine how patients felt about CAM treatments. Interviews with 92 patients determined that “only 4 (4%) of patients reported no knowledge or use of CAM, of the remaining 88 patients, 79 (90%) reported the use of two or more CAM modalities” (Evans et al., 2008, p. 24). The most commonly used CAM treatments included massage (73%), vitamins (65%), chiropractic services (54%), herbal therapies (49%), aromatherapy (40%), spiritual healing (35%), acupuncture (35%), and osteopathy (30%). The main reasons for using CAM were similar to the aforementioned study by Chrystal et al., (2003), and included CAM use to relieve symptoms (98%), to improve their quality of life (95%), to control and manage their disease (75%), to prevent the recurrence of their disease (73%), and patients also held hope for a cure (83%). What drove these patients to use certain

CAM treatments included recommendations from friends and family regarding the benefits of CAM (87%), to gain control over one's health (75%), the safety of CAM therapies (69%), and their previous positive experiences utilising CAM (69%). What is noteworthy is that the authors claim that their "study reports the highest prevalence of CAM use published to date in New Zealand" (Evans et al., 2008, p. 30), and no studies of this nature appear to have been published since.

While trends of CAM use in adult populations have been studied, Wilson et al., (2007) turn their attention to CAM use in children (under 12), having found that New Zealand children have a higher use of CAM than overseas child populations. After conducting interviews in Christchurch, New Zealand at general practices and paediatric outpatient clinics, the authors found that 70% of children had used CAM, with only 23% disclosing that information to their western medical practitioner. The authors primary concern was the lack of conversation between parents and medical practitioners regarding the use of CAM in child patients, particularly due to the adverse reactions that can occur between CAM and biomedical therapies. Thirty-five different types of CAM were used on children in the study, hence, given the high use of CAM, Wilson, et al., (2007) suggest that there is an "increasing health consumer trend towards incorporating complementary healthcare models in the prevention and treatment of symptoms" (p. 45). Because of the high CAM use and low disclosure rate in New Zealand, the authors encourage "health practitioners to engage in dialogue with patients about their CAM consumption practices" (Wilson, et al., 2007, p. 45). This study shows that it is not just adults who are utilising CAM therapies, but that adults are giving CAM to their children.

In specific reference to TCM use, literature has shown some of the reasons for patient use and the benefits of TCM. One of the common reasons TCM is utilised is to address infertility and reproductive health issues. A systematic review conducted by Ried and Stuart (2011), compared the efficacy of western medical treatment against Chinese herbal medicine in the management of female infertility. Their meta-analysis found that traditional Chinese herbal medicine was most effective "achieving on average a 60% pregnancy rate over 4 months compared with 30% achieved with Western Medical drug treatment, or IVF over 12 months" (p. 326). TCM is also used to treat diabetes (Li et al., 2004, Chao et al., 2009) with an insightful study from Hsu et al., (2014)

determining that there was a decreased risk of developing kidney failure when integrating TCM care into diabetes care provided by western practitioners. Thus, Hsu et al., (2014) highlight the importance of integrative healthcare systems using both western and TCM. Further still, TCM has been used to treat mental health disorders such as depression (He et al., 2007, Allen et al., 1998), dermatological conditions such as atopic dermatitis and psoriasis (Koo & Desai, 2003), and irritable bowel syndrome (Bensoussan et al., 1998). This list is not exhaustive of all conditions treated with TCM but shows the broad range of conditions TCM can treat.

With the increasing popularity of CAM in New Zealand, and the various healthcare needs that are being met, a question that arises is what can be done to support other medical modalities when New Zealand's health care system centres western medicine? A suggestion and probable solution that has been raised by healthcare professionals, is that integrative healthcare systems could be endorsed to facilitate patient's by providing them with greater access to CAM modalities, particularly through financial incentives and subsidies (Maizes et al., 2009). This would then support the diverse healthcare needs of patients by offering them the autonomy to choose which healthcare provider they feel is best suited for their personal healthcare circumstances rather than pushing biomedical treatments onto patients who do not want them.

2.11 Medical pluralism: Is integrative medicine the way forward for New Zealand healthcare?

A common assumption among many healthcare professionals, is that endorsing an integrative, pluralistic system could mitigate the epistemological tensions between biomedical and alternative medical modalities. Integrative medicine, as described by Cohen et al., (2007), "is a system of medicine that seeks to provide safe, effective, and appropriate care in the best interest of the patient as it integrates CAM with conventional care" (p. 21). The purpose of integrative care is that the appropriate medical modality will be selected as a result of the patient's given circumstance. There are no underpinning biases governing the treatment offered to the patient, treatment is selected on an individualised basis. The benefits of doing so include patient autonomy (Moreau et al., 2012, Joffe et al., 2003; Lee & Lin, 2010; Hölmstrom & Röing, 2009), having patients collaborate with their practitioners to select an

appropriate modality based on their unique circumstances, as well as disease alleviation and disease prevention from utilising integrative care (Shalom-Sharabi et al., 2017; Deng et al., 2013; Wolever et al., 2012). Nevertheless, there are potential barriers in endorsing an integrative medical model that need to be considered.

The first potential barrier toward integration are the attitudes held by many biomedical practitioners toward CAM due to their commitment to positivism. Western practitioners have voiced concerns over the safety and efficacy of alternative treatments, have discouraged its use, and have argued that CAM treatments must be backed up by scientific evidence the same as biomedicine (Bocock et al., 2011; Lee et al., 2002). A study conducted by Maha and Shaw (2007), explored western practitioner's attitudes toward CAM, with multiple western practitioners showcasing their commitment to science, below are three excerpts from practitioners. The first practitioner stated: "I think that most CAM research shows it doesn't work and yet people continue to believe in it, and that reinforces my view that it is a flight from science and rational thought" (Maha & Shaw, 2007, p. 8). The second western practitioner mentioned: "I would consider referring my patients to complementary therapists if they requested it. However, I would have to emphasise that there is little evidence" (Maha & Shaw, 2007, p. 6). Lastly, the third western practitioner within the study remarked how: "none of my patients have ever asked me if they could see a homeopath, maybe because they pick up on my scepticism" (Maha & Shaw, 2007, p. 6). Thus, with mainstream, western medicine's alliance to positivism, integration may be resisted.

Even with doubts and criticisms surrounding CAM research, there are TCM practitioners that believe there is already sufficient evidence to support their treatments, either through scientific studies or through pragmatic and experiential knowledge. In a study by Wiese and Oster (2010), one practitioner expressed how CAM has worked hard to build its evidence base despite the ongoing scepticism held toward the profession:

"CAM practitioners have done a lot of hard work to prove that they are not just a bunch of whackos, and that there is a lot of scientific evidence and legitimacy to what they do, and they've done that. Of course there

are a few sceptics that believe it's all quackery, but I don't think you're ever going to convince those people" (p. 425).

Similarly, Xue et al. (2010) discuss how more funding has been allocated to CAM research:

"Governments in a number of western countries have supported high-quality research into CAM including TCM. For example, from 2000 to 2006, the United States' National Center for CAM (NCCAM) funded over 1200 CAM research projects and since 2005, the annual research funding allocation for NCCAM has been in excess of over US\$120 million" (p. 301).

With CAM research growing, the counterargument from biomedical providers against CAM research is that it is methodologically flawed, as the "research designs commonly consist of individual case studies or other small-scale or qualitative studies" (Borgerson, 2005, p. 504). Some TCM practitioners defend the lack of scientific research, arguing against its use due to the incompatibility between scientific research and TCM. Instead, TCM practitioners believe evidence can instead be seen in its historic use. What's problematic, is that other bodies of knowledge can struggle to be accepted in mainstream medicine where scientific epistemologies are held in high esteem. Jackson and Scambler (2007) examined the perceptions of EBM from traditional acupuncturists, with one acupuncturist commenting:

"The whole drive towards insisting on more and more research it is making the whole thing into a pseudo-rational process, leading us away from the art of acupuncture and leading us into something that isn't what traditional acupuncture means to me. Acupuncture and herbalism, moxa and everything has survived almost 2,000 years without this huge drive towards EBM" (p. 424).

The aforementioned acupuncturist states how the demand for scientific evidence has jeopardised the profession, steering TCM into a westernised model of healthcare with scientific standards that do not speak to the traditional foundations of TCM. This is

despite the fact that these traditional foundations have survived almost 2,000 years without needing to be evidence based. This position reiterates earlier discussions, where Chinese reformers were ready to abandon the traditional foundations of TCM to align themselves with western, scientific discourses.

The second potential barrier toward integration involves the assumptions biomedical practitioners have about the competency of TCM practitioners, claiming that TCM training is inadequate (Olchowska-Kotala and Barański, 2016). A study by Wong et al. (2006) explored the attitudes of fourth year western medical students in Hong Kong. Many of the future western practitioners were sceptical of the training received by TCM practitioners, and in turn, were sceptical of their clinical competency:

“Western medical students raised concern about the qualifications and abilities of TCM practitioners. They thought that TCM training in Hong Kong was not systematic enough and that there were great differences in professional standards among practitioners. The lack of organisation or guidelines to supervise and monitor practices of the TCM practitioners was of concern. Some students admitted sceptically that, to some degree, they believed in TCM but not TCM practitioners” (Wong et al., 2006, p. 186).

Wong et al., (2006) continue, noting that the primary barrier for the integration of both TCM and western medicine was “the hostility between both parties” (p.188), with students stating that “in their opinion, mistrust and hostility arose because of a mutual lack of understanding” (p. 188). Although, it can be questioned whether the hostility between parties could also be due to other factors, such as economic and professional interests and rivalries. Nevertheless, some students suggested that learning about TCM in medical school and seeing more evidence could be “a good way forward” (Wong et al., 2006, p. 188). While this study showcases the distrust western medical students have toward the education standards and abilities of TCM practitioners, these students did recognise that this distrust could potentially be mitigated by learning more about TCM in medical school. However, for a group that claims to know little about TCM, to the point that they think learning TCM could help reduce the tensions between

different practitioner groups, it is interesting that they claim to know that TCM training in Hong Kong is not “systematic enough”.

The third barrier toward integration is the co-optation of TCM treatments by the biomedical sector. Co-optation refers to the ways dominant or elite groups claim something as their own or appropriate it for their own purposes (Liebler & McConnel, 2004). In contemporary medicine, co-optation has occurred through the different ways western medicine has adopted specific TCM techniques. Biomedical practitioners have selected certain therapies and methods and have begun practising these therapies from a biomedical perspective. Western medical acupuncture is a prime example of this, with biomedical practitioners only deciding to endorse acupuncture after having first altered it to suit a biomedical model of health (Wiese et al., 2010). The implication of this, is the potential loss of traditional knowledge that occurs through the co-optation of traditional treatments and through biomedicine picking and choosing which aspects of the traditional treatment are necessary within a biomedical philosophy and framework. If an integrative system were endorsed in New Zealand, this is something that would need to be considered, especially given that TCM bodies of knowledge are already being devalued against scientific bodies of knowledge. An additional concern that stems from this, is the fact that integration may be seen as unnecessary given that biomedicine already utilises some TCM treatments.

Co-optation has also been witnessed in the way biomedicine oversees CAM, for example, by initiating CAM therapies into mainstream healthcare clinics and then having CAM practitioners practice under the direction of western practitioners. A study undertaken at an integrative clinic in Canada explored this kind of biomedical gatekeeping and looked at the different way's CAM was co-opted and controlled within an integrative clinic setting. It was revealed that biomedical practitioners dominated “the patterns of interaction” (Hollenberg, 2006, p. 332) as biomedical practitioners took over “patient referrals, charting and diagnostic tests” (Hollenberg, 2006, p. 332). TCM practitioners were also expected to “practise within specified parameters” (Hollenberg, 2006, p. 332) while biomedical practitioners had full rein over their clinical practices. Further, it was noted how biomedical practitioners appropriated “certain Chinese medical techniques from less powerful Chinese medical groups, and used biomedical language as a means of maintaining esoteric knowledge of their profession”

(Hollenberg, 2006, p. 332). The author claims that “biomedical dominance and co-option strategies will continue unless the nature of professional patterns of interaction are taken into account” (Hollenberg, 2006, p. 332).

While the study illustrates the numerous ways co-optation can occur within integrative clinics, what also stands out is the use of language and esoteric knowledge to convey professionalism and superiority in medicine. This perspective aligns with the work of Illich who, as discussed earlier, explored the medicalisation of society through clinical expertise. Not only does medical expertise function in medicalising populations and making the public reliant on western practitioners, but it undermines alternative treatments through co-optation, which could explain why alternative systems and de-medicalised approaches are underrepresented in mainstream healthcare and may continue to be underrepresented even within an integrative healthcare system.

2.12 Conclusion

This literature review showed how epistemic authority has been granted to western medicine in New Zealand society despite the diversity of healthcare modalities that are used by consumers in New Zealand. By examining the structural landscape of New Zealand’s healthcare system and how public funding and authority are distributed, it is clear that western medicine is in a dominant position, professionalising its practice with governmental support, while largely shutting out other medical professions from practising to the same degree. Because western medicine holds the authority that it does, this research is important for understanding the role of epistemological differences in medical practice. Particularly given the lack of literature on TCM practitioner’s experiences practising in a biomedical society. What remains to be determined is whether these epistemic differences have created challenges for TCM practitioners whilst practising in New Zealand where positivist medical systems are mainstream.

Chapter Three – Methodology

3.1 Introduction

This methodology chapter will discuss the inductive interpretivist approach I used to research New Zealand's medical landscape and to determine whether there are epistemic tensions between New Zealand's different medical modalities. As stated earlier, positivist perspectives have guided the operation of New Zealand's mainstream healthcare sector. Because of this, the positivist perspectives that western practitioners uphold are widely known and supported in New Zealand, whereas the inductive, holistic model held by TCM practitioners is less well-known. By employing an inductive interpretivist approach, I was able to obtain new insights from TCM practitioners during the interviews. This enabled the TCM practitioners to voice their concerns about New Zealand's medical industry which is heavily dominated by positivist interpretations of health and illness. The aim of this research was to understand whether epistemological tensions are present in New Zealand, to understand the extent epistemological tensions function in New Zealand's medical sphere, to understand whether epistemological tensions are politically exacerbated in New Zealand, and to understand how epistemological tensions have impacted traditional Chinese medical practice in New Zealand.

This research also involved an extensive literature review and a document analysis of two MoH datasets. Through my literature review, own field research, and document analyses I have been able to contribute to the scholarship of medical sociology in a unique way. My research contributes to international debates around epistemological tensions in medicine. In the New Zealand context, this research is timely considering emerging conversations about the integration of non-western healthcare systems into New Zealand's mainstream public healthcare system. To date, I have not been able to locate published literature from the viewpoint of TCM practitioners on New Zealand's medical landscape and their insights on the tensions between different medical systems. Thus, this research will fill an important gap in theoretical development and will also be useful in its contribution to wider policy debates.

3.2 Selection of Participants

Five participants were recruited through purposive sampling. The participants I was hoping to interview fit a narrow criterion as I was only looking to interview TCM practitioners with professional qualifications, who were currently registered and are practicing in a professional practice in Auckland, New Zealand. My decision to interview registered TCM practitioners was due to recognising that they would be more likely to comment on the landscape of New Zealand's medical system as they would all be ACC registered practitioners and, in this way, would have a better understanding of New Zealand's biomedical sector. Additionally, given that Auckland is the home of most New Zealand Chinese, accounting for 69% of the ethnic Chinese population as of 2013, and given the continual growth of Auckland's Chinese population (Statistics New Zealand, 2013), I initially decided to focus on recruiting TCM practitioners in the Auckland region. However, one practitioner I came into contact within the course of my research was a senior figure in the TCM industry and so, whilst not based in Auckland, was recruited due to the valuable insight they could provide to this research. Because I had an idea in mind of which practitioners would best represent this research project, I was able to recruit participants in line with my criterion and saved time by ensuring that I only heard back from suitable practitioners.

I located practitioners initially through an internet search engine, Google. The next step involved determining which practitioners held professional qualifications and were registered and practicing professionally. I visited the websites of several different practitioners and read through their profiles, allowing me to gauge who would be appropriate for recruitment. If participants were suitable, I stored their information on a recruitment invite list, a document that would then be referred to later when recruitment officially commenced. This was with the exception of two participants; the first of which was an acquaintance of, and was referred to me by, an associate at Massey University (Dr Sally Liangni Liu). The recruitment of this one participant like the others, still directly took place via email correspondence. As for the second participant, this practitioner was located during my telephone and email inquiries with TCM associations when looking into updates about TCM becoming a blended authority with the Nursing Council, a lead that was initially provided to me by another

interviewee. In order to protect the identity of the individual I will not disclose the TCM association I found this participant through. However, after she agreed to have a Skype meeting with me to discuss the updates on becoming a blended authority, I asked whether she would instead like to come on board as a participant given that she met the profile for participants I was seeking, to which she agreed.

Sixteen practitioners were invited to participate in the study, the invite included information sheets written in both English and Chinese which outlined what my research was about and what would be expected of the potential participants. It also listed my contact information should they be interested. Out of the sixteen invitations sent and following me re-contacting those who did not initially respond, five practitioners agreed to participate, below are the profiles of these five participants.

3.3 Participant profiles

Participants	Qualifications	Experience and Specialties
Participant one – Jenny	<p>Bachelor's degree in Acupuncture (obtained in China) (People's Republic of China (PRC).</p> <p>Master's degree of Health Science in Practice (obtained in New Zealand).</p> <p>PhD of Acupuncture in Gynecology and Fertility (obtained in PRC).</p>	<p>Jenny has practiced for over 25 years, in both China and New Zealand, with her highest degree being obtained in China where she received her doctorate in Acupuncture specialising in gynecology and fertility. Jenny practiced in China as a Gynecologist. However, in New Zealand she is not classified as a medical doctor so cannot be a gynecologist. She still addresses fertility issues within the limitations of her scope of practice in New Zealand, namely through acupuncture treatments. Jenny owns her own clinic in Auckland, New Zealand.</p>

	Diploma of Adult Education (obtained in New Zealand).	
Participant two – Suzan	<p>Bachelor's degree in Traditional Chinese Medicine (Acupuncture).</p> <p>Currently completing Master's in Traditional Chinese medicine specialising in Women's health and mental health.</p> <p>Suzan obtained her first degree in New Zealand and her master's is also being obtained through a New Zealand based Chinese medical institution.</p>	<p>In 2006, Suzan obtained her bachelor's degree in traditional Chinese medicine specialising in acupuncture. For the past 14 years she has been practicing as an acupuncturist in New Zealand.</p> <p>Suzan has carried out extensive work in women's health and with sexual assault services and owns her own clinic in Christchurch, New Zealand.</p>
Participant three – Hayek	Master's degree in Orthopedics of Chinese medicine (obtained in PRC).	<p>Hayek has practiced TCM for 21 years, qualifying in 1999 with his specialty being in orthopedics. Hayek has practiced in China, and now practices in New Zealand. Like others who first qualified in China, the scope of his practice has changed since moving to New Zealand. While he was able to perform orthopedic surgeries in China, he is unable to operate in New Zealand.</p>

		Hayek owns his own clinic in Auckland and specialises as best as he can within his new scope of practice in New Zealand addressing patient problems through acupuncture and herbal medicine.
Participant four – George	<p>Bachelor's degree in Traditional Chinese Medicine (obtained in PRC).</p> <p>Diploma of Acupuncture (Level 7). Obtained in New Zealand.</p>	<p>George has practiced since 1995 in both China and New Zealand. Prior to moving to New Zealand, George worked as a doctor practicing both western and Chinese medicine. During his time in China he worked in three different departments (orthopedics, internal disease, and general surgery). In China, George completed his residency and became a doctor in charge at the hospital he worked at as a surgeon.</p> <p>From 2003 to present, George has worked as a registered acupuncturist and herbalist in New Zealand at his own clinic in Auckland.</p>
Participant five - Aroha	Bachelor of Health Science BHSc (Acupuncture). Obtained in New Zealand.	Aroha has been practicing for six years as a licensed acupuncturist. She owns her own acupuncture and traditional Chinese medical clinic in Auckland where she sees clients with varying issues. However, she mostly works in the field of women's health fertility.

Table 1 – Participant Profiles (Author)

3.4 Data Collection

3.4.1 Interviews

The collection of primary data took place from the 24th of September 2019 to the 18th of November 2019. This research is a qualitative study that employs an inductive interpretivist methodology through the use of semi-structured interviews with TCM practitioners. Kara (2017) explains how:

“Interpretivist methodologies suggest that reality is interpreted by people as we work to make sense of the world we experience and of our place in that world. Interpretivist researchers believe they cannot understand why social phenomena occur if they don’t first understand how the people involved in those phenomena interpret, or make sense of, what they experience” (p.46).

Thus, an inductive interpretivist approach was selected on the basis that it would best complement the exploratory nature of this research and would help bring light to the tensions between TCM and western medical modalities in New Zealand. Given that the research seeks the opinions and subjective insights of TCM practitioners, the research has no pre-determined hypotheses or theoretical framework of which data is to be collected alongside. Because of this, the research is inductive in nature and the data will be interpreted on the basis of what is uncovered during the interviews. It is important to note that interpretivist, qualitative, research is often critiqued alongside positivist, quantitative, forms of research and there are varied opinions around which methodology holds greater validity. These methodological debates are comparable to the epistemological debates that are seen in medicine where positivist medical knowledge is often considered superior to social or cultural forms of medical knowledge. Because this research understands the debates around positivism and its role in mainstream medicine, utilising an interpretivist approach seemed fitting. I believe it will ultimately offer greater levels of validity given that the opinions of TCM practitioners are largely silenced under the rhetoric of positivism.

3.4.2 Secondary data

A key part of this research was determining what the current medical landscape is like in New Zealand, and since I knew that I would be able to gather opinions from TCM practitioners during my interviews, establishing the position of biomedical practitioners and organisations and determining their stance toward TCM was important. One of the ways I was able to do this is by reading the opinions of biomedical practitioners and organisations put forward in the submission documents to the MoH. This research referred heavily on MoH data that was produced following the application from TCM groups to become a regulated profession. After TCM groups applied to become regulated and following agreement from a government appointed expert panel that TCM fit the criteria for inclusion under the HPCA Act, the MoH created a proposal document inviting healthcare organisations to comment and provide feedback on whether TCM should become regulated. The proposal document received 35 submissions from various organisations, and it was these submissions that I analysed to make a determination on whether there are epistemological tensions within New Zealand's medical landscape and what these exact tensions were for different groups.

Another document that was analysed alongside these submissions was information I received from the MoH. I requested information under The Official Information Act (1982) to the MoH on the 9th of September 2019. Because the application to become regulated was put forward in 2010, and since the process has been ongoing since then, I sought to determine why there have been delays in progress and hoped that more information would shed light on this. An analysis was undertaken on one large file that was sent through from the MoH on the 14th of November 2019. The file comprised of letters, meeting minutes, memos, discussion documents, and reports. These documents were thematically analysed and helped clarify the timeline of events, reasons for delay, and some of the logistics around becoming a regulated profession. Both of these documents offered context not only to the epistemological tensions that exist in New Zealand, but the current negotiations around regulation. The MoH submissions were insightful in providing me with background information for my interviews whilst the documents obtained from The Official Information Request documentation came through closer to the end of my interviews but were useful in corroborating statements made by practitioners throughout the interview phase.

3.5 Data Analysis

My data analysis involved analysing a combination of both primary and secondary data, in both instances a thematic analysis was undertaken. Thematic analysis is a method used to identify, analyse and report patterns found within datasets (Braun & Clarke, 2006). It is widely used in qualitative, experience-based studies, Nowell et al. (2017) notes the benefits of a thematic analysis:

“Thematic analysis is a highly flexible approach that can be modified for the needs of many studies, providing a rich and detailed, yet complex account of data. It is useful for examining the perspectives of different research participants, highlighting similarities and differences, and generating unanticipated insights” (p. 2).

The key with a thematic analysis is to capture information that is pertinent to the overall research question, which is why the analysis and the coding process is exhaustive, with patterns being identified “through a rigorous process of data familiarisation, data coding, and theme development and revision” (Braun & Clarke, 2006). My thematic analysis was conducted in line with Braun and Clarke’s six phase process and is outline below.

3.5.1 Thematic analysis of primary and secondary data

Phase one: Data familiarisation

The first phase involved familiarising myself with the data. With my primary data, this involved transcribing my interviews and reading through the transcribed conversations. With my secondary data, this involved reading through all thirty-five submissions that had responded to the MoH’s proposal document that invited medical groups to provide feedback regarding regulating TCM. It also involved familiarising myself with the information I received from my official information request from the MoH.

Phase two: Generating initial codes

The second phase involved generating codes. For my primary and secondary data I undertook qualitative coding on the information available. Qualitative coding “is most often a word or short phrase that symbolically assigns a summative, salient, essence capturing, and/or evocative attribute for a portion of language-based or visual data” (Saldana, 2009, p.3). When information was relevant to the research questions, was particularly insightful, or repeating conversations were had about a particular topic I would assign codes to that information. For example, when integrative healthcare was mentioned within the interviews with TCM practitioners I would assign the code “integrative healthcare” to selected text, or in the secondary data when western practitioners discussed their concerns regarding TCM’s lack of scientific evidence to provide the safety and efficacy of their treatments, I would code that text as “safety and efficacy”. Generating these codes throughout the data helped me see commonalities and differences between the ideas and experiences of TCM practitioners. It also enabled me to see how western practitioners responded to TCM’s efforts to regulate and to gauge their positionality on certain topics. Establishing codes across all datasets helped me begin to establish key themes that were emerging from the data.

Phase three: Searching for themes

The third phase involved searching for themes, this involved re-analysing existing codes, looking at the relationship between different codes, and organising them into potential themes. For this research, there were two overarching themes and multiple subthemes that spoke back to these two overarching key themes. Drawing on an example from the secondary data, one overarching theme was the forms of social closure that western medicine utilises to maintain dominance in New Zealand’s medical sphere. This theme was evidenced throughout both primary and secondary data, however, the submission documents were more reflective of this. Nevertheless, there were also sub-themes that fell within this overarching theme of social closure, the sub-themes were the specific forms of closure utilised. This was the same for the primary data, where there was one overarching theme, that being the challenges TCM

practitioners face working within a biomedical society, and then there were multiple sub-themes which clarified the specific challenges.

Phase four: Reviewing themes

Throughout the development of the results chapters themes were revised, this involved ensuring that the selected information fit in with the specific themes and that it coherently told a story that was reflective of the data. During this phase themes were re-assessed and data was removed if it didn't provide value to the themes discussion. It was also a time when additional data was selected due to it better speaking to the selected theme.

Phase five: Defining and naming themes

During this phase, themes were refined a final time and were given appropriate names throughout the thesis. The names or titles are reflective of the message the data is conveying.

Phase six: Producing the report

Lastly, the final two key themes established from my review of both primary and secondary data sets were utilised within the two results chapters of this thesis. Within these two results chapters multiple sub-themes pertinent to the overarching theme were written and discussed.

3.6 Ethics

3.6.1 Cultural considerations

Because this was a cross cultural study my ethical considerations primarily focused on ensuring that the voices of TCM practitioners were accurately represented. Prior to commencing this research, I realised that TCM practitioners are in a somewhat marginalised space in New Zealand given the dominance of western medicine.

Therefore, ensuring that I captured the opinions of TCM practitioners accurately and was able to represent them in this research was an important task. Bearing this in mind, along with the fact that I myself am a non-Chinese person, I set forth to determine what could potentially jeopardise my interpretations of the data. My main concern was the possible language barrier between the selected practitioners and myself. In order to address this, I had an information sheet translated into Chinese, this was then sent along with an English version to all of the practitioners. On this sheet it asked the practitioners whether they would like an interpreter to be present during the interview, none of the practitioners ended up needing an interpreter but it was a necessary precaution.

Another consideration I accounted for was how I would work with Chinese doctors as someone who is not a Chinese medical doctor. One of the factors I considered was that I lacked a full understanding of what TCM is, and in order to be able to communicate about Chinese medical practice within the interviews I needed a better understanding of TCM. Before conducting my interviews, I undertook my literature review and within that I explored the principles of TCM and familiarised myself with Chinese medical practice. This gave me a better foundation of understanding that I was then able to draw on when conducting my interviews, enabling more enriching conversation. It also allowed me to better understand some of the remarks made by practitioners about their practice, and thus assisted with data interpretation.

3.6.2 Informed consent

Prior to starting the interviews, I went over my informed consent sheet with the participants, I again discussed my research project and asked whether they had any questions. After answering any further questions, I made sure that the participants knew that at any time, should they not want to answer a question they were in no way obliged to do so and that the interview could end at any time. I then asked participants to choose a pseudonym that they would like to be referred to as in the thesis and asked whether they would mind being audio recorded. For the participants I met in person they signed and dated the consent form, for those who I interviewed over Skype they verbally consented to the agreements of the study and being audio recorded.

3.6.3 Privacy and confidentiality

All participants were given the opportunity to choose a pseudonym in order to protect their identity, of which 3 practitioners decided to use a pseudonym. Moreover, any private information such as their previous places of practice and current places of practice have not been mentioned to ensure their identities aren't exposed.

It was also important that patient confidentiality was kept. Due to interviewing doctors, I needed to ensure that in our discussions patient confidentiality wasn't compromised and that if patient cases were relayed no names or documentation was used as evidence of their cases. To prevent this from happening, when going over the consent process I discussed patient confidentiality concerns and reiterated that no cases needed to be mentioned.

3.6.4 Research setting

This study was conducted both in person (3 participants) and via Skype (2 participants). For the interviews that were conducted in person, the main consideration was being cautious when meeting the participants for the first time and ensuring that my own safety was protected. I arranged to meet up with the participants during business hours at their practices and took precautionary measures such as recognising the entry and exit paths and letting people know where I was going and how long they can expect me to be gone for. As for my participants, I chose to meet them at their practices so the interview could occur in a place familiar to them where they would likely feel comfortable. For the Skype interviews, my main consideration was ensuring that the conversations couldn't be overheard, which was easily done by using headphones during the Skype calls.

3.7 Conclusion

This chapter discussed the research methodology I utilised during my qualitative study on the epistemic tensions between western and TCM in New Zealand. By using an inductive interpretivist approach, I was able to capture the subjective insights of TCM

practitioners during my interviews and establish their experiences of working in a biomedically dominant society. This was critical as the purpose of this research was to give voice to TCM practitioners who are seeking greater recognition by New Zealand's medical sector. An inductive interpretivist approach plays on the debates seen in medicine around epistemological knowledge systems and the idea that positivist knowledge systems are greater in their validity. Not only does qualitative knowledge exist, but there is validity in qualitative forms of knowledge that shouldn't be ignored. Because western medicine has ignored the knowledge of TCM, which has largely derived from inductive, interpretive forms of analysis, this research sought to support TCM practitioners by giving them a platform to speak out about New Zealand's medical landscape, and strategically did that through an inductive, interpretivist approach.

In order to provide context for New Zealand's medical landscape, the perspectives of western practitioners were necessary, this research utilised secondary data from the MoH in order to do this. Ultimately both primary and secondary data provided information that formed part of the two results chapter. This information contributed to existing discussions taking place internationally about the epistemologies of medicine, however, theoretically it newly added to these discussions by providing context to how epistemological tensions exist in New Zealand through the lens of social closure, which, to date, doesn't appear to have been discussed previously. What's more, the insights of this thesis are timely as there are emerging conversations regarding the integration of a non-western medical systems into western societies, particularly with ongoing debates around integrating TCM under New Zealand's HPCA Act. In this way, the thesis contributes not only by filling an important gap in theoretical development but will also be useful in its contribution to wider policy debates as the regulation of TCM proceeds.

Chapter Four – The practices of social closure: How western medicine utilise material and symbolic forms of social closure to dominate New Zealand’s medical sphere

4.1 Introduction

In this chapter I examine the ways western medicine maintains hegemony in New Zealand’s medical sphere. I draw on neo-Weberian class analysis frameworks of social closure and Bourdieu’s theory of symbolic violence to argue that the suppression of heterodox modalities and the domination and cultural hegemony of western medicine has created value differentials between western and TCM through material and symbolic forms of social closure. The material forms of social closure I analyse include the legitimisation of biomedical knowledge and delegitimisation of Chinese medical knowledge (4.2), the professionalisation of western medicine through avenues of regulation and the semi-professionalisation of TCM through de-regulation (4.3), as well as the social closure that occurs through the exclusive resource allocations that go to western medicine (4.4.1) and in turn the medicalisation and monopolisation of healthcare (4.4.2).

The symbolic forms of social closure I analyse include assumptions and expectations of TCM practitioners: qualification standards (4.5.1), English language competency (4.5.2) and hygiene practices (4.5.3). These assumptions and expectations are symbolic as they intensify the power differentials between western and TCM through the implications of imposing unfounded assumptions and western standards of practice on TCM. These three forms of symbolic social closure, and the assumptions and expectations that are placed on TCM practitioners, are largely guided by ethnocentrism. Thus, ethnocentrism largely underpins the exclusion of TCM in New Zealand society.

4.2 Neo-Weberian theory: Social closure through professional expertise with what constitutes as legitimate versus illegitimate medical knowledge

Throughout this research, one of the main questions I wanted to answer was whether TCM practitioners feel that there are epistemological struggles between western and TCM and what these struggles entail. Prior to my interviews, I began with an analysis of secondary data which looked at submission responses from varying medical groups regarding whether TCM should become a regulated profession. This is where the epistemological commitment to positivism first became apparent. The struggle evidenced within the submissions, and later confirmed throughout the interviews, is that there is a push from biomedical organisations for scientific evidence produced through RCT's. However, TCM cannot always produce scientific evidence under the same guidelines, and consequently their own body of knowledge is de-legitimised against "legitimate" scientific knowledge produced by the western medical sector. Social closure has often been looked at through the lens of professions, with professional occupations attempting to achieve market control over certain industries. This is done through facilitating membership to specific industries by setting criteria for those eligible to join at a particular point in time. Within this research, social closure has been witnessed through the institutionalisation of western medical expertise, and the legitimisation of scientific epistemics over other bodies of knowledge.

Several submissions from biomedical organisations and supporters discussed the lack of scientific evidence available to support the safety and efficacy of TCM. The New Zealand Medical Association was one of these submissions, mentioning how TCM needs to prove its efficacy scientifically:

We have always held the view that before an alleged therapeutic product or service is provided, its efficacy should be proven by properly verifiable scientific methodology (such as double-blind trials). Regrettably much of the complementary or alternative medicine's offered (such as TCM) have not been subjected to these standards of evidence (Ministry of Health, 2011, p. 18).

Other submissions have claimed that because of their lack of scientific evidence, TCM cannot be deemed a health service. The Royal New Zealand College of General Practitioners was one of these submissions stating that:

In order for a profession to be defined as a health service pursuant to the HPCA Act the profession must be able to demonstrate on an evidential and scientific basis that it assesses, improves, protects or manages the physical or mental health of individuals. The College does not consider that the current proposal contains sufficient information or evidence to demonstrate that TCM is a health service such as is defined by the HPCA Act (Ministry of Health, 2011, p. 70).

Both responses illustrate how positivism is endorsed in New Zealand by biomedical organisations, arguing that there is insufficient scientific evidence available to regulate TCM under the HPCA Act. However, some TCM practitioners disagree, claiming that there is already sufficient evidence available to support the use of TCM. The New Zealand College of Chinese Medicine discussed in their submission their preference for TCM to be known as Chinese medicine to reflect its research base and place in contemporary medicine:

TCM is alternatively known as 'Chinese Medicine' to reflect more accurately its research basis and modern application to contemporary conditions (Ministry of Health, 2011, p. 61).

This name change shows the degree of social closure that has occurred within contemporary society, where scientific, evidence based medicine is held in higher regard to knowledge that is evidenced in other ways, such as through longstanding tradition. This is problematic as the traditional principles of TCM are also a source of its appeal and value. TCM's knowledge base is no less important than western, evidence based knowledge, having sustained Chinese communities and now western communities since its conception. However, western epistemologies have rendered such knowledge useless, which has resulted in western practitioners undermining the care TCM practitioners provide to their patients.

With the demand from western practitioners for scientific evidence, TCM practitioners have undertaken scientific tests where possible. A few practitioners I interviewed discussed TCM's evidence base. Suzan, a TCM practitioner who specialises in acupuncture and in women's health, mentions the Cochrane reviews TCM has:

In terms of its evidence base, acupuncture, despite the fact that it isn't funded to do much research, we get stuff all, we don't have that funding base that Otago medical school does, despite that, we have over 11,000 Cochrane reviews. There is actually a lot of evidence out there, we have good evidence.

Cochrane is recognised as a key resource for evidenced-based medical research (John Wiley & Sons Inc, 2020). Even so, the Cochrane reviews of TCM have been contested by western medical doctors. Systematic reviews of Chinese medical Cochrane reviews have determined that poor methodology was used to truly establish the efficacy of TCM treatments (Manheimer et. al., 2009; Zhang et al., 2011). This lack of methodological similarity to western medicine was also raised in a submission by the Pharmacy Council, who despite agreeing that there has been a growth in TCM research, argue that TCM research needs to better comply with scientific standards (Ministry of Health, 2011, p. 85). The growth of TCM research counts for little if its methodology differs in any way to the scientific bodies of knowledge produced by western practitioners.

Another angle taken by biomedical supporters when considering TCM's evidence base, or lack thereof, is that TCM should instead be thought of as a cultural belief system rather than a medical system. The New Zealand Skeptics Society Inc, a group that self-describes as promoting critical thinking and supporting scientific evidence in daily life, argue that:

There is significant risk in granting legitimacy of official regulation ahead of adequate evidence of efficacy. (...) Chinese medicine was developed long before modern medicine, biology, chemistry and physics, which are evidence-based, cross cultural bodies of knowledge that exist independently of a practitioner's or client's beliefs, supported by

independent verification and monitored practice. (...) There is no evidence for the existence of concepts such as Yin-Yang or its role in health care these are pre-scientific concepts that bear no relationship to the current understanding of the human body, anatomy, physiology, and the germ theory of disease. TCM does not fulfil the criteria of being a health service, but is more in the nature of an applied cultural practice and belief system (Ministry of Health, 2011, p. 98-100)

Such a perspective devalues TCM's cultural foundations, to the point that it is being questioned whether TCM should even be considered a medical system. This perspective also suggests that cultural knowledge cannot be implemented in the world of medicine, which is ironic given that science could be thought of as a western cultural system (Sinclair, 2004). Although TCM has undertaken scientific studies to appease biomedical organisations and supporters, there are cases where it is not viable for TCM to use scientific methodology. In my interview with George, a TCM practitioner with a background in orthopaedic medicine, internal disease, and general surgery, he spoke to this incompatibility:

In China we have a lot of universities of TCM that are already doing a lot of research. Most of them have already stated that it doesn't work, it's very complicated and it's hard to prove how TCM works in the modern standard.

Expanding on George's insights, Jenny, a TCM practitioner with a background in gynecology and women's health, specifies exactly why scientific testing with RCT's don't work for TCM:

Acupuncture is different than RCT's for western medicine; first of all you cannot blind the practitioner, and secondly, with manual treatments if you only employ one acupuncturist that's fine, but if you employ different acupuncturists with different techniques and different experience then that's two variables which you cannot have in western medicine. Allocation for the test sample is another problem, when you're testing a drug for a health condition in western medicine you only get patients with

the same diagnosis, but in TCM we diagnose people differently with chi deficiency, chi stagnation, etc., that's completely different to western diagnostics, how can you classify them as the same?

These diagnostic differentials explain why this incompatibility exists, however, despite this incompatibility, TCM has its own way of knowing and understanding whether its treatments are safe and effective and is not practising on a whim. TCM practitioners have largely relied on anecdotal evidence across time to establish whether their treatments are safe and effective. One interviewee, Hayek, a TCM practitioner that specialises in orthopaedic medicine, discussed how evidence is instead witnessed in TCM's historic use and the knowledge that has been passed down across generations:

It's very difficult to prove what works in a western medical way. Chinese medicine comes from the old people, there is a recipe on how to treat someone. You will use medication for a particular ailment and the fact that everyone has had the same reaction of getting better is reassurance that it works. Maybe Chinese practitioners don't fully understand how it works scientifically, but it's the results that are a sure thing.

Because of the methodological incompatibility between western and TCM, a question that arises is how evidence for TCM can be provided. Aroha, a TCM practitioner who specialises in women's fertility, like Jenny, mentions the problem of having one fixed variable in scientific analyses, and believes a shift is needed from trials of efficacy to pragmatism. Pragmatic trials, as explained by Patsopoulos (2011):

"Are designed to evaluate the effectiveness of interventions in real-life routine practice conditions, whereas explanatory trials aim to test whether an intervention works under optimal situations. Pragmatic trials measure a wide spectrum of outcomes, mostly patient-centered, whereas explanatory trials focus on measurable symptoms or markers (clinical or biological)" (p. 217-218).

This pragmatic approach, as discussed by Aroha, is better suited for TCM:

The problem with western medicine is that they drill in what they test against which is one fixed item, whereas acupuncture is a holistic, whole patient centered approach and you cannot actually understand what the one thing is that we do. Yes, we put needles in but even communicating with people to help them understand their signs and symptoms is a big part of the treatment. There have been many studies about what acupuncture is, it's a complex treatment it's not just putting needles in. Yet western medicine wants us to do tests where it's just put a needle in, or put a fake needle in, and see what happens. But placebo needling is not inert, it still stimulates the outer aspects of the body, and stimulates a result. When I trained, my university talked to us a lot that we should do pragmatic trials steering away from efficacy. People have acupuncture because it works and makes them feel better. That is what we need to look at, the effectiveness of the healthcare for the individual, rather than just the science.

Pragmatic trials have been conducted in the United States, Suzan discusses how insurance companies are assisting with such studies, and how New Zealand could follow suit:

Insurance companies in America have discovered the benefits of Chinese acupuncture ... They looked at their statistics for back injuries and other problems and realised that patients who had acupuncture were back to work quicker and were using less medications. They interviewed patients and the patients spoke about their feeling of wellness and their ability to sleep and the insurance companies could see that it was actually cost effective to keep acupuncture insured. These results came from insurance companies exploring in retrospective reviews what acupuncture was showing, and that's what we need here in New Zealand, we need ACC to do that. Our latest recommendation to them is to do that.

With pragmatic trials being recommended to the ACC, TCM practitioners are trying to establish an evidence base for themselves and are trying to organise a research

methodology better suited to their practice. Albeit, Jenny seems doubtful that western medicine would accept an evidence base that isn't scientific:

The only thing that western medicine would accept without any excuse is to provide them more adequate scientific evidence. The thing is, western medicine is an evidence-based practice, we will accept that, and we will explain our medical system to them in their way biomedically and scientifically. But speaking on their terms cannot be a solution for Chinese medicine, just because western medicine cannot understand Chinese medicine or just because Chinese medicine cannot scientifically prove itself yet, it doesn't necessarily mean that Chinese medicine is wrong.

This incompatibility is troublesome, as on the one hand TCM practitioners understand that scientific evidence is needed to be accepted in a biomedically driven society. On the other hand, they understand the limitations of scientific analysis for TCM and are trying to establish other methodological approaches that they can use to build their knowledge base. Undoubtedly, in New Zealand, positivist knowledge systems have validated western medicine and have granted the western medical sector the authority to control the medical sphere in terms of the entry requirements to be initiated and accepted into mainstream healthcare systems, discussed in 4.3 below, as well as initiated into New Zealand's political economy of medicine by way of funding, discussed in 4.4. The fact that western medical organisations will not accommodate other bodies of knowledge affirms that social closure is occurring through the production of knowledge and what is considered professional expertise or otherwise.

4.3 Social closure through the professionalisation of western medicine and the semi-professionalisation of Chinese medicine

An analysis by Macdonald (1985) on social closure and different professions determined that "registration is one of the strategies that an occupation employs in its continuing effort to achieve and maintain social closure that will ensure control and the collective social status of its members" (p. 541). In New Zealand, social closure

through avenues of professionalisation and semi-professionalisation is evidenced with who is regulated (western medicine), and not regulated (TCM), under the HPCA Act. Because western medicine is regulated under the Act and has considerable control over who is initiated under the Act, boundaries have been created between western and TCM. This has strengthened the professional status of western medicine while keeping TCM within a space of stagnancy as a semi-professional medical modality.

Submissions from biomedical organisations discussed how regulating TCM would be beneficial in addressing public safety concerns. This would result from being able to set high standards of practice for the profession under regulation. However, biomedical organisations are also concerned that regulating TCM under the HPCA Act could legitimise the profession without it having scientific evidence for its treatments. In order to regulate TCM, biomedical organisations have suggested that other regulatory methods be used, such as regulating TCM under a separate Act. Yet, a separate Act would still see TCM classified as semi-professional and will still be considered less credible in comparison to western medicine. Essentially, multiple Acts will function to compete in New Zealand's existing medical hierarchy and TCM will be no better off than before. The following submissions showcase how social closure is achieved through the boundary making that is occurring under regulatory frameworks.

The New Zealand Medical Association, gives example to how regulation would protect the public from the services provided by TCM:

The principal grounds for regulation in our view must be public safety.
The public must have protection in respect of services provided by health practitioners (Ministry of Health, 2011, p. 18).

Similarly, Arthritis New Zealand discussed how regulation would ensure that TCM practitioners are held to a high standard ensuring that they practice “competently, capably and ethically” (Ministry of Health, 2011, p.6). Likewise, the Taranaki District Health Board comment how regulation would “give the public confidence that the particular practitioner they were seeing was of a set standard” (Ministry of Health, 2011, p. 5). These biomedical organisations appear to question the standards of TCM practice because TCM isn't regulated under the HPCA Act. Despite these public safety

concerns, as touched on before, biomedical organisations are hesitant to regulate TCM under the HPCA Act, with the New Zealand Medical Association claiming that it would provide the profession with “legitimacy and credence” (Ministry of Health, 2011, p.18) prior to establishing scientific evidence for their treatments. Iain Martin, Dean of the University of Auckland’s Medical and Health Sciences faculty, discusses this conflict around regulation:

I would preface this by saying that there exists within the Faculty a number of divergent views on whether it is appropriate to regulate a profession that many felt did not have a sound scientific evidence base. Against this was the clear recognition of the potential for harm and on this basis our view is that given the numbers of practitioners that TCM should be regulated. However, a number of individuals in our organisation hold strongly to the view that regulating endorses a practice without a strong scientific evidence base (Ministry of Health, 2011, p. 13).

Essentially, regulation is used as a form of social closure as western medicine is only willing to accept evidence based practices under the HPCA Act. The social closure of what is considered medical expertise again shows itself in the face of regulatory discussions by prohibiting other professions from regulating due to their reported lack of scientific evidence. This results in a system where scientific knowledge is privileged over other bodies of knowledge, something that has become normalised due to the governments support.

An additional concern raised by biomedical organisations is what would happen to the allocation of funding resources if TCM became regulated. The Capital and Coast District Health Board discuss this, stating how regulating TCM: “may result in resources being misdirected that might otherwise be used for more evidence-based treatments” (Ministry of Health, 2011, p. 28). This wasn’t the only submission that considered resource allocations, the New Zealand Skeptics Society Inc argue that the only reason TCM is seeking regulation is to justify public funding and to gain credibility:

We already have a number of medically dubious practices covered by our regulations, and this legitimisation has been used as a marketing tool by them to justify public funding, expand their clientele base and gain credibility without requiring to provide evidence as to the safety and efficacy of their practices (Ministry of Health, 2011, p. 108).

Like other biomedical organisations, the Skeptics Society is wary of legitimising TCM, but takes it further by asserting that the profession is only seeking legitimisation to obtain funding. However, this statement can be contested as my interviews found that there are divergent views between TCM practitioners around funding. As will be discussed in the next chapter, some practitioners believe that greater funding and incorporation into New Zealand's publicly funded healthcare system would be beneficial for patient care. Whereas others believe that greater funding could impose further limitations on the profession and their practice, hence, there is a preference for some TCM practitioners to practice privately.

With that said, it is not just western medicine's refusal to support the regulation of TCM, it is also the tactics of delay they've employed to avoid TCM's regulation. Suzan discusses these tactics of delay:

The New Zealand Medical Council was going to have a service level agreement with us that our Chinese medical board would sit beside them and share resources such as offices and things like that. It wouldn't be that they were on top of us or had control of us, it would simply be that we would co-exist and have this agreement of space and secretaries, it reduces costs. We were doing that and we had been ticked off for cultural competency and a whole lot of other things, and then boom, the health department went to the Medical Council and said can you put in writing that you're going to do this? and they had a new CEO who, this was just before Christmas, said no we are not willing. We are not interested anymore. Cut.

Suzan's conversations reveal two insights. Firstly, Suzan reiterates that creating a blended authority with the Medical Council would not have meant that they had control

over the Chinese medical sector, TCM would maintain its autonomy and would remain separate from western medicine. Suzan has brought attention to this matter due to her criticism toward the hierarchical nature of New Zealand's medical system. Throughout the course of her interview, Suzan unpacked her thoughts on New Zealand's medical hierarchy and what she believes is the enacted violence that occurs within it. Enacted violence refers to violence that is enacted through social actions, such as the actions undertaken by western practitioners under a medical hierarchy that unfavorably impact TCM and TCM practitioners; forms of social closure fall within this category. It is clear this is something she wants to avoid with blended authorities, as other conversations with her stated the challenges of working within a system that enacts violence by not accepting other medical modalities:

The challenge in New Zealand is that it's been so hierarchal that western practitioners cannot even get out, it's like they're blind to it, they don't see the cage they're in, that's where they operate from and it's what's normal. I was invited to be a part of couple of health centres where one western doctor really wanted me as a partner of the group, but the other doctors could not cope with that, and I refuse to go into any system with horizontal violence. Because that's what it is, it's enacted violence. It's a very unhealthy model for wellness, it doesn't empower people. It ensures a whitecoat mentality with dissociated practitioners who have a very narrow understanding of a particular condition and no understanding of how it may be supported or resourced from other areas.

The symbol of a "whitecoat mentality" denotes authority, power, science and western medical doctors (Couser, 1997). Because a whitecoat mentality upholds these tenets, it has led to the rejection of systems that operate outside of western medicine. Suzan believes that the hierarchal power given to western practitioners, particularly those opposed to alternative forms of care, can lead to horizontal violence. Horizontal violence refers to the "malicious behaviour perpetrated by healthcare workers against each other including bullying, verbal or physical threats, undermining clinical activities, purposeful disruptive behaviour, and other malicious behaviours" (Volz et al., 2017, p. 213). This explains why Suzan felt it were necessary to mention that a blended authority would not result in TCM coming under the direction of western medicine, as

it is this hierarchical system that perpetuates horizontal violence and inequalities between different professions.

Secondly, Suzan's initial response discusses the delays in becoming a regulated profession, and how the Medical Council's refusal to become a blended authority meant that another year had passed with no progress being made. Her response was rather emotive, having mentioned how there was now the upcoming challenge of finding another regulated authority to create a service level agreement with. This insight illustrates how rejection is used as a tactic of delay by western medicine, and in turn is a form of social closure. Consequently, TCM maintains a semi-professional status that is undermined by the expertise and professionalism that western medicine is known for.

Following her conversation on the Medical Council's change of mind, Suzan discussed the options the Chinese medical sector was given from the MoH. This is where the suggestion to regulate TCM under a separate Act was noted:

We got given options by the Ministry, and that was find another regulated profession to have a service level agreement with, to stand alone which is incredibly expensive, or also to set up one for CAM. I thought that was really interesting to suggest that we should establish a CAM regulatory authority, that would lump our very scientific and very whole system with anything else that wasn't western medicine. I was like screw that, that's not going to happen. Other modalities aren't anywhere near ready for regulation, so it's just about putting us off for another ten years. We now have a memorandum of understanding with the Nursing Council and it is at the stage where we are moving forward in becoming a blended authority and we will see how it goes, it could happen next year, but I mean in all honesty the MoH will put anything ahead of it, we will get shunted down the list.

Including TCM within a new Act alongside medical modalities that are less scientific, are further behind in their efforts to become regulated, and are further behind in their efforts to assist in mainstream healthcare situations is, as Suzan argues, another way

to prolong regulatory efforts. If a separate Act were to happen, the MoH would have to start the process over again, by determining which CAM modalities to include under the new Act, as well as accounting for the legalities involved in establishing a new Act. However, biomedical organisations justify the decision, as noted earlier, by claiming how it could mitigate concerns over the potential harm TCM poses to the public, and the problem of regulating a profession under the HPCA Act that has insufficient scientific evidence to support its treatments. Below the Medical Council of New Zealand discusses this:

TCM is a health service, and in an unregulated environment, traditional Chinese practitioners may present a risk of harm to the public. While a number of TCM remedies are of proven benefit, many are not. Regulation may serve to legitimise treatments that have no positive benefits for patients. (...) The Council's view is that regulation of TCM is appropriate, but the Council suggest that Health Workforce New Zealand consider alternate regulatory mechanisms for the regulation of TCM medicine including regulation of all traditional and complementary modalities under a single umbrella. This would protect the public from harm without also fostering an interpretation by the public that TCM is supported by the government as meeting the same standards of efficacy as other health professions which do subject themselves to properly verifiable scientific methodology (Ministry of Health, 2011, p. 19-21).

The Nursing Council, as of September 2019, have agreed to become a blended authority with TCM, which would regulate TCM under the HPCA Act. However, Suzan remains sceptical that the MoH will proceed with regulation, clearly frustrated by the continual resistance and the social closure that occurs under the guise of statutory regulation. The public safety discourse that is perpetuated through statutory regulation has privileged biomedical conceptions of what is deemed legitimate medical knowledge and safe and effective medical practice, excluding TCM's knowledge perspectives from within the boundaries of state-recognised knowledge and now state-recognised protections through regulation. In New Zealand this division in labour and the boundaries that have been created are evidenced through the regulation of western medicine and the authority it has through boundary making. King et al., (2018)

state that “while the security afforded by legally enshrined occupational closure is not absolute, government-endorsed registration remains a key strategy for the emerging health professions” (p. 6). Hence why the Chinese medical sector continues in their efforts to become regulated and legitimised in the same way that western medicine has done.

4.4 Social closure through resource allocation and the medicalisation and monopolisation of healthcare

State controlled medical professions have greater political power than medical professions that are not endorsed, or are only partially endorsed, by the government. Western medicine has a national-level political alliance with the government, in large because both establishments have agreed upon the use of positivist epistemologies in medicine. This has resulted in state support through the creation of government legislation that endorses and promotes the use of western medicine, as well as through resource allocations such as funding streams. From exploring the role of the political economy in New Zealand, this research has uncovered how social closure is occurring through the exclusive resource allocations that are going to western medicine. By providing resource allocations to western medicine, social closure has been enacted through the medicalisation of patients and in turn the monopolisation of healthcare. Because social closure occurs through the political economy through funding streams, western medicine prospers in New Zealand society and ensures that other medical professions remain outside of the political sphere and have less market control in mainstream medicine.

4.4.1 Resource allocation

Because of the support that western medicine receives from the government, there have been discussions within the submissions around resource allocations in New Zealand. These submission entries spoke about funding streams, including how the distinction could be made between groups who do and do not receive resources from the government, which medical modality is the most deserving of resource allocations, and whether regulating TCM would be beneficial for TCM practitioners by seeing them

receive the same resources that western medicine does. Each submission uniquely documents the ways social closure occurs through the preference that is given to western medicine for funding resources.

The New Zealand Nurses Organisation (NZNO) discuss how distinctions could be made between medical professions who do and do not receive resources from the government. They state how only regulated professions under the HPCA Act should receive funding. Further, they mention how if unregulated or self-regulated modalities wanted resource allocations they would need to form part of a blended authority with an existing regulated profession. In this way, it would be clear which medical models are funded. Their conversation is prompted by issues that have arisen around the recognition of medical models that are seeking public funding for their service, albeit are unable to receive funding.

However, the drawback of needing to be a blended authority to receive funding resources, is that such a system could create an influx of unregulated or self-regulated medical professions seeking regulation, which, the NZNO claim, could impact existing regulated authorities financially as they would be expected to support an additional healthcare system (Ministry of Health, 2011, p. 56). Notably, social closure is evidenced in such a suggestion, particularly given that unregulated or self-regulated professions would have to apply to become a blended authority with an existing medical profession and convince them to take them on board. The majority of existing regulated professions are western healthcare providers. Thus, power is still in the hands of western medicine in terms of who becomes regulated and who receives resource allocations.

A submission by an anonymous individual or group, shifts their focus from how resources could be allocated between different medical groups, instead looking at who is most deserving of resources. The author/s consider aspects of patient harm, and mention how resources should be allocated to medical groups based off of who is less likely to harm their patients. They state: “as nobody can claim that TCM, or other forms of CAM, always represent an optimal choice” (Ministry of Health, 2011, p. 10), resources should only be allocated to the optimal medical professions. The author/s are implying that western medicine is the optimal choice while TCM is the sub-optimal

choice. The public safety discourse western medicine abides to has rendered western medicine the optimal choice. However, there are treatments that may not practice in line with the public safety discourse relayed by western medicine, although these alternative treatments, such as Chinese medicines, are safe and effective, and in turn could be equally as viable as western medicine.

Although regulation is often seen as an advantage when it comes to receiving resources, not all TCM practitioners support the move toward regulation. In his submission, Mark Inglis, a TCM practitioner who owns their own practice, warns how regulation could increase costs for practitioners without any guaranteed benefits:

There are no current standards in New Zealand required for TCM as most practitioners are small businesses. Regulation of these could be perceived as being unduly harsh unless they were able to gain equal status with other approved providers and gain government subsidies to absorb the costs of regulation (Ministry of Health, 2011, p. 126).

Each submission shows how there is power in receiving resource allocations. Not only does western medicine receive resources, but other western medical professions, the NZNO, have argued how western medicine should also control who receives resource allocations in future. Additionally, some people believe that western medicine is the only optimal choice when it comes to who is deserving of resource allocations. As for the perspective provided by Mark Inglis, a TCM practitioner, his response illustrates how he too recognises the importance of receiving resources, mentioning how TCM would not benefit from regulation unless it could receive the same resource allocations that western medicine receives. Because western medicine has garnered support from the government to receive resources, TCM is not advantaged in the same way that western medicine is. There is also another factor to consider, and that is how western medicine takes its allocated resources to limit the practice of TCM in mainstream medical markets through the medicalisation and monopolisation of healthcare.

4.4.2 The medicalisation and monopolisation of healthcare

Since western medicine has significant power in New Zealand's political economy through governmental support and the funding it receives, it has developed into an institution of social control, largely through the medicalisation of society and in turn through the monopolisation of healthcare. The medicalisation thesis was stated earlier within the literature review, to restate, medicalisation is a critique that non-medical conditions are becoming classified as medical problems, but is also thought of as the over-medicalisation of medical problems too. In contrast, medical practitioners utilising de-medicalised approaches aren't so quick to treat health problems medically, and will instead consider biopsychosocial contexts of health prior to determining the best course of treatment. By considering all contexts, medical practitioners may find that medically prescribed treatments aren't the best course of action, as a patients' ill health may not necessarily be caused by biological factors.

Because western practitioners take a medicalised approach in their care, medical treatments are marketed toward patients, which, some TCM practitioners claim, western practitioners and pharmaceutical industries do for financial gain. While it cannot be assumed that all western practitioners are motivated by the financial gain to be had from sick patients, particularly those within the public health care system, it is a popular theory that has circled the western medical profession, having been recognised for being a profit driven industry (Miller, 2009). Before drawing further on discussions around western medicine's profit making and the monopolisation of healthcare, the below discussions that emerged from the interviews first look at how medicalised approaches continue to be used in New Zealand. Several interviewees within this research have claimed that despite western medicine's continual use, it is unsustainable and is not always a cost effective solution.

In her interview, Suzan comments how "western medicine's funding model is unsustainable, with health boards on the brink of collapse". However, she claims that due to the hierarchical nature of New Zealand's medical system, western medicine is deemed the most appropriate modality to address patient problems. This, she argues, is despite the fact that there are instances where TCM would be a more suitable, cost effective solution for the New Zealand healthcare sector. Since TCM is not utilised

within mainstream healthcare situations, Suzan mentions how she is advocating for pilot studies to build bridges into specific projects, claiming:

Unless we build bridges to filling in gaps in services, until western practitioners recognise the benefit of having us involved, because they're blind to us at the moment, the system will not accept us.

New Zealand's healthcare industry seeks healthcare options that are cost effective. The cost effectiveness of treatments heavily ties in with the public safety discourse that western medicine promotes. If RCT's cannot validate medical treatments, treatments are not considered safe and efficacious, and in turn, are not considered cost effective. However, as stated earlier, there are medical treatments such as TCM, that are safe and efficacious and could be a cost-effective option, despite not having undergone RCT testing. Because these treatments don't abide to western medicine's public safety discourse they are largely ignored, hence why Suzan wants to find alternative ways to prove their use.

Similarly, Jenny recognises the role TCM could have in treating patients, providing examples of when TCM could be utilised in mainstream healthcare and how it could reduce government expenditure:

We can prevent the very high cost of drug usage, especially painkillers, and we can prevent a lot of unnecessary surgeries from happening. For example, knee replacement, hip replacement, or shoulder surgeries. Also, we can save costs associated with government funded IVF. I have made hundreds fall pregnant and they have had live births, so there is no need for the government to spend \$17,000 per couple for one cycle of IVF. We can help a lot of people and save huge amounts of money and expenses for the government if we practice on the frontline.

This wastage of government spending on unnecessary western medical treatments was also reiterated by George, who discussed how patients could become healthier if TCM treatments were used, treatments that would prove to be more cost effective:

If people who receive funding for asthma go and see a Chinese practitioner, I think the government could save a lot of money. In Chinese medical textbooks we have 1% of people who have asthma, in New Zealand it's 20-25%. Because once patients have been coughing and wheezing for a week, they will try modern medicine and if it's not working, they will then have TCM. With TCM they will take the Ginseng herb, for around 1-2 weeks, and at least 80-90% of patient's symptoms will clear. Kiwis aren't being fixed even though they're using inhalers and the government is wasting a lot of money on them. The government can save a lot of money and maybe make the people healthier if TCM was used to treat conditions like asthma.

George goes on to argue that the reason western funded treatments continue to be used, despite poor results, is due to the role of pharmaceutical companies in the healthcare industry and their financial motivations:

It's the modern medicine theory, it's a big industry and once you fix it there's no money. The pharmaceutical companies, they'll use inhalers and a lot of medicines and it's a big business. They are against the use of TCM, and they will say to Chinese practitioners, "have you proven the safety and efficacy of Chinese treatments?" – but we don't need to prove that our treatments work, they can ask the patients, ask the one hundred people who go to see Chinese practitioners and see how many people get better. But they want to use scientific standards to prove TCM's safety and efficacy, they need 1 million, 2 million patients in control trials to prove the safety and efficacy of TCM, that's just silly. But they do it so that big companies like western medicine and pharmaceutical companies can dominate everything and stop other people practicing medicine.

The monopolisation of healthcare intertwines with medicalisation, given that patients have to be medicalised in order for medical treatments to be prescribed and for western medicine to create a monopoly and to profit off of their treatments. The public safety discourse is at the root of this monopoly, as the government has provided

western medicine with the resources necessary to strengthen the use of western medicine in everyday life. This has enabled western medicine to have greater market control than other medical modalities and has functioned to shut TCM out of the medical market to a considerable degree. TCM practitioners continue to advocate for the use of TCM treatments as a more cost-effective solution. The statistics behind New Zealand's budget deficit will be discussed in chapter six, reiterating the need for treatments with higher success rates, which in turn are cost effective.

4.5 Social closure through symbolic violence: Three ways symbolic violence is enacted within New Zealand's healthcare system

Bourdieu's theory of symbolic violence was discussed earlier within the literature review, to restate, its premise is that there are groups that are subordinated "by the dominant class of an ideology which legitimates and naturalises the status quo" (Chandler & Munday, 2011, p. 417). In medicine this involves the dominant class, the biomedical sector, establishing a status quo around the ontologies and epistemologies of medicine and engraining this into society until it becomes mainstream, normalised, and accepted by those within the community. Western medicine has achieved this status quo by creating a hierarchy of evidence, whereby scientific medical knowledge, and in turn scientific medical practice, is deemed superior to other forms of medical knowledge and medical practices. The scientific principles that underpin western medicine have become favoured, with the government endorsing western medicine through legal avenues such as the creation of legislation, through the allocation of funding resources, as well as through public initiatives that encourage the general public to utilise western healthcare services.

Symbolic violence is a non-physical form of violence that results in power differentials between different groups, subordinating the less "superior" group. There is no coercion or persuasion per say, rather the status quo continues to be socially reproduced across time, even to the point that those oppressed by the status quo are complicit in accepting it. Thus, violence is embedded within the power held by the dominant group and the actions they take to maintain their power. This research found three forms of symbolic violence underpinning the resistance to TCM in New Zealand. Each of these

forms of symbolic violence mirror the ideologies of the dominant class, the biomedical sector, and show how ethnocentrism is at the centre of these forms of social closure, underpinning the resistance to TCM in New Zealand.

4.5.1 Qualification standards

Qualification standards were frequently discussed throughout the submission responses from biomedical organisations. It is believed that due to the inconsistencies and differences between TCM training institutions, TCM practitioners pose a risk to public safety due to insufficient training. Furthermore, there is concern over the specific teachings not being reliable and being based off pre-scientific concepts. Arthritis New Zealand mentions how regulation would ensure that standards were set for TCM and that only highly qualified professionals would be practising. This, they claim, would “reduce risk to the public” (Ministry of Health, 2011, p. 6). Their remark shows their assumption that, because TCM is self-regulated, TCM practitioners aren’t highly qualified to begin with and that they pose a risk to public safety. Similarly, the Royal Society of New Zealand remarks how regulation would “create a nationwide standard with a high level of clinical knowledge and competence” (Ministry of Health, 2011, p. 36). Whilst they instead question the clinical knowledge of TCM practitioners, their assumption is similar in that because TCM practitioners are self-regulated, their service delivery is assumed to be of a lower standard than regulated professions. Additionally, TCM practitioners clinical knowledge is also deemed subpar.

These assumptions around public risk and qualifications likely rest on the fact that there are different education levels set between different institutions regarding what is required to become a TCM practitioner. Other submissions directly discuss the discrepancies in qualification criteria. The Physiotherapy Acupuncture Association note how bachelor programs for TCM in New Zealand have different requirements in terms of the hours necessary to achieve theoretical and clinical competence in order to become a TCM practitioner (Ministry of Health, 2011, p. 31). The ACC argue how discrepancies in qualification criteria they may mislead the public around the reliability and credibility of registered TCM practitioners due to different requirements from New Zealand’s two Chinese medical self-regulatory bodies (Ministry of Health, 2011, p. 112). It is true that there are different standards set between different institutions in

New Zealand, in fact, qualification standards are being debated within the TCM profession as regulatory discussions are had. These debates will be discussed in the following chapter, but are important to mention here as it provides some context as to why biomedical organisations may assume TCM practitioners pose harm to the public and need appropriate training and qualifications. Albeit, it could be argued that these assumptions still undermine current education standards which have been set by TCM's two self-regulatory bodies.

Another issue that surfaced, was with regard to the taught curricula in TCM programs. In their submission, the New Zealand Skeptics Society criticised TCM's taught curricula, arguing that its teachings are pre-scientific and noted how their concepts of medicine lack biomedical understanding:

It is clear students are being taught pre-scientific concepts that bear no relationship to the current understanding of the human body, anatomy, physiology, and the germ theory of disease (Ministry of Health, 2011, p. 100).

Although the Skeptics Society have remarked how Chinese medical schools are teaching pre-scientific concepts, this idea is not completely warranted as New Zealand's two main Chinese medical colleges, The New Zealand School of Acupuncture and Traditional Chinese Medicine and the New Zealand College of Chinese Medicine, both have biomedical sciences incorporated into their curriculum. The New Zealand School of Acupuncture and Traditional Chinese Medicine's Bachelor of Health Science (Acupuncture) program offers papers in basic microbiology, anatomy, physiology, and biomedical pathology (New Zealand School of Acupuncture and Traditional Chinese Medicine, 2020). As for The New Zealand College of Chinese Medicine, the Bachelor of Health Science (Chinese Medicine) three semesters are dedicated to learning biomedical sciences and three semesters of biomedical clinical sciences are also taught (New Zealand College of Chinese Medicine, 2020). Thus, both programs incorporate biomedical teachings alongside Chinese Medical practicum. As for programs taught in China, it is not uncommon for practitioners to be dually trained in western and TCM, but even for those who aren't dually trained, TCM programs typically offer western medical training (Lu, 2002). Such

remarks show the prejudice toward TCM, with preconceived ideas about the profession that are baseless and that could nowadays be fact checked online.

Even though TCM has incorporated biomedical teachings into their training programs, western medical schools have not reciprocated by incorporating Chinese medical teachings into theirs. This demonstrates the level of symbolic violence that is occurring as biomedical teachings are deemed more important in medical school curricula than TCM teachings. In fact, this expectation speaks back to discussions around the social closure that occurs through what is deemed professional expertise or otherwise. The social closure of professional expertise extends to the educational expectations being placed on TCM in terms of what deems TCM practitioners qualified, that being someone who has learnt biomedicine. The expectation that TCM incorporate biomedicine into their teachings, with no reciprocation from the western medical sector, is problematic as it undermines other systems of learning that are unique to TCM such as the cultural components of care that TCM was founded on.

Western medicine has dominated the medical industry and has set a status quo and ideological framework for other medical modalities to follow. In this way, symbolic violence is enacted against other medical modalities as western medicine undermines other ideological frameworks, to the point of even questioning their importance in teaching frameworks and educational platforms. Not only is ethnocentrism evident in the assumptions around whether TCM practitioners are qualified to practice, but through the suggestion that TCM should follow western medical frameworks of learning. There is a blatant disregard toward TCM's own body of knowledge that should be taught in Chinese medical school curricula.

4.5.2 English language competency

Alongside qualification discussions, submission entries spoke of the English language capability of TCM practitioners. Many submissions assume that because it is TCM, TCM practitioners must be from China, with their native language being Chinese. Subsequently, the assumption is that TCM practitioners are unable to speak English. The concern within these submissions, is that because TCM practitioners cannot speak English, they're putting their patients at risk while practising in New Zealand. A

submission by Mauri ora, mentioned how many TCM practitioners are not fluent in written and oral English and that there is no proof of their English language proficiency (Ministry of Health, 2011, p. 8). However, there is no indication as to where this information about English competency has been obtained from; it is merely a racialised assumption being held toward TCM practitioners. Similarly, the Physiotherapy Acupuncture Association of New Zealand share similar sentiments around TCM practitioners and their lack of English:

Many TCM practitioners both trained in New Zealand and from overseas do not speak English as their first language. The ability to effectively communicate with the public is an absolute imperative (Ministry of Health, 2011, p. 31).

Both submissions assume that “most” TCM practitioners in New Zealand are not fluent in both written and oral English. However, this is not always the case as many TCM practitioners have learnt English and are fluent in English despite having originally trained in China. Other TCM practitioners are not Chinese natives and are in fact Europeans whose first-born language was English. As for those who have qualified in New Zealand, whilst the Physiotherapy Acupuncture Association of New Zealand claims that even those who have trained in New Zealand lack English speaking capabilities, the two main teaching institutions are taught in English. Submissions such as this show that there are often preconceived ideas around who TCM practitioners are, where they have come from, and where they have qualified.

Another submission by Physiotherapy New Zealand, echoes the aforementioned submissions, questioning the English language capabilities of practitioners. However, they take it a step further, arguing that TCM practitioner’s lack of English-speaking capabilities may result in them either mis-diagnosing patients or outright failing to diagnose patients:

There is a risk that some providers currently do not speak or have a good understanding of English. This may result in them failing to fully understand a patient’s condition and consequently missing warning signs of more complex conditions. If TCM is regulated English language

requirements should match those of other health professionals (Ministry of Health, 2011, p. 26).

Once more, it is assumed that TCM practitioners English speaking capabilities are not on par with other health professionals, as well as the assumption that if TCM practitioners' were unable to understand their patients, they wouldn't refer them onto someone suitable. Yet, for TCM practitioners who are registered with self-regulatory bodies and are ACC providers, there are tests to ascertain whether they can communicate in verbal and written form (Acupuncture New Zealand, 2020; New Zealand Acupuncture Standards Authority Inc, 2020). Although there is assurance that registered practitioners have a good command of the English language, it's harder to gauge whether those who are unregistered and who are not ACC providers have the same English capabilities. Regardless, to assume otherwise, and to assume TCM practitioners wouldn't use their better judgement to refer patients on to another medical practitioner if they were unable to diagnose a patient, shows the racial judgements being made against the profession and its practitioners because it is a Chinese medical modality.

Interestingly, despite the submissions that demanded English language testing for all TCM practitioners, there was one submission that recognised the dangers an exclusively English-based system would have on the Chinese community. The NZNO stated that an English language requirement could hurt not only Chinese speaking TCM practitioners, but their patients who rely on their chosen healthcare provider for their care:

Regulation would, presumably, carry a requirement for English language competence. A substantial number of non-English speaking practitioners and patients (whose access to their health care system of choice) could be adversely affected by this move (Ministry of Health, 2011, p. 58).

This insight is important, as imposing English language criteria on a Chinese medical system in itself is a Eurocentric move. Undoubtedly, a Chinese medical system in a western, biomedical society poses challenges not only with appropriately integrating

TCM systems into New Zealand, but ensuring that the integrity of TCM is not lost and that it is accessible for all who live in New Zealand. This accessibility is regardless of whether patients are English or Chinese speaking; the idea is for access to be had by all, and for it not to be an exclusive system. Nevertheless, to impose an English standard assumes that all patients are English speaking, which is problematic as patients may select their practitioner on the basis of being able to speak Chinese with one another. Meeting in the middle and having clinics who can cater to both English and Chinese speaking patients would be the ideal middle ground and would be beneficial for those practitioners who may not be able to meet English proficiency requirements, albeit that can still assist in patient care for New Zealand's Chinese community.

4.5.3 Standards of hygiene

The standards of hygiene in TCM have been called into question by some biomedical organisations. Because western medicine follows strict asepsis protocol to protect patients from the transmission of pathogens, there are concerns that TCM practitioners may not be protecting their patients in accordance with these protocols, such as through using sterile equipment. However, like the other forms of symbolic violence documented, these assumptions around hygiene appear to stem from ethnocentric prejudice toward TCM and TCM practices. Physiotherapy New Zealand provide an example of the viewpoints held toward the lack of hygiene practice undertaken by TCM practitioners, and in turn, the risk they pose to public safety:

There is a major risk of harm to the public due to the lack of regulation of TCM. Risks include infection due to lack of sterile techniques (Ministry of Health, 2011, p. 26).

Whilst Physiotherapy New Zealand comments on the lack of sterile technique used in TCM, there are no examples provided as to when unsterile techniques have been noticed and used, and what exactly these unsterile techniques entail. However, a submission from the Physiotherapy Acupuncture Association of New Zealand do provide an example, stating that TCM practitioners may use re-sterilisable needles rather than disposing of their needles:

Chinese practitioners may not have sufficient knowledge of safe practice using re-sterilisable needles rather than disposable needles” (Ministry of Health, 2011, p. 31).

Each submission presumes that there are risks associated with a lack of hygiene, with the latter submission going as far as stating that TCM practitioners may not be aware of the risks associated with the re-use of needles, implying that TCM practitioners are not disposing of needles after use. However, with efforts to modernise TCM, along with the inclusion of biomedical teachings in Chinese medical school curricula, it is unlikely that a TCM practitioner would lack knowledge around sterile protocols and that they would re-use needles.

Another perspective put forward by The Physiotherapy Acupuncture Association of New Zealand, remarks on the unsafe environments that TCM practitioners may practice within. They refer to an instance when an unregistered physiotherapist was practising acupuncture in an uninviting premise in Auckland:

They may not have a clean and inviting premise to provide treatment, note the gentleman reported to the Physiotherapy Board of New Zealand by one of the respondents who was advertising the practice of acupuncture and physiotherapy. He was unable to communicate in English. His premises were a curtained off area at the back of a food hall in Karangahape Road in Auckland. He was not a registered physiotherapist (Ministry of Health, 2011, p. 31)

The language of the submission hints toward the idea that TCM practitioners are practising in uninviting and sleazy back ally premises rather than at professional clinics. This is despite the fact that it was actually a physiotherapist who was practising acupuncture in the submissions noted example, not a TCM practitioner. In actuality, the aforementioned submissions have provided little evidence of TCM breaching hygiene practices and little evidence for TCM practitioners causing harm to patients. Yet, hygiene standards are a common concern for these organisations and regulating TCM is seen as a way to protect patients and bring hygiene standards up to par.

Speaking to these fears, in her interview, Suzan mentions how racism is involved, and that it is the racism held toward the Chinese population that has made society fearful and tense toward TCM:

I think there is inherent racism involved because it's Chinese medicine, it's the anti-Chinese sentiment that gets played out. Auckland has a huge Chinese population and the issue is that people feel the pressure, whether real or not, with housing being bought out by the Chinese but at the same time there's Chinese people that have been here for 5-6 generations. There's also the political landscape with the One Belt One Road policy putting pressure on New Zealand. There are these conflicting things that have happened, and Chinese medicine cops the fears and tensions of society.

While these submissions illustrate the racial prejudice evidenced within the assumptions held toward TCM practitioners regarding who TCM practitioners are, their practising ability, and place of practice, these assumptions also function to exclude TCM practitioners by deeming their practice sub-par and more dangerous in comparison to western medicine. Suzan believes that the racism toward TCM may be due to other anti-Chinese sentiments that are at play in New Zealand, and thus, the resistance to TCM is a reflection of these other anti-Chinese sentiments. Regardless of why, TCM practitioners are having to endure working within a biomedical society that uses symbolic forms of social closure that are characterised by the ethnocentrism and the ethnocentric prejudice held toward TCM and TCM practitioners. This exacerbates not only their exclusion from mainstream medicine but the challenges TCM practitioners face in their daily practice.

4.6 Conclusion

Western medicine has maintained medical dominance through the reproduction of discourses around public safety. Public safety discourses argue that scientific evidence is required to prove the safety and efficacy of medical treatments. There are two resources that feed into the discourse of public safety and in turn the ways western

medicine has dominated the medical industry, these include material and symbolic resources. Material resources are best understood through neo-Weberian theoretical frameworks which discuss the idea of social closure. Social closure refers to the professional privilege that is defended or sought by restricting other groups access to resources and rewards and is typically thought of from an economic standpoint. In the case of western medicine, social closure occurs in three distinct ways. Firstly, and most notably, is through what is considered as evidence and in turn what constitutes as legitimate medical knowledge and practice. Secondly, is through the professionalisation of western medicine which is achieved through regulation and governmental endorsement. Thirdly, social closure occurs through the medicalisation and monopolisation of healthcare. These forms of social closure have granted western medicine a political edge over unorthodox medical modalities.

As for symbolic resources, these are best understood through Bourdieu's theoretical framework of symbolic violence. This theory extends on, and develops, Weber's discussions on the connections between legitimacy and domination and argues that hegemonic power is also maintained through symbols such as the beliefs and assumptions that are instilled in society, with these beliefs reproducing inequitable power relations between medical groups. The assumptions and beliefs around TCM include pre-conceived ideas about the identities of TCM practitioners such as where they have obtained their qualifications, their proficiency at speaking English, as well as the hygiene and cleanliness involved in their daily standard of practice. It also includes the kinds of hegemonic expectations that are imposed on TCM practitioners as western medical approaches are considered superior to Chinese medical approaches. Attention must be given not only to the material resources that impact TCM and its practitioners, but to the way's symbolic violence supports ethnocentric bias through the incorrect assumptions that underpin biomedical perspectives about TCM practitioners.

Chapter Five – The challenges TCM practitioners face working in New Zealand due to the ongoing material and symbolic forms of social closure

5.1 Introduction

In this chapter I argue that the different forms of material and symbolic forms of social closure enacted by western medicine have created challenges for TCM practitioners in their daily practice. Subsequently, tensions have emerged between western and Chinese medical communities, and in some cases within the Chinese medical community itself. Four key challenges were noted during the interviews which I discuss in four sub sections. I analyse the constraints of practising TCM within a society where biomedicine predominates and the challenge of not being able to provide the standard of care TCM practitioners desire to their patients (5.2), the loss of control over the Chinese medical profession as TCM is co-opted by western medical professionals (5.3), the challenges of conforming to western standards of safety (5.4), and the challenges of conforming to western standards of learning in a context where younger and older generation practitioners have divergent views around TCM education (5.5).

5.2 The challenge of practising Chinese medicine within the constraints of biomedicine

Practicing outside of New Zealand's medical mainstream as a TCM practitioner who is not deemed scientifically qualified has its challenges. One challenge for TCM practitioners is the inability to provide the standard of care they desire to their patients due to the limitations in TCM's scope of practice. Three practitioners I interviewed mentioned their inability to order biomedical testing services and each agreed that, in New Zealand, TCM practitioners need to be able to order biomedical tests for their patients as they are able to do in China. China's integrative model of health was often referred to by interviewees as a model that should be implemented to enhance the level of care practitioners can provide and to bring continuity to patient care.

Aroha describes how she navigates the constraints of not being able to order biomedical testing services by referring patients onto their general practitioner. This highlights how the continuity of care with her patients is impacted as they switch between western and Chinese medical systems:

I think that regulation would be fantastic for things like being able to order more blood work. Quite often people who are coming to see us are coming for fatigue and fertility issues and I have to refer them to their General Practitioner to get their blood counts done or to check their thyroid, things like that so I think that would be very handy.

Similarly, Jenny also noted the benefits of integrative healthcare models. She discusses how integrative care worked for her in China, and mentions how she believes an integrative healthcare model could be successfully implemented in New Zealand:

Integrated medicine meant that we would see patients in China from an allopathic and Chinese medical point of view. We would prescribe blood tests, scans, x-rays, MRIs, or culture tests to find out a diagnosis all while doing Chinese treatments. From a health maintenance point of view, it is very important for ongoing care and prognosis. I certainly believe that integration can work in New Zealand as we have been practicing it for decades in China.

Although Aroha and Jenny have different backgrounds, with only Jenny having worked in an integrated system previously in China, both practitioners advocate for integration. Integration is seen as a pathway to expand their scope of practice in order to provide better patient care. However, another practitioner I interviewed, Hayek, also considers the importance of relationships being built between TCM and western practitioners through avenues of information sharing. For Hayek, the lack of information sharing across medical sectors has also constrained his practice and the level of care he can provide to his patients:

When I was studying at university in China, I learned a lot about western medicine and western diagnostics, but we cannot use western diagnostic systems in New Zealand. I cannot order x-ray information and receive results from hospitals, sometimes I'll treat patients who are in pain and I really need to be able to order tests. Also, information is not shared between western and Chinese medical clinics, I think that doctors need to share this information.

Hayek is hoping to build connections which don't currently exist in New Zealand between the two professions. Integration is not simply about being able to order biomedical testing, but it is about all of the different ways that TCM could be enhanced to assist in the delivery and continuity of patient care. In enhancing these systems, whether through ordering biomedical tests or through greater communication efforts, New Zealand could build integrative systems that are already in place in China. In saying that, an important question is what an integrative system might look like in New Zealand. The TCM practitioners I interviewed held different views about what an integrative system would look like within New Zealand's public model. For Aroha, another constraint she has noticed while practicing, is being an unfunded healthcare model and not being able to see her patients regularly. Because funding is only partially offered for accidental injuries for acupuncture treatments, patients typically have to pay out of pocket for TCM treatments. However, patients who cannot afford this option will often choose to forgo their treatment:

At the moment I have some clients that I really need to see daily and just within the constraints of how I work and what's going on, I'm unable. I will quite often do discounted rates for people to come in a few times a week, that's what they need, acupuncture is designed often for people to go daily.

This lack of funding will see patients turn to western medicine because it is a funded healthcare modality. This is a form of social closure that has occurred due to resource allocations primarily being provided to western medicine and in turn being the convenient option for patients. Aroha believes TCM needs to be part of New Zealand's public, funded healthcare model to support patients who would prefer to receive TCM

treatments and who need routine care. This is in contrast to Hayek, who in his interview exclaimed how public funding could impose further limitations on the profession and on patient care:

ACC now has more rules than before and they are stricter. The treatment times are limited too, and we have less time to spend with patients. More Chinese doctors are treating people and are not relying on ACC because they can make their surcharge more than they could under ACC guidelines, so they want to treat patients by themselves. After practicing for many years, Chinese practitioners have people that trust them, so they can get good money from their patients and from patient referrals. (...) For example, I have now raised my surcharge, before it was \$5, and then \$10 and now \$15.

Both practitioners have shown how they navigate working within New Zealand's health sector differently and subsequently the experiences and challenges they face can differ. Aroha's circumstance has resulted in a financial loss for her, with her having to reduce her fees to see patients more frequently, something that could be avoided under a public funded healthcare system. Hayek on the other hand has had a different experience, having benefitted from practicing privately outside of a funded healthcare system by choosing his own surcharge fees and catering to wealthy private patients. This in itself raises a separate issue, that of TCM becoming an exclusive treatment that is only available for those who can afford to pay out of pocket for their treatments. Nevertheless, although there is shared agreement between practitioners over the challenge of not being able to provide the level of care they desire due to the limitations of being a TCM provider, and while China's integrative healthcare system is commonly referred to by practitioners as a model to emulate, there are different ideas around what an integrated system may look like in New Zealand. If regulation proceeds and integration is considered, there will be different opinions coming from the Chinese medical sector and disagreements about what integration should look like.

5.3 The challenge of the loss of control of the Chinese medical profession as it is co-opted by other medical professions

TCM practitioners have discussed the challenge of co-optation as other healthcare providers adapt and adopt TCM treatments into their own scope of practice. This has resulted in the Chinese medical sector losing control over who uses their treatments and how they use it. It has also resulted in untrained people practising TCM which poses a reputational risk for TCM. An additional concern, is that TCM practitioners will be pushed out of practice altogether if co-optation continues. One example of co-optation is with acupuncture treatments which have been adopted and adapted by western medical professions, to the extent that it has even been renamed as western medical acupuncture. The difference with western medical acupuncture is in its application and philosophical approach. Acupuncturists taking a western medical approach apply western scientific reasoning in their diagnosis with an emphasis on physiological and anatomical considerations. Their assessment and treatment of a patient does not employ any TCM concepts, such as yin, yang, and chi, and is often used alongside other biomedical treatments (White et al., 2018).

With distinctions between western and traditional Chinese acupuncture, an argument put forward from two academics from the Auckland University of Technology is that the two scopes of practice must remain separate from one another in terms of their recognition in New Zealand's healthcare system. This is due to western medical acupuncture being "heavily researched with randomised control trials that have looked into acupuncture's efficacy" (Ministry of Health, 2011, p. 48). Co-optation has occurred as western medicine has claimed acupuncture as a technique, and western medical acupuncture is now held in higher regard by biomedical organisations due to its scientific standing. I argue that co-optation is a product of the process of social closure, in particular the social closure of what is considered expert knowledge and in turn professional practice. Science continues to be used as a way to demarcate western and TCM from one another in a way that marginalises TCM while appropriating some of its most successful tools.

My interviews with TCM practitioners discussed the threat co-optation poses to patient safety, the reputational risk to TCM, as well as the general lack of control TCM

practitioners have in setting a standard of practice for the use of their treatments. Two practitioners I interviewed mentioned how other healthcare professionals have not received the correct training necessary to practice TCM. Despite this, other healthcare professionals have incorporated TCM treatments into their scope of practice. Jenny elaborates on this by discussing the importance of hands-on clinical experience prior to practicing TCM:

There are healthcare practitioners who are not acupuncturists, they only have two weeks of training and they do acupuncture and call themselves acupuncturists. It has damaged the reputation of acupuncture. Acupuncture is a hands-on therapy, so your own practitioner's experience and the sensation is essential to the safety and the success of acupuncture treatment. If somebody is practicing that but only after two weeks of training, and they announce that they can do acupuncture, I think that is irresponsible.

A theoretically based pedagogy that expects students to learn solely within a classroom environment disregards the practical strategies and experience that providers of TCM need to know and understand. While public safety is jeopardised because of inadequately trained practitioners, Jenny also discusses how co-optation and improper training has ruined the reputation of TCM. Given that other healthcare providers are calling themselves acupuncturists, despite not having undergone the required training, when something adverse happens or if acupuncture is unsuccessful, the reputation of acupuncture is impacted. This is because the public may believe that the treatment is inherently unsafe or ineffective. What makes co-optation particularly challenging, is that TCM organisations are not in a position to address the co-optation of their practices and cannot advise on best practice protocols as many of the professions incorporating TCM into their scope of practice are regulated. Suzan provides examples of these healthcare professions, the tactics they use to incorporate acupuncture into their scope of practice, and like Jenny mentions the inadequate training they have received:

Other regulated authorities are including acupuncture into their scope of practice. You have physiotherapists, osteopaths, podiatrists, who have

written into their scope of practice under their registered authority the ability to do acupuncture, but they will call it medical acupuncture, dry needling or trigger point therapy. They have no clinical training; osteopaths have a short course through Otago physiotherapy that has no Chinese training whatsoever in it and they are out there practicing acupuncture under a different name with no quality assurance. Everyone is adopting our practice because it works, but they're adopting it from a very unsafe position.

Because TCM is not regulated under the HPCA Act, other regulated professions have greater control over the forms of TCM they do decide to use. This is because their practice comes under governmental oversight and meets the quality assurance measures imposed under the Act. However, Suzan questions whether quality assurance is truly being met due to the lack of training these regulated professions have received. Regardless, governmental oversight and the quality assurance measures used do not negate the fact that TCM practitioners, who are the most qualified and knowledgeable of TCM, should be in control of the standards of practice necessary for TCM. Especially given that TCM practitioners have noticed public safety concerns that stem from inadequate training. TCM practitioners should be able to control the use of their treatments and have a say over whether it is appropriate for other professions to even utilise TCM to begin with.

Because there are different kinds of acupuncture, such as western and TCM acupuncture, Aroha suggests that the distinction between the two professions needs to be made clearer. In this way, the public may better understand the kind of care they require and the kind of care they are going to receive from different medical providers:

It needs to be differentiated; I don't think a lot of people recognise what it is a traditional style acupuncturist does compared to getting acupuncture done while you're at the physio.

In saying that, Suzan believes that one major problem remains, and that is what will happen to TCM if it continues to be pushed out of the formal health sector as more regulated professions adopt or "culturally appropriate" their practice:

If you as a physiotherapist injure someone with acupuncture and it goes to health and disability board, then it's just you, we are just looking at you, what did you do, what did you do that didn't inform the client of the risks, what did you do that showed that you didn't needle properly, what do you need to do to correct it. No one is going, hey system, what are you doing western medicine? Looking at the western medical model more broadly. They're just culturally appropriating anything that suits them to meet their needs and aim and are actually excluding those with the knowledge and practice. It's a very interesting dynamic.

As Suzan argues, adverse reactions to acupuncture treatments are not simply a matter of individual wrongdoing but are a systemic failure that has arisen from inadequate training systems. These systems aren't rigorous enough to sufficiently train practitioners and do not incorporate practical training programs into its curricula. With the health and disability board ignoring these systemic errors, biomedical organisations continue to co-opt and unsafely use acupunctural treatments. Suzan argues that they do so to suit their own agenda. For example, because western medicine is able to continue using acupuncture without their systems of practice coming under scrutiny, they continue to commodify acupunctural treatments. For example, as interviewee George argued in chapter four, western medicine is a big business that is money driven rather than wellness driven. If western medicine couldn't co-opt acupuncture all monetary gain would go directly to TCM. Thus, one could argue that western practitioners may be co-opting acupuncture into their scope of practice through forms of social closure in order to claim some of the market for acupuncture treatment. Co-optation has enabled western medicine to dominate the medical sphere even more as it expands its scope of control and authority over other treatment modalities.

TCM practitioners want to address the co-optation of their practices and one of the ways they intend to do this, as stated by Suzan, is by becoming a regulated profession. She describes her concerns around what will become of TCM if it remains unregulated:

What's happened in Australia is that the Australian acupuncturists are being shut out as all these other people are performing acupuncture and

are getting paid under Medicare, the insurance industry, and they're effectively shutting acupuncturists down. We cannot address the flow of our work been taken by everyone else, all of these regulated practitioners under the guise of quality assurance. We cannot address that on an intellectual property, or a scope of practice, or best practice, whilst we are unregulated by the system.

Efforts to regulate TCM in New Zealand are ongoing, yet, while regulation is seen as a way for TCM practitioners to regain control over their practices and to address the issues around co-optation, the HPCA Act is based off of western standards of medical practice. This means that incorporating TCM under the Act may not necessarily resolve these issues.

5.4 The challenge for Chinese practitioners to conform to western ideals of patient safety, despite the incompatibility between western safety standards and Chinese medicine

There is an expectation for TCM practitioners to conform to western standards of safety. However, much as there are barriers to performing RCTs on TCM, there are barriers to practicing TCM in line with western safety standards. This is because TCM treatments are conducted in line with their own understandings of health and illness, which sees TCM practitioners conducting their practice differently to western practitioners. Throughout her interview, Aroha discussed how western sterility practices have threatened the integrity of TCM practice. In particular, the use of gloves can interfere with the hands-on healing undertaken by TCM practitioners:

In other countries they have made people wear gloves when needling the whole time which really takes away from the hands-on approach of needling. My contact to the needle and my contact to the patient's skin, outside of where I am needling obviously, that's a big part of Chinese medicine. A big part of acupuncture is your energy with the patient, and by putting too many medical aspects like wearing gloves, it makes it a little bit too sterile takes away from the modality.

The healing philosophy of TCM differs greatly from western medicine. As Aroha mentions, TCM practitioners take an interactive approach when treating patients, evidenced when conducting acupuncture. The contact and energy between the practitioner and patient are considered essential to the healing process. In contrast, western medical care is reductive, and practitioner-patient interactions and physical contact are limited. Despite these different approaches to patient care, TCM practitioners are still expected to utilise biomedical safety techniques. This expectation emphasizes the hegemony of western medicine and the disregard for TCM's traditional values of patient healing.

Aroha discusses how other methods of best practice need to be considered:

We need to look at the effectiveness of the healthcare modality for the individual rather than just looking at science. If a patient is not getting better in a practitioner's care, it needs to be considered what else needs to be added to the treatment plan, if it is even effective for that person or should the patient be seeing another healthcare provider. Quite often that's not happening on all fronts. I don't think that acupuncture is good for everybody, there's some people who don't have a good response to it. Most people do, but it's the same with western medicine, in general, some people are better off with other treatments.

Aroha suggests that, rather than relying on scientific evidence, western practitioners should instead focus on individualised results. By looking at how well patients respond to TCM treatments, there is assurance in the fact that the treatments not only work but that they are safe. If therapeutic failure happens, it may not be due to a specific modality's standard of practice but may be due to the individualised response a patient has to a particular treatment. In his interview, George shared similar sentiments to Aroha, agreeing that treatment outcomes can differ between people and stressed the importance of having multiple modalities available for that exact reason. However, unlike Aroha who believes that the safety and efficacy of TCM needs to be proven pragmatically, George believes evidence already exists, as evidenced in its historic use:

For my patients, 90% of them have tried modern medicine first and it has not worked for them, so they come and see us and then they become our client. For the long term, if you look at the thousand years TCM has been used, I think TCM is more scientific than modern medicine, this can be argued. If New Zealanders can get two forms of medicine it's good news for them, they will have more options.

George follows up his discussion by noting how a science-oriented culture has impacted how receptive the public has been to TCM. The New Zealand public, George claims, has only been exposed to scientific ontologies of healthcare. However, this claim can be contested, particularly with the growth of CAM in western countries, New Zealand being one such country. Instead, perhaps the argument here is that New Zealander's may have less exposure to Chinese medical ontologies due to the processes of social closure utilised by western medicine. With that said, since scientific ontologies of health are mainstream in New Zealand, TCM practitioners are working within an unusual space in that they are going against the grain and therefore have to work against the doubt cast toward their profession:

A lot of people don't want to try TCM because of their background, they think that TCM is not scientific, they don't understand the culture of TCM only the culture of science so it's not their fault.

Some western practitioners discourage patients from utilising TCM because it is not scientifically evidenced. George recalled two times when his patients visited their western practitioner and mentioned their interest in seeing a TCM practitioner for acupuncture treatment. Both times the western practitioner was not receptive to the idea and discouraged the patient from seeing George. Despite this, the patients still visited George and were happy they had done so as their treatments were successful. However, because they had been advised against using TCM, these patients became dissatisfied and distrustful of their western practitioner, to the point that one left a complaint with their western medical centre. This illustrates the shift that may be taking place in New Zealand's healthcare landscape as more people become receptive to Chinese ontologies of healthcare. This shift is happening regardless of the fact that TCM is not grounded in western ontologies of disease and health. Patients have

recognised that western healthcare may not always be successful for them, and that there are alternative options available. In this way it appears that patients are less concerned with ontologies than results. Not only is TCM not as powerless as it once may have been, but the power dynamics of contemporary medicine are changing as TCM grows in popularity despite its different approach to patient care.

While this change is in motion, for now TCM still works within the confines of a biomedical society where TCM practitioners are pressured to follow western standards of practice. Consequently, since TCM is in the process of becoming regulated, some TCM practitioners are concerned about how they will navigate becoming regulated under the HPCA Act. Suzan discusses how her main priority would be ensuring that TCM practitioners are ready to work under a western medical model and that they understand what would be expected of them:

I want to ensure that practitioners are at the standard that regulation will require, knowing what they didn't know in a self-regulated system and knowing what they will need to know within a western medical model. Because that's what it is, Chinese medicine and the structure of that board will be within a western philosophical, hierarchal model. I want to try to minimise the risk to Chinese practitioners in terms of them having a real understanding of what that means so they won't be penalised. I do believe in integration, I think best practice is when you have many sets of eyes from different positions, any communities and healthcare systems are strong because of diversity, diversity is key. At the moment it's still a white coated, white men and women who have made it up those systems by adopting the same one type of practice, western medicine.

Regulation may be beneficial in expanding the scope of practice of TCM and enabling TCM practitioners to provide the standard of care to patients they are seeking. As well as potentially helping address co-optation issues, although there is still the issue of working under an Act that is based on western medical frameworks. As Suzan argues, as regulation proceeds TCM practitioners will need to ensure they understand and abide to the standards set under the HPCA Act otherwise they could be barred from

practicing. Thus, regulation may add extra burdens on practitioners and reinforce the hegemony of western medicine.

5.5 The challenge of professionalising Chinese medicine in New Zealand: The assumed superiority of western educational standards

While there are self-regulated Chinese medical bodies who check the qualifications and English language standards of TCM practitioners prior to registering them with their institution, New Zealand-based practitioners are not obliged to register. Because of this, there has been confusion over the set standard for TCM as un-registered practitioners may have different qualifications from those who are registered, whilst some may not have formal qualifications at all. Submissions in chapter four from biomedical organisations discussed these discrepancies; there were also debates around what constitutes legitimate knowledge and in turn proper education standards for Chinese medical practice. Biomedical organisations are not the only ones who have noticed discrepancies between training institutions and who have questioned the standards that need to be set for TCM in New Zealand.

With conversations around regulation proceeding, the Chinese medical community have questioned what the minimum qualification needs to be, the appropriate time to completion, and the English language standard that should be required. Tensions that were once only seen between western and Chinese medical communities due to their divergent views around medical practice and standards, are now being seen between the Chinese medical community. In specific, tensions have arisen between younger and older generation TCM practitioners who have differing ideas about TCM qualification standards and what is required to be a TCM practitioner. Younger generation practitioners lean toward a more westernised standard of education with university programs, whereas older generation practitioners prefer traditional ways of learning through apprenticeship. In both instances the challenge surrounds the expectation to conform to western standards of education.

For TCM practitioners who initially trained in China, relocating to New Zealand can impact the scope of their practice as not all qualifications obtained in China are

recognised. Jenny discusses the challenge of losing her qualifications upon coming to New Zealand and showcases how restrictions in being able to use the title “Dr” have limited her options:

I have a PhD of Acupuncture, Gynecology and Fertility which I obtained in China and a Master of Health Practice from the Auckland University of Technology in New Zealand, but the New Zealand Qualifications Authority does not recognise my PhD, therefore if you want to practice as a doctor then there is no way. I cannot even call myself a doctor, I have received a warning from Acupuncture New Zealand because they received a complaint from a man of the advertisement committee who monitors advertisements.

In New Zealand, a position as a gynecologist is reserved for those who have completed a Bachelor of Medicine and Bachelor of Surgery (MBChB), who work for two years in a hospital as a “western” junior doctor, and who then “complete another six years as a registrar with specialist training and pass examinations to become a Fellow of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists” (Careers New Zealand, 2019, p. 1). Unless Jenny retrained, which would take 14 years, she is unable to practice to the extent she was able to in China. While she deals with this by addressing fertility issues from a Chinese medical standpoint, there are limitations in her practice. Therefore, TCM practitioners who qualified in China often have to make considerable sacrifices either retraining, or in accepting limits on their scope of practice. TCM trained doctors are not considered to have the same degree of expertise as western doctors, to the extent that they can be reprimanded for using the title “doctor”. Wilson (2012) discusses the social significance of the doctor title, his insights reflecting discussions around boundary making through the professionalisation and de-professionalisation of medical models:

“From a human healthcare point of view, most people generally consider you successful only if you manage to achieve the MBChB, which then transforms you from a normal, educated citizen into a medical doctor. A natural evolution in the social status of the successful medical doctor is immediately apparent – the “Mr.”, “Ms.” or “Mrs.” now becomes “Dr.” –

the “medical doctor title” has now evolved to be the ultimate status symbol within the healthcare (or medical) environments, and in itself becomes a primary target of achievement” (p. 4).

The restriction on the doctor title is a form of boundary making. For Chinese medical practitioners, not being able to call themselves doctors may result in them being perceived as less credible and successful, not only within the medical community but by the public as well. This showcases how status symbols such have functioned in bolstering the authority of western medicine and have impacted the perceptions and power relations that exist within medical environments. While status symbols such as titles can portray medical professionalism, TCM practitioners practising in New Zealand have looked into other ways TCM can be professionalised. One suggestion is through tightening and standardising the qualifications held by TCM practitioners under a regulated system. In her interview, Jenny discussed how TCM can create a professional reputation for itself, namely through tightening the requirements necessary to practice:

Educational requirements, language ability, and the standards of practice of practitioners need to be taken into consideration. There needs to be a level of professionalism. You have to see patients and you have to keep your records straight and you also need to know a certain amount of allopathic medicine. Instead of giving people chi and blood all the time you have to understand how western medicine has developed and formed and therefore you can communicate with the western practitioner on an equal platform.

Notably, Jenny’s suggestions illustrate her desire for TCM practitioners to fit into a biomedical society through professionalising TCM with qualification requirements and language standards that are akin to western practice. For her, it is important that TCM practitioners learn allopathic medicine in order to be able to communicate with western practitioners, something which she claims will help with the professional image of TCM and will help the professions communicate on an equal platform. However, it is not clear whether these requirements would truly help with communication and collaboration between TCM and western practitioners, particularly given that these

changes assume western medicine as the standard. As discussed earlier, one of the challenges TCM faces in a biomedical society is not losing touch of its traditional principles and practices. If Chinese medical qualifications, language speaking capabilities, and standards of practice were suitable in China, why not in New Zealand?

Another interviewee, George, also sees regulation as a means to set a higher standard for TCM, although for him, tighter qualification standards are necessary to help the reputation of TCM, not to facilitate communication with western practitioners:

If practitioners do TCM properly and they have good qualifications, I think that we will have more people trust TCM, we definitely want to make TCM practitioners have better standards. Regulation will be good for the industry because some people they're not qualified and they try to use acupuncture for every condition, but acupuncture cannot treat all conditions. For some patient's TCM is not working because their problem cannot be treated with TCM, so they become distrusting of the profession.

By tightening qualification requirements, George believes unqualified practitioners would be filtered out, which would help with the reputation of TCM, as, according to him, there are currently practitioners whose standards are lacking. While Jenny and George do not clarify what the exact qualification standard should be moving forward, other Chinese organisations have, and there have been disagreements over what the required standard should be. The New Zealand College of Chinese Medicine provide insight on what they believe are the sufficient qualifications needed to practice:

The National Diploma of Acupuncture is sufficient to deliver acupuncture services. The TCM profession also agree in general that the Bachelor degree in Chinese Medicine or Traditional Chinese Medicine should be the primary qualification to completely provide the services under the new regulation (Ministry of Health, 2011, p. 61).

While they state that a diploma is sufficient to practice acupuncture in New Zealand, they believe that launching a bachelors program is necessary because of the lack of uniformity between internationally trained practitioners (Ministry of Health, 2011, p. 62). However, what this means for internationally trained practitioners remains unclear. For example, if there is considerable variance in international qualifications, how will it be determined whether the qualifications of internationally trained practitioners are equivalent to a bachelor's degree, enabling them to practice in New Zealand and maintaining levels of uniformity? How would it be any different from current assessment standards that approve international qualifications and determine their equivalence to the national diploma of acupuncture? It seems that with the acceptance of internationally trained practitioners there will always be irregularities given the different qualifications across the world. The question then is what standard would need to be achieved overseas in order to be the equivalent of a bachelor degree holder in New Zealand?

Similarly, the New Zealand Institute of Acupuncture (NZIA) discuss qualification requirements, noting how examination standards could be put in place to assess whether TCM practitioners meet the English and qualification standards necessary to practice in New Zealand:

A nationwide entry level examination set and managed by the Chinese Medicine Council of New Zealand will be the fairest and most manageable method to ensuring that minimum standards of Chinese Medicine knowledge and written English are met. This would be applicable to all new graduates following regulation of Chinese medicine and would be similar to the State final Examination sat by nurses and by Midwives currently in New Zealand. This examination could also be the entry level standard for practitioners seeking to be registered with an overseas qualification in Chinese medicine (Ministry of Health, 2011, p. 67-69).

Interestingly, the NZIA draw on the examination standards set by biomedical organisations such as the Nursing Council, showcasing how biomedical models are being used as a framework to follow for TCM. That said, there have been debates

around whether it is fair to expect TCM practitioners to speak English when it's a Chinese medical modality and when there are Chinese clients that they can care for. During my interview with Hayek he provided an example of his friend, a TCM practitioner who is qualified in TCM and who has practiced for over 20 years in New Zealand, despite not being able to speak English. His practice has been successful, but if English language requirements were imposed his practice could be jeopardised:

Maybe 30 years ago, some Chinese practitioners came here, and their English was very bad, they couldn't even do basic communication. But before when they joined the association it was easy to pass as there was no English test, but now you have to communicate using English, but they cannot do that. Even if they are qualified but their English is bad, they cannot get their license from the association. I have a Chinese doctor friend and they have worked here for over twenty years, but they don't have an ACC license because they didn't pass their English test. I think his qualifications are good, so, usually these people will only treat Chinese people.

Currently, practitioners with insufficient English language capabilities can practice in New Zealand, but do not become registered with the self-regulation bodies and give up their eligibility to be ACC providers. Thus, new standards and examinations could threaten these practitioners even further, restricting their ability to practice at all, even to Chinese speaking patients. This is not just a concern for TCM practitioners and their life's work, but it is also a concern for patients who have built relationships and come to trust them over the years.

With bachelor's degrees and English language requirements being proposed as necessary for professionalising TCM, there are debates within the Chinese medical community about the length of time bachelor's programs should run for and how many years it takes to become a competent practitioner. The Australian Acupuncture and Chinese Medicine Association Ltd was one of these groups, arguing that four year programs need to be the minimum standard set and that all learning must take place within the classroom to ensure full competency (Ministry of Health, 2011, p. 122).

Likewise the New Zealand Register of acupuncturists Inc (NZRA) also advocates for four-year programs:

A four-year minimum course of study is essential, those who graduate in three years may well be good technicians but in order to produce competent and confident practitioners, a four-year full-time course is the minimum requirement. It is of great concern to us that NZQA have approved one teaching institution to deliver a three-year Bachelor programme when the first programme they approved was a four-year programme (Ministry of Health, 2011, p. 73).

Even though there are approved three-year programs in New Zealand, Chinese medical organisations such as the NZRA and AACMA are firm that four-year courses should be mandatory and that the additional year is essential to ensuring practitioner competency. Yet, much like the dilemma of TCM practitioners who don't speak English although are capable of practising TCM, there are practitioners who are capable of practising TCM but may not meet these new mandatory four-year qualification requirements. A submission by an anonymous senior practitioner discussed their ability to practice TCM despite the new proposed standards of learning:

There has to be a grandfather clause for registration for people who have been in practice all their adult lives. People like myself who qualified in 1954 probably feel we do not need to conform to any new age philosophy or requirements. I consider myself a fully able practitioner and am more qualified than many of the people who have put the proposal forward (Ministry of Health, 2011, p. 3).

This practitioner writes in their own defence, clearly irritated over the threat of becoming a regulated profession and the new requirements that would be imposed. The "new age philosophy and requirements" the writer speaks of is interesting, suggesting that this senior, TCM-trained practitioner is critical of changes to the philosophy of TCM. Having qualified in 1954, this practitioner's comment showcases the tension that exists between older and younger generation practitioners, and undoubtedly the changing ideas around qualifications. While younger generation

practitioners may lean toward a more biomedical framework for TCM through new university systems, older generations may prefer traditional learning modes such as apprenticeships through family clinics. Older generation practitioners were often taught through apprenticeships as it was the original way TCM was taught before university programs were developed (Mao & Leung, 1992). If university programs are the minimum standard moving forward, this would weaken the traditional ways of learning as future Chinese practitioners would no longer be able to apprentice.

Although a grandfather clause may mitigate tensions if regulation were to move forward, it is not guaranteed as such a clause would only be applicable to older generation practitioners. Debates may remain around how future practitioners should be taught, whether that be through following the traditional way of learning and accepting that some practitioners would prefer an apprenticeship or western ways of learning through university programs.

5.6 Conclusion

This chapter has documented the challenges TCM practitioners face practising in New Zealand's biomedical society. These four challenges are implications of the material and symbolic processes of social closure that create boundaries between western and Chinese medical practice. These challenges include: 1. The social closure that has occurred through the legitimisation of biomedical knowledge and the delegitimisation of Chinese medical knowledge. 2. The social closure that has occurred through the professionalisation of western medicine through avenues of regulation and the consequent de-professionalisation of TCM through a lack of regulation. 3. The social closure that has occurred through funding resources that are exclusively allocated to western medicine. Lastly, 4. The symbolic forms of social closure that has occurred, involving assumptions around the standards of Chinese medical practice. These assumptions have led to ongoing discussions regarding Chinese medical qualifications, English language standards, as well as other standards of practice such as western aseptic protocols that are pushed onto TCM practitioners.

The challenges faced by TCM practitioners has created tension between western and Chinese medical groups as western standards of practice aren't always compatible with TCM. Yet, western medical groups will not accept standards of practice that do not abide to the ontological and epistemological commitments of western medicine. Tensions have also emerged within the Chinese medical community, as younger and older generation practitioners have divergent views around the practice of TCM in New Zealand and the standards that should be set for the practice. Younger generations are more open to following biomedical standards of learning including the incorporation of allopathic medicine into school curricula and training future practitioners through university programs. This is in contrast to older practitioners who believe that university taught students are no more qualified to practice than those who have learned through traditional apprenticeships. Thus, in trying to address the challenges TCM practitioners have to navigate while working in a biomedical society, tensions have emerged that are reflective of the hegemony of western medicine and the lack of receptiveness to other standards of practice.

Chapter Six – Conclusion

6.1 Introduction

This chapter concludes this thesis, providing an overview of what this research entailed, such as the objectives of this research, the research questions, and the aims of this research. It also states the methodological approach used, as well as how this research has contributed to medical sociology and broader CAM literature. The chapter closes with recommendations for the MoH that are based off of the findings of this research. This research has shown how positivist epistemologies have been granted epistemic authority in New Zealand. Because of the support western medicine receives from the government, positivist discourses have been endorsed within New Zealand's public healthcare system, accepting medical modalities based on whether their bodies of knowledge meet scientific methodology. This research has found that the western medical sector are using various material and symbolic forms of social closure to keep other medical professions from practising in New Zealand's mainstream medical sector. All of these forms of social closure are in some way rooted in the public safety discourse that western medicine abides to. Having material and symbolic forms of social closure enacted on TCM has created challenges for TCM practitioners in their daily practice. In trying to navigate these challenges, tensions that were once witnessed between western and TCM practitioners around how TCM should be practiced have now emerged within the Chinese medical community, with TCM practitioners having different opinions around TCM's place within New Zealand.

6.2 Summary of study

The objective of this research was to determine how TCM practitioners fare when working in a western society where biomedicine dominates mainstream healthcare and where scientific discourses of positivism are mainstream. Several of my initial research questions fell within the scope of this research objective including 1. What challenges do TCM practitioners face in their medical practice in New Zealand? 2. Do

TCM practitioners feel that there are ideological struggles between traditional and orthodox medical modalities, and if so, what are these struggles? And lastly 3. What political determinants in New Zealand work in favour of, or against TCM? In order to answer these research questions, I used an inductive interpretivist approach to research New Zealand's medical landscape through the analysis of secondary data and conducted semi-structured interviews with TCM practitioners. The aim was to determine whether TCM practitioners felt there are epistemological tensions between New Zealand's different medical industries and if these tensions have created challenges in TCM practice.

6.3 Methodological contributions

The originality of this thesis consists also in its methodology, having been selected for the purpose of countering positivist epistemics. Because mainstream medicine voices the opinions of western practitioners and positivist methodologies, I chose a qualitative, interpretivist approach to bring awareness to the perspectives of TCM practitioners who are generally silenced under the rhetoric of positivism. Interpretivist approaches focus on human insights and the lived experiences of research participants. These insights and experiences are usually relayed through interviews that the researcher then interprets. This is in comparison to positivist research, where researchers instead rely on quantifiable evidence through observation, experiments, or surveys. The benefit of an interpretivist approach is that there is validity in being able to directly ask participants questions, or to clarify with participants their responses. This ensures that the information is being interpreted correctly and is a true representation of the participants response. The subjective nature of this research was best suited for answering the research questions.

6.4 Research contributions

Bradby (2009) explains how medical sociology involves the sociological analysis of:

“The structural and cultural features of medicine as an institution, a profession and a discipline. Scholarship in this area is also termed the ‘sociology of health and illness’ to underline that understandings of health and illness in society are not confined to medicine, but a broader field of enquiry” (p. 1).

Contributions from medical sociologists have brought awareness to the role medical organisations and institutions play in patient healthcare. Common research areas in medical sociology include: the patient-physician relationship, healthcare delivery and healthcare services utilisation, the medicalisation of patients, alternative healers and alternative medical practices, healthcare policy, and medical knowledge and technology. This research speaks to the majority of these existing conversations. However, its primary focus lay with conversations about medical knowledge and the tensions between positivism and holism. Previous epistemological discussions within medical sociology, have outlined how specialised medical knowledge has been reinforced and how it has governed healthcare choices and practices (Brosnan & Kirby, 2016). There are also epistemological debates between biomedicine and CAM regarding the role different medical knowledge systems have within higher education (Brosnan, 2015).

Additionally, medical sociologists have looked at the interconnection between biomedical epistemologies and medical power and have discussed for how internet informed patients are beginning to challenge biomedical authority (Broom, 2006). In terms of legitimising medical knowledge, studies have looked at how different professions have sought to legitimise their practice, with legitimisation being granted to positivist knowledge claims over other bodies of knowledge (Cant & Sharma, 1995). Because positivist epistemologies hold authority over alternative knowledge claims, research has also explored the struggles alternative medical modalities have in proving the safety and efficacy of their treatments (Keshet, 2009). Lastly, research has documented the implications of professionalising an alternative practice within a biomedical society (Baer et al., 1998).

This research contributes to all of these existing conversations on epistemologies on some level. However, it adds to these conversations theoretically as it shows how

social closure is accomplished through multiple material and symbolic methods. This research relayed the challenges that TCM practitioners in New Zealand are facing as a result of the forms of social closure they are subjected to. While this has created tensions between TCM and western medical groups, tensions have arisen within the TCM industry as a result of trying to navigate these challenges. The findings from this research are unique as, to date, it appears to be the first study that explores how these epistemological tensions function in New Zealand. This is due to its analysis of TCM and western practitioners who are currently practicing in New Zealand. Sociologically, it is critical to understand how societal structures impact medical practice. This research has delved into the multiple facets of New Zealand's medical landscape that have resulted in a hegemonic, Eurocentric system with little regard for alternative medical modalities. This is despite the MoH's own healthcare strategies, to be discussed shortly, which reiterate the importance of bi-cultural and multicultural systems. These strategies merely pay lip service to the national policies that have been enacted to support western medicine.

This research can also be placed within CAM literature across multiple disciplinary fields including medical sociology, medical anthropology, the biomedical sciences, and law. As discussed within the literature review, recent studies have documented the growing popularity of CAM, western practitioner's attitudes toward CAM, CAM disclosure between patients and western practitioners, the resistance to CAM in western societies, and epistemological debates over the evaluation of CAM. Again, this thesis spoke to all of these conversations on some level, having remarked on the current standing of TCM in New Zealand, noting both the unusual space TCM practitioner's practice from as a self-regulated profession navigating daily challenges from working in a biomedically-orientated society. Additionally, this research explored the shift that is occurring in public healthcare choices in New Zealand as patients become more receptive to holistic ontologies of health. This shift is taking place despite western practitioners advising patients against using TCM, and despite the hesitancy western practitioners have toward supporting medical systems that do not abide to the epistemological frameworks of positivism. CAM literature in context to New Zealand is scarce, therefore this research contributes in CAM discussions by exploring how TCM, a CAM modality, navigates working in a biomedical society.

More broadly, this research shows how we should be thinking about epistemologies in a different way. It is not simply that there are different epistemological viewpoints that exist within the world of medicine, but that the authority given to positivist epistemologies of health has led to a hegemonic, Eurocentric medical system in New Zealand that expects other medical modalities to abide to the same epistemological standards as western medicine. This is regardless of the fact that other medical modalities, such as TCM, may have their own way of knowing whether their treatments are safe and effective. TCM's epistemological frameworks are being undermined against western medicine and this has largely occurred through the multiple material and symbolic forms of social closure enacted on TCM. This research sheds light on medical practice in New Zealand and speaks back to ongoing discussions in medical sociology and CAM about alternative forms of medicine in western countries.

Moreover, because this research comes at a time where regulatory discussions are ongoing and policy issues around the HPCA Act are still being worked through, this research is timely as it has insights that could prove useful for policy makers within the healthcare sector. Currently, there is a medical hierarchy and knowledge claims largely guide this hierarchical structure. Scientific bodies of knowledge have supported western medicine's dominance and in turn its place at the top of this medical hierarchy. The question moving forward, is what can be done to accommodate other knowledge systems in New Zealand's medical healthcare sector? and how these knowledge systems can maintain legitimacy in their own distinct way. Incorporating new medical knowledge within an existing system that structurally supports biomedicine is undoubtedly a complicated task, but this research provides insights that policy makers can utilise when trying to regulate TCM within New Zealand, hopefully paving the way toward a more pluralistic healthcare system.

6.5 Research recommendations

The findings of this research contribute by filling a gap in New Zealand's literature regarding medical epistemologies, and showcases the complexities of integrating a foreign medical system into a country where an existing medical system is already employed with its own epistemological frameworks. New Zealand's medical system is currently hegemonic and Eurocentric in that alternative, traditional medical systems

are undervalued and are not utilised within mainstream public healthcare situations. This is despite the fact that the MoH have discussed the importance of a bi-cultural and multicultural system and have developed a health strategy plan to improve the health of New Zealanders. Minister of health, Jonathan Coleman, in his foreword on New Zealand's health strategy states how "we need to work on all New Zealanders achieving equitable health outcomes" (Coleman, 2016, p. 1).

The strategy claims that there would be a shift toward a people powered model of health this would: "enable individuals to make choices about the care or support they receive" (Ministry of Health, 2016, p. 1). Within their road map, the Ministry of Health (2016) state how they want to: "build cultural competence in the system to reflect New Zealand's cultural diversity" (p. 1), and mention how: "a key component of this theme is true integration of services across the health sector and also starting to improve integration with other agencies to support improved health and wellbeing outcomes" (p. 1). When discussing the future direction of the strategy, the Ministry of Health (2016) remark: "we need to reduce the fragmentation of services and care in our health system, and foster great trust and collaboration. Getting rid of fragmentation will provide us with opportunities to improve the quality of services, improve timeliness of access and reduce duplication of resources" (p. 1).

The MoH recognise that services are fragmented and that greater collaboration is needed between different healthcare providers. However, while the strategy understands that New Zealand's healthcare sector needs to reflect the cultural diversity of the country at large, little has been done to reduce the fragmentation evidenced between different medical sectors and to shift toward a more multicultural model of healthcare. Another factor to consider, is with regard to the MoH's own discussions about New Zealand's changing healthcare needs, which in actuality, alternative healthcare providers could assist with. For example, the MoH has noted how New Zealand's healthcare system needs to be adapted to address long-term conditions. Long term conditions include "conditions such as diabetes, cancers, chronic pain, cardiovascular diseases, respiratory diseases, mental illness, and dementia" (Ministry of Health, 2020, p 1). There is also the needs of New Zealand's aging population, the Ministry of Health (2019) comment how one of their strategic themes involves "prevention, healthy ageing and resilience throughout people's older

years” (p. 1). These are healthcare needs that TCM practitioners could, and in many cases already do, assist with privately. Having TCM practitioners assist in the public healthcare sector could help patients without necessarily taking anything away from mainstream, western practitioners.

Excluding other healthcare systems from mainstream public healthcare hurts the general public, in that there are healthcare providers who could support their particular healthcare needs but are unable to unless patients visit them privately. However, because alternative healthcare providers aren’t subsidised, patients may choose not to visit them or may not even know they are an option. Hence, the healthcare system currently reinforces inequities between different populations and communities. For example, because alternative healthcare is practiced privately, these services are more likely going to be visited by patients who can afford to pay full price for treatments. This means that wealthier clients are more likely to benefit and have better healthcare outcomes than lower socioeconomic individuals. Additionally, there are inequalities between different service providers, as discussed within this research, this is evidenced in the creation of a medical hierarchy that favours western medicine. Consequently, TCM practitioners aren’t supported in the same way, and may find that their service delivery and care to patients is compromised, something New Zealand western practitioners don’t typically have to worry about.

Overall, excluding non-western healthcare providers with different epistemological frameworks shows the hegemony of western medicine in New Zealand, and shows that the system is Eurocentric and is far from being culturally diverse. There is still work to do in order for the Ministry of Health’s healthcare strategy to come to fruition. This research has shown that there is a demand for CAM in New Zealand, however this demand is yet to be reflected in policy change. Given that TCM has found an existing regulated authority, the Nursing Council, to become a blended authority with, discussions are taking place around the integration of a non-western, non-positivist modality under New Zealand’s HPCA Act. Perhaps if it were to proceed, it could lead future discussions for the incorporation of other CAM modalities as well. Below are my recommendations to the Ministry of Health.

- 1 Pragmatic trials should be used to evaluate the efficacy of TCM treatments. If TCM is held to the standard of the RCT, Chinese medical knowledge will continue to be undermined against western scientific bodies of knowledge. What's at stake for TCM is not having their knowledge base recognised and taken seriously in the world of contemporary medicine. While TCM has tried to establish scientific evidence for its practice, there are difficulties in doing so, with some practitioners mentioning the incompatibility between science and TCM. New Zealand's medical sector must recognise how it is obstructing the creation of new forms of medical knowledge by supporting and privileging scientific discourses over other methodological approaches used to obtain information. The fact that other medical modalities cannot grow their own knowledge base as they see fit goes against the MoH's own conversations around building cultural competence and reducing the fragmentation between different providers. As this research found, pragmatic trials are better suited for TCM with TCM practitioners being adamant that pragmatic trials can be reputably done. Moreover, just because scientific discourses are privileged over other bodies of knowledge doesn't mean that it is without its flaws as there are limitations with RCTs, such as being bound to statistical deductions when there are other means of explanation that could provide information on the causal factors of health and illness.

With this in mind, I would relay to the MoH the importance in acknowledging that there are different ontologies of health and subsequently different epistemologies other than positivism that can contribute in the creation of new medical knowledge, particularly in ways that positivist approaches cannot. There needs to be reconsideration toward the other viable forms of medical knowledge that emerge through pragmatic trials. This would empower other medical providers in much the same way that western medicine is empowered through conducting research that is methodologically appropriate for its own modality. It would also ensure that the MoH's healthcare strategy is being actioned, allowing for cultural diversity within New Zealand's medical sector. Not all medical knowledge has to abide to scientific epistemologies. However, while I would suggest that new forms of research be accepted, how new medical knowledge will be received within a medical community that has strictly upheld positivist views for so long is another question altogether that will need to be carefully considered.

- 2 TCM should be regulated in order to move away from being a semi-professionalised medical profession. Currently TCM cannot professionalise to the degree that they are wanting to, potentially jeopardising the quality of TCM practice if TCM continues to be practiced in an unregulated environment without minimum standards set for the profession. By becoming regulated, TCM organisations could establish minimum standards to ensure that only qualified and competent members can practise in New Zealand. However, it is important to bear in mind that not all TCM practitioners are on the same page about what a minimum standard would look like for the profession as regulatory discussions progress.

Considering this, I do believe that regulation is important for TCM's growth in contemporary society, and for there to be any chance for TCM to be seen as a professional medical establishment in New Zealand. There is a reason why biomedical organisations within the submission documents were against TCM becoming regulated under the same Act as them, and that is because they recognise the power regulation has in legitimising medical professions. New Zealand's current medical landscape prevents TCM from achieving full professional status due to the social closure that occurs through biomedicines tactics of delay, or in their suggestion that TCM should be regulated under a separate Act. Because of this, I believe the MoH needs to regulate TCM under the same Act as western medicine in order for TCM to move away from its semi-professionalised status. The benefits of professionalising TCM seem warranted, from creating uniformity through setting a minimum standard, to ensuring that only the best TCM practitioners are practising TCM in New Zealand, as well as the benefits professionalisation will have for the public reputation and opinion of TCM.

In saying that, I also think consideration needs to be given toward the different perspectives held between TCM practitioners with regards to what is deemed professional practice and the standards that are being set for TCM as regulation progresses. Because there are tensions within the TCM community around the direction of TCM under regulatory frameworks, it could be beneficial for TCM practitioners to go through a mediated dispute resolution meeting with the MoH or the Health Workforce. This could provide the opportunity for different opinions to be heard,

negotiations might be able to be established, and a middle ground may be met. While a positive outcome such as this would be the ideal solution moving forward, it is unrealistic to assume that a middle ground can always be met. Nevertheless, taking the steps necessary to facilitate a more optimal outcome for all TCM practitioners is worth a try. In professionalising TCM, thought needs to be given to all TCM practitioners currently practising, not just those who form part of the bigger organisations such as the self-regulatory bodies of TCM.

- 3 TCM should be eligible for public funding and subsidies, the creation of an opt-in model could facilitate this. Being relegated to the private health care market has impacted TCM's standing in New Zealand, and in some instances has impacted patient care. Because western medicine is New Zealand's mainstream medical modality, it receives the majority of New Zealand's healthcare funding. This has provided western medicine with considerable leeway in New Zealand's medical marketplace as patients can easily see their western practitioner at a subsidised cost. This is in contrast to patients seeing their TCM practitioner, who typically have to pay out of pocket as visits are usually unsubsidised (bar acupuncture treatments for accidental injuries). Some TCM practitioners think funding is necessary as it would enable patients to see their TCM practitioner more frequently. However, it is not unanimously agreed by all TCM practitioners that public funding is desirable, as some TCM practitioners believe that greater incorporation of TCM into a funded healthcare model would place further limitations on the profession and prefer the freedom of the private healthcare sector.

Knowing this, I would recommend that the MoH consider an opt-in funding model, giving TCM practitioners the choice of whether they want to be incorporated into a funded healthcare system or not. If TCM practitioners feel that their practice would benefit from additional funding they could register with the MoH to receive funding and to have greater incorporation into mainstream healthcare. For those who feel that their practice already prospers regardless of funding and would prefer to practice privately they can choose not to register with no obligation to follow the same guidelines as funded TCM practices. While the logistics of this would need to be figured out, a one-size fits all approach, if utilised, is unlikely to appease all TCM practitioners. With that

said, an opt-in model does raise questions around where other healthcare providers would stand, particularly for other alternative and traditional medical systems that do not receive funding although may wish to opt-in to such a system. For some healthcare providers, an opt-in system for TCM may be considered unfair, favouring one traditional system over others. However, it could be argued that such a suggestion could drive change, later leading to the incorporation of other CAM modalities. The idea behind an opt-in system is that it would mirror western medicine's two tiered system of public and private healthcare.

- 4 TCM needs to be able to contribute in mainstream, public healthcare situations in order to help reduce the costs spent in New Zealand's healthcare sector. Budget deficits highlight the financial burden currently placed on New Zealand's public healthcare system. Latest financial data from the Ministry of Health highlight a \$423 million deficit as of 2018/2019 (Ministry of Health, 2020). This budget blowout, according to Jancic (2019), has been attributed to "rising populations and growth in the number of patients requiring more complex health services, higher personnel costs and ageing infrastructure that requires a large cash injection (p. 1). Because western medicine controls primary and secondary healthcare situations, TCM practitioners do not practice on the frontlines. TCM practitioners have discussed how if they were able to practice in mainstream healthcare situations, they could help patients and reduce the financial burden currently faced by New Zealand's medical sector.

My recommendation to the MoH is an idea that was put forward by one of the TCM practitioners I interviewed, and that is to put pilot studies in place in different healthcare situations to assess whether TCM medicine can truly help, and to determine whether it is feasible for some TCM practitioners to be employed full time in certain mainstream medical environments. Pilot studies are a good safeguard measure as there may be unanticipated issues that arise that will need to be worked through before full implementation. The pilot study provides an opportunity for both TCM practitioners to prove that their practice is suited in mainstream healthcare, as well as allowing western practitioners to see the benefits of an integrated system that utilises both forms of care where possible.

- 5 TCM medicine practitioners should be involved in decision-making around TCM's scope of practice to prevent co-optation of their methods and techniques by other professions. The co-optation of TCM medicine will remain at stake if TCM remains self-regulated and isn't initiated under New Zealand's HPCA Act. Regulation has been considered essential in being able to place TCM professionals in a position where they are able to address the risks associated with other professions co-opting TCM. Because many of the co-opters of TCM are regulated professions and have greater authority in New Zealand's medical sphere, TCM practitioners are unable to address the fact that other professions are using treatments. Additionally, they are unable to establish scope of practice differentiations between the different providers utilising TCM, along with best practice protocols for providers who use TCM.

TCM practitioners are concerned that there may be a risk to public safety if patients choose to have treatments such as acupuncture done with anyone other than a qualified TCM practitioner. It has been argued that these risks associated with the use of TCM by other medical professions could be mitigated with proper practical training programs. However, acupuncture courses offered by biomedical providers are short in duration and are all classroom-based programs which don't adequately prepare healthcare providers to conduct manual acupunctural treatments. Subsequently, TCM practitioners are not only concerned about public safety, but they are concerned that the improper use of TCM could reflect badly on TCM, hurting their reputation. What's more, there's concern that TCM will be pushed out of practising altogether as co-optation continues.

Once again, I would recommend that the MoH regulate TCM, in this instance regulation would allow TCM practitioners to claim ownership over their practice again, something that it is currently unable to do. I would also advise that the training programs that are being provided by biomedical providers be reformed with the guidance of TCM practitioners who have noted the risks of training programs that lack clinical training. With regulation and education reform the TCM profession can have assurance that 1. They will not be shut out of practice as they will hold authority over TCM care and 2. That when their practices are being used by other medical providers

that they are being done so safely due to other medical care providers having undergone appropriate training.

References

- Acupuncture New Zealand. (n.d.). *About Acupuncture NZ*. Acupuncture New Zealand. <https://www.acupuncture.org.nz/about/>
- Adams, J. (2013). *Primary health care and complementary and integrative medicine: Practice and research*. World Scientific Publishing.
- Ahn, A., Tewari, M., Poon, C., & Phillips, R. (2006). The limits of reductionism in medicine: Could systems biology offer an alternative? *PLOS Medicine*, 3(6), 0709–0713.
- Ahuriri-Driscoll, A., Baker, V., Hepi, M., Hudson, M., Mika, C., & Tiakiwai, S. J. (2008). *The future of rongoā Māori wellbeing and sustainability. A report for Te Kete Hauora*. Ministry of Health. <https://ir.canterbury.ac.nz/handle/10092/5897>
- Allen, J. J., Schnyer, R. N., & Hitt, S. K. (1998). The efficacy of acupuncture in the treatment of major depression in women. *Psychological Science*, 9(5), 397-401.
- Amzat, J., & Razum, O. (2014). *Medical sociology in Africa*. Springer.
- Baer, H. A., Jen, C., Tanassi, L. M., Tsia, C., & Wahbeh, H. (1998). The drive for professionalization in acupuncture: A preliminary view from the San Francisco Bay area. *Social Science & Medicine*, 46(4-5), 533-537.
- Baer, H. (2015). *Complementary medicine in Australia and New Zealand: Its popularisation, legitimization and dilemmas*. Routledge.
- Bakx, K. (1991). The 'eclipse' of folk medicine in western society. *Sociology of Health & Illness*, 13(1), 20-38.

- Barcan, R. (2013). *Complementary and alternative medicine: Bodies, therapies, senses*. Berg Publishers.
- Barnes, L. L. (2003). The acupuncture wars: The professionalizing of American acupuncture-a view from Massachusetts. *Medical Anthropology*, 22(3), 261-301.
- Baronov, D. (2008). *The African transformation of western medicine and the dynamics of global cultural exchange*. Temple University Press.
- Beehive. (2017). *The New Zealand health and disability system: Handbook of organisations and responsibilities*. Beehive.
https://www.beehive.govt.nz/sites/default/files/2017-12/Health - Organisations and Responsibilities_0.pdf
- Bellander, T., & Landqvist, M. (2018). Becoming the expert constructing health knowledge in epistemic communities online. *Information, Communication & Society*, 23(4), 507–522.
- Bensoussan, A., Talley, N. J., Hing, M., Menzies, R., Guo, A., & Ngu, M. (1998). Treatment of irritable bowel syndrome with Chinese herbal medicine: a randomized controlled trial. *Jama*, 280(18), 1585-1589.
- Bocock, C., Reeder, A. I., Perez, D., & Trevena, J. (2011). Beliefs of New Zealand doctors about integrative medicine for cancer treatment. *Integrative Cancer Therapies*, 10(3), 280-288.
- Bodea, A. (2016). *Medicalization. Encyclopedia of Global Bioethics*. Springer.
- Borgerson, K. (2005). Evidence-based alternative medicine?. *Perspectives in Biology and Medicine*, 48(4), 502-515.
- Bradby, H. (2009). *Medical sociology: An introduction*. SAGE.

- Brand, E., & Wiseman, N. (2008). *阐明中药学*. Paradigm Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Broom, A. (2006). Reflections on the centrality of power in medical sociology: An empirical test and theoretical elaboration. *Health Sociology Review*, 15(5), 496-505.
- Brosnan, C. (2015). 'Quackery' in the academy? Professional knowledge, autonomy and the debate over complementary medicine degrees. *Sociology*, 49(6), 1047–1064.
- Brosnan, C. (2016). Epistemic cultures in complementary medicine: knowledge-making in university departments of osteopathy and Chinese medicine. *Health Sociology Review*, 25(2), 171-186.
- Brosnan, C., & Kirby, E. (2016). Sociological perspectives on the politics of knowledge in health care: Introduction to themed issue. *Health Sociology Review*, 25(2), 139–141.
- Brosnan, C., Vuolanto, P., & Danell, J. (2018). *Complementary and alternative medicine: Knowledge production and social transformation*. Palgrave Macmillan.
- Brown, N., & Szeman, I. (2000). *Pierre Bourdieu: Fieldwork in culture*. Rowman & Littlefield.
- Bunker JP (2003) Ivan Illich and medical nemesis. *Journal of Epidemiology and Community Health*, 57, 927.

Cant, S., & Sharma, U. (1995). The reluctant profession - Homoeopathy and the search for legitimacy. *Work, Employment and Society*, 9(4), 743–762.

Caporaso, J., & Levine, D. (1992). *Theories of political economy*. Cambridge University Press.

Careers New Zealand. (2019). *Gynaecologist/Obstetrician*. Careers Government New Zealand. <https://www.careers.govt.nz/jobs-database/health-and-community/health/gynaecologistobstetrician/>

Chandler, D., & Munday, R. (2011). *A dictionary of media and communication*. Oxford University Press.

Chang, L., & Lim, J. C. J. (2019). Traditional Chinese medicine physicians' insights into interprofessional tensions between traditional Chinese medicine and biomedicine: A critical perspective. *Health Communication*, 34(2), 238-247.

Chao, M., Zou, D., Zhang, Y., Chen, Y., Wang, M., Wu, H., ... & Wang, W. (2009). Improving insulin resistance with traditional Chinese medicine in type 2 diabetic patients. *Endocrine*, 36(2), 268-274.

Chen, P. (2004). *Diagnosis in traditional Chinese medicine*. Complementary Medicine Press.

Chiang, H. (2015). *Historical epistemology and the making of modern Chinese medicine*. Manchester University Press.

Chrystal, K., Allan, S., Forgeson, G., & Isaacs, R. (2003). The use of complementary/alternative medicine by cancer patients in a New Zealand

- regional cancer treatment centre. *The New Zealand Medical Journal (Online)*, 116(1168).
- Cloatre, E. (2019). Regulating Alternative Healing in France, And the Problem of 'Non-Medicine'. *Medical law review*, 27(2), 189-214.
- Cohen, M., Ruggie, M., & Micozzi, M. (2007). *The practice of integrative medicine: A legal and operational guide*. Springer Publishing Company.
- Coleman, J. (2016). *Minister of Health's foreword*. Ministry of Health. <https://www.health.govt.nz/new-zealand-health-system/new-zealand-health-strategy-future-direction/minister-healths-foreword>
- Conrad, L., Nutton, V., Porter, R., Wear, A., & Neave, M. (1995). *The western medical tradition: 800 B.C.-1800 A.D.* Cambridge University Press.
- Conrad, P., & Leiter, V. (2003). *Health and health care as social problems*. Rowman & Littlefield.
- Cooter, R., & Pickstone, J. (2000). *Medicine in the twentieth century, part 1*. Routledge.
- Couser, G. (1997). *Recovering Bodies: Illness, disability, and life writing*. The University of Wisconsin Press.
- Cram, F., McCreanor, T., Smith, L., Nairn, R., & Johnstone, W. (2006). Kaupapa Maori research and Pakeha social science: Epistemological tensions in a study of Maori health. *Hulili*, 3(1), 41-68.

- Daniels, R., & Nicoll, L. (2011). *Contemporary medical-surgical nursing* (2nd ed.). Cengage Learning.
- DeAngelis, T. (2017). Trends report: targeting social factors that undermine health. *APA Monit*, 48(10), 55-57.
- Demystifying Rongoā Māori: Traditional Māori healing. (2008). *Best Practice Journal*, (13), 32–36.
- Deng, G. E., Rausch, S. M., Jones, L. W., Gulati, A., Kumar, N. B., Greenlee, H., ... & Cassileth, B. R. (2013). Complementary therapies and integrative medicine in lung cancer: diagnosis and management of lung cancer: American College of Chest Physicians evidence-based clinical practice guidelines. *Chest*, 143(5), e420S-e436S.
- Diamond, W. (2000). *The clinical practice of complementary, alternative, and Western medicine*. CRC Press.
- Downer, S. M., Cody, M. M., McCluskey, P., Wilson, P. D., Arnott, S. J., Lister, T. A., & Slevin, M. L. (1994). Pursuit and practice of complementary therapies by cancer patients receiving conventional treatment. *Bmj*, 309(6947), 86-89.
- Downs, A. (2017). *From theory to practice: The promise of primary care in New Zealand*. Fullbright New Zealand. <https://www.fulbright.org.nz/wp-content/uploads/2017/09/DOWNS-From-Theory-to-Practice-The-Promise-of-Primary-Care-in-New-Zealand-.pdf>
- Dowrick, C., May, C., Richardson, M., & Bundred, P. (1996). The biopsychosocial model of general practice: rhetoric or reality? *British Journal of General Practice*, 46(403), 105–107.
- Duke, K. (2005). A century of CAM in New Zealand: a struggle for recognition. *Complementary therapies in clinical practice*, 11(1), 11-16.

- Durie, M. (2004). *Maori specific provisions in legislation*. Massey University. [https://www.massey.ac.nz/massey/fms/Te Mata O Te Tau/Publications - Mason/M Durie Maori specific provisions in legislation.pdf](https://www.massey.ac.nz/massey/fms/Te%20Mata%20O%20Te%20Tau/Publications%20-%20Mason/M%20Durie%20Maori%20specific%20provisions%20in%20legislation.pdf)
- Ellison-Loschmann, L., & Pearce, N. (2006). Improving access to health care among New Zealand's Maori population. *American journal of public health*, 96(4), 612-617.
- Evans, A., Duncan, B., McHugh, P., Shaw, J., & Wilson, C. (2008). Inpatients' use, understanding, and attitudes towards traditional, complementary and alternative therapies at a provincial New Zealand hospital. *The New Zealand Medical Journal (Online)*, 121(1278).
- France, H., & Rodriguez, C. (2019). Traditional Chinese medicine in Canada: An indigenous perspective. *Chinese Medicine and Culture*, 2(1), 1.
- Ghosh, D., Skinner, M., & Ferguson, L. R. (2006). The role of the Therapeutic Goods Administration and the Medicine and Medical Devices Safety Authority in evaluating complementary and alternative medicines in Australia and New Zealand. *Toxicology*, 221(1), 88-94.
- Gilbey, A. (2009). Ninety years' growth of New Zealand complementary and alternative medicine. *The New Zealand Medical Journal (Online)*, 122(1291).
- Goldenberg, M. J. (2006). On evidence and evidence-based medicine: lessons from the philosophy of science. *Social science & medicine*, 62(11), 2621-2632
- Greene-Prabhu, A. M., Walsh, E. G., Sirois, F. M., & McCaffrey, A. (2009). Perceived benefits of complementary and alternative medicine: a whole systems research perspective. *Open Complementary Medicine Journal*, 1, 35-45.
- Gruendemann, B., & Mangum, S. (2001). *Infection prevention in surgical settings*. Saunders.

- Halkias, D., Thurman, P., Caracatsanis, S., & Harkiolakis, N. (2016). *Female immigrant entrepreneurs: The economic and social impact of a global phenomenon*. Routledge.
- He, Q., Zhang, J., & Tang, Y. (2007). A controlled study on treatment of mental depression by acupuncture plus TCM medication. *Journal of traditional Chinese medicine= Chung i tsa chih ying wen pan*, 27(3), 166-169.
- Health Navigator. (2019). *Complementary and alternative medicine*. Health Navigator. <https://www.healthnavigator.org.nz/medicines/c/complementary-and-alternative-medicine/>
- Hess, D. J. (2004). Medical modernisation, scientific research fields and the epistemic politics of health social movements. *Sociology of Health & Illness*, 26(6), 695-709.
- Ho, R., & Gibaldi, M. (2013). *Biotechnology and biopharmaceuticals: Transforming proteins and genes into drugs*. John Wiley & Sons.
- Hollenberg, D. (2006). Uncharted ground: patterns of professional interaction among complementary/alternative and biomedical practitioners in integrative health care settings. *Social science & medicine*, 62(3), 731-744.
- Holmström, I., & Röing, M. (2010). The relation between patient-centeredness and patient empowerment: a discussion on concepts. *Patient education and counselling*, 79(2), 167-172.
- Hong, H. (2016). *Principles of Chinese medicine: A modern interpretation*. Imperial College Press.
- Hsu, P. C., Tsai, Y. T., Lai, J. N., Wu, C. T., Lin, S. K., & Huang, C. Y. (2014). Integrating traditional Chinese medicine healthcare into diabetes care by reducing the risk of developing kidney failure among type 2 diabetic patients: a

- population-based case control study. *Journal of ethnopharmacology*, 156, 358-364.
- Hu, J., Zhang, J., Zhao, W., Zhang, Y., Zhang, L., & Shang, H. (2011). Cochrane systematic reviews of Chinese herbal medicines: An overview. *PLoS One*, 6(12), e28696.
- Ijaz, N., & Boon, H. (2018). Statutory regulation of traditional medicine practitioners and practices: The need for distinct policy making guidelines. *The Journal of Alternative and Complementary Medicine*, 24(4), 307-313.
- Illich, I. (1976). *Medical nemesis: The exploration of health*. Random House.
- Jackson, S., & Scambler, G. (2007). Perceptions of evidence-based medicine: traditional acupuncturists in the UK and resistance to biomedical modes of evaluation. *Sociology of Health & Illness*, 29(3), 412-429.
- Jancic, B. (2019). DHB deficit explodes to \$423 million, more than double last year. The New Zealand Herald. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12255017
- Jing, Y. (2020). *A study of Emersonian transcendental educational thought*. Scientific Research Publishing.
- Jiuzhang, M., & Lei, G. (2009). *A general introduction to traditional Chinese medicine*. CRC Press.
- Joffe, S., Manocchia, M., Weeks, J. C., & Cleary, P. D. (2003). What do patients value in their hospital care? An empirical perspective on autonomy centred bioethics. *Journal of Medical Ethics*, 29(2), 103-108.

- Johannessen, H., & Lazar, I. (2006). *Multiple medical realities: Patients and healers in biomedical, alternative, and traditional medicine*. Berghahn Books.
- John Wiley & Sons. (2020). About Cochrane reviews. Cochrane Library. <https://www.cochranelibrary.com/about/about-cochrane-reviews>
- Kara, H. (2017). *Research and evaluation for busy students and practitioners: A time-saving guide*. Policy Press.
- Kastner, J. (2009). *Chinese nutrition therapy dietetics in traditional Chinese medicine (Tcm)* (2nd ed.). Georg Thieme Verlag.
- Kaye, K. (2011). *Infection prevention and control in the hospital, an issue of infectious disease clinics* (Vol. 25). Saunders.
- Kayne, S. (2009). *Complementary and alternative medicine*. Pharmaceutical Press.
- Kendall, J. (2003). Designing a research project: Randomised controlled trials and their principles. *Emergency Medicine Journal*, 20(2), 164–168.
- Keshet, Y. (2009). The untenable boundaries of biomedical knowledge: epistemologies and rhetoric strategies in the debate over evaluating complementary and alternative medicine. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 13(2), 131–155.
- King, O., Borthwick, A., Nancarrow, S., & Grace, S. (2018). Sociology of the professions: what it means for podiatry. *Journal of foot and ankle research*, 11(1), 30.
- Koo, J., & Desai, R. (2003). Traditional Chinese medicine in dermatology. *Dermatologic therapy*, 16(2), 98-105.

- Krasner, R., & Shors, T. (2014). *The microbial challenge: A public health perspective*. Jones & Bartlett Learning.
- Lange, R. (1999). *May the people live: A history of Maori health development 1900-1920*. Auckland University Press.
- Leach, M. (2013). Profile of the complementary and alternative medicine workforce across Australia, New Zealand, Canada, United States and United Kingdom. *Complementary Therapies in Medicine*, 21(4), 364–378.
- Lee, S. I., Khang, Y. H., Lee, M. S., & Kang, W. (2002). Knowledge of, attitudes toward, and experience of complementary and alternative medicine in western medicine—and oriental medicine—trained physicians in Korea. *American Journal of Public Health*, 92(12), 1994-2000.
- Lee, Y. Y., & Lin, J. L. (2010). Do patient autonomy preferences matter? Linking patient-centered care to patient–physician relationships and health outcomes. *Social science & medicine*, 71(10), 1811-1818.
- Leung, B. (2008). *Traditional Chinese medicine: The human dimension*. Routledge.
- Leung, P. (2015). *Comprehensive guide to Chinese Medicine* (2nd ed.). World Scientific Publishing.
- Lewis, M. (2019). Sociology of Health & Illness. *De-Legitimising Complementary Medicine: Framings of the Friends of Science in Medicine-CAM Debate in Australian Media Reports*, 41(5), 831–851.
- Li, W. L., Zheng, H. C., Bukuru, J., & De Kimpe, N. (2004). Natural medicines used in the traditional Chinese medical system for therapy of diabetes mellitus. *Journal of ethnopharmacology*, 92(1), 1-21.
- Lieber, J., & McConnell, C. (2004). *Management principles for health professionals* (4th ed.). Jones and Bartlett Publishers.

- Lin, A. X., Chan, G., Hu, Y., Ouyang, D., Ung, C. O. L., Shi, L., & Hu, H. (2018). Internationalization of traditional Chinese medicine: Current international market, internationalization challenges and prospective suggestions. *Chinese medicine*, 13(1), 9.
- Lü, S. (2002). *Handbook of acupuncture in the treatment of musculoskeletal conditions*. Donica Publishing.
- Lu, H. (2005). *Traditional Chinese medicine: An authoritative and comprehensive guide*. Basic Health Promotions Inc.
- Lundy, K. S., & Janes, S. (2016). *Community health nursing: Caring for the public's health*. Jones & Bartlett Publishers.
- MacDonald, K. M. (1985). Social closure and occupational registration. *Sociology*, 19(4), 541-556.
- Magner, L. (2009). *A history of infectious diseases and the microbial world*. Praeger.
- Maha, N., & Shaw, A. (2007). Academic doctors' views of complementary and alternative medicine (CAM) and its role within the NHS: an exploratory qualitative study. *BMC Complementary and Alternative Medicine*, 7(1), 17.
- Maizes, V., Rakel, D., & Niemiec, C. (2009). Integrative medicine and patient-centered care. *Explore*, 5(5), 277-289.
- Manheimer, E., Wieland, S., Kimbrough, E., Cheng, K., & Berman, B. M. (2009). Evidence from the Cochrane Collaboration for traditional Chinese medicine therapies. *The Journal of Alternative and Complementary Medicine*, 15(9), 1001-1014.

Mantri, S. (2008). Holistic medicine and the western medical tradition. *AMA Journal of Ethics*, 10(3), 177-180.

Mao, Z., & Leung, J. (1992). *The writings of Mao Zedong, 1949-1976*. M.E. Sharpe.

Medsafe. (2019). *Regulation of dietary supplements*. Medsafe.
<https://www.medsafe.govt.nz/regulatory/dietarysupplements/regulation.asp>

Miller, D. (2009). *Resistant infections*. Greenhaven Press.

Ministry of Health. (2011). *Proposal that traditional Chinese medicine become a regulated profession under the Health Practitioners Competence Assurance Act 2003*. Ministry of Health.
<https://www.health.govt.nz/system/files/documents/publications/traditional-chinese-medicine-regulation-proposal.pdf>

Ministry of Health. (2014). *Primary health care providers*. Ministry of Health.
<https://www.health.govt.nz/our-work/primary-health-care/about-primary-health-organisations/primary-health-care-providers>

Ministry of Health. (2014). *Crown entities and agencies*. Ministry of Health.
<https://www.health.govt.nz/new-zealand-health-system/key-health-sector-organisations-and-people/crown-entities-and-agencies>

Ministry of Health. (2016). *One team*. Ministry of Health.
<https://www.health.govt.nz/new-zealand-health-system/new-zealand-health-strategy-future-direction/five-strategic-themes/one-team>

Ministry of Health. (2016). People-powered. Ministry of Health.
<https://www.health.govt.nz/new-zealand-health-system/new-zealand-health-strategy-future-direction/five-strategic-themes/people-powered>

Ministry of Health. (2017). Chronology of the New Zealand Health System 1840 to 2017. Ministry of Health.
https://www.health.govt.nz/system/files/documents/pages/chronology-of-the-new-zealand-health-system-1840-to-2017_0.pdf

Ministry of Health. (2017). *Overview of the health system*. Ministry of Health.
<https://www.health.govt.nz/new-zealand-health-system/overview-health-system>

Ministry of Health. (2019). Healthy Ageing Strategy: Update. Ministry of Health.
<https://www.health.govt.nz/our-work/life-stages/health-older-people/healthy-ageing-strategy-update>

Ministry of Health. (2019). *Zero fees for under-14s*. Ministry of Health.
<https://www.health.govt.nz/your-health/services-and-support/health-care-services/visiting-doctor-or-nurse/zero-fees-under-14s>

Ministry of Health. (2019). *What we do*. Ministry of Health.
<https://www.health.govt.nz/about-ministry/what-we-do>

Ministry of Health. (2020). DHB Sector Financial Reports 2018–19. Ministry of Health.
<https://www.health.govt.nz/new-zealand-health-system/key-health-sector-organisations-and-people/district-health-boards/accountability-and-funding/summary-financial-reports/dhb-sector-financial-reports-2018-19>

Ministry of Health. (2020). Long-term conditions. Ministry of Health.
<https://www.health.govt.nz/our-work/diseases-and-conditions/long-term-conditions>

Ministry of Health. (2020). *Rongoā Māori: Traditional Māori healing*. Ministry of Health.
<https://www.health.govt.nz/our-work/populations/maori-health/rongoa-maori-traditional-maori-healing>

Ministry of Health. (2020). *Budget 2020: Vote Health*. Ministry of Health.
<https://www.health.govt.nz/about-ministry/what-we-do/budget-2020-vote-health>

Moreau, A., Carol, L., Dedianne, M. C., Dupraz, C., Perdrix, C., Lainé, X., & Souweine, G. (2012). What perceptions do patients have of decision making (DM)? Toward an integrative patient-centered care model. A qualitative study using focus-group interviews. *Patient education and counselling*, 87(2), 206-211.

New Zealand Acts As Enacted. *Quackery Prevention Act 1908*. New Zealand Legal Information Institute.
http://www.nzlii.org/nz/legis/hist_act/qpa19088ev1908n247335/

New Zealand Acts As Enacted. *Medical Research Council Act 1950*. New Zealand Legal Information Institute.
http://www.nzlii.org/nz/legis/hist_act/mrca19501950n20227/

New Zealand Acupuncture Standards Authority. (2020). *About NZASA*. New Zealand Acupuncture Standards Authority. <https://nzasa.org/about-nzasa/>

New Zealand Legislation (2014). *Health Research Council Act 1990*. New Zealand Legislation.
<http://www.legislation.govt.nz/act/public/1990/0068/latest/whole.html>

New Zealand Legislation. (2018). *Medicines Act 1981*. New Zealand Legislation.
<http://www.legislation.govt.nz/act/public/1981/0118/latest/DLM53790.html>

New Zealand Legislation. (2020). *Health Practitioners Competence Assurance Act 2003*. New Zealand Legislation.
<http://www.legislation.govt.nz/act/public/2003/0048/latest/DLM203312.html>

Nicholson, T. (2006). Complementary and alternative medicines (including traditional Maori treatments) used by presenters to an emergency department in New Zealand: a survey of prevalence and toxicity. *The New Zealand Medical Journal (Online)*, 119(1233).

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, 16(1), 1609406917733847.

Olchowska-Kotala, A., & Barański, J. (2016). Polish physicians' attitudes to complementary and alternative medicine. *Complementary therapies in medicine*, 27, 51-57.

Olson, R. (2006). *Mental health systems compared: Great Britain, Norway, Canada, and the United States*. Charles C Thomas Publisher.

Paltiel, O., Avitzour, M., Peretz, T., Cherny, N., Kaduri, L., Pfeffer, R. M., ... & Soskolne, V. (2001). Determinants of the use of complementary therapies by patients with cancer. *Journal of Clinical Oncology*, 19(9), 2439-2448.

Patel, A., & Toossi, V. (2016). Traditional Chinese medicine practitioners in New Zealand: differences associated with being a practitioner in New Zealand compared to China. *NZ Med J.*, 129(1444), 35-42.

Patsopoulos, N. A. (2011). A pragmatic view on pragmatic trials. *Dialogues in clinical neuroscience*, 13(2), 217.

- Pope, C. (2003). Resisting evidence: the study of evidence-based medicine as a contemporary social movement. *Health*, 7(3), 267-282.
- Poynton, L., Dowell, A., Dew, K., & Egan, T. (2006). General practitioners' attitudes toward (and use of) complementary and alternative medicine: a New Zealand nationwide survey. *The New Zealand Medical Journal (Online)*, 119(1247).
- Regenmortel, M., & Hull, D. (2002). *Promises and limits of reductionism in the biomedical sciences*. John Wiley & Sons.
- Ried, K., & Stuart, K. (2011). Efficacy of Traditional Chinese Herbal Medicine in the management of female infertility: A systematic review. *Complementary therapies in medicine*, 19(6), 319-331.
- Roex, A., & Degryse, J. (2007). Viewpoint: Introducing the concept of epistemological beliefs into medical education: The hot-air-balloon metaphor. *Academic Medicine*, 82(6), 616–620.
- Roumbanis, L. (2019). Symbolic Violence in Academic Life: A Study on How Junior Scholars are Educated in the Art of Getting Funded. *Minerva*, 57(2), 197-218.
- Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, 25(4), 14-20.
- Saarni, S. I., & Gylling, H. A. (2004). Evidence based medicine guidelines: A solution to rationing or politics disguised as science?. *Journal of Medical Ethics*, 30(2), 171-175.
- Sadler, J., & Hulgus, Y. (1992). Clinical problem solving and the biopsychosocial model. *American Journal of Psychiatry*, 149(10), 1315–1323.
- Saks, M., & Adams, T. L. (2019). Neo-Weberianism, Professional Formation and the State: Inside the Black Box. *Professions and Professionalism*, 9(2).

- Saldana, J. (2009). *The coding manual for qualitative researchers*. SAGE.
- Shalom-Sharabi, I., Samuels, N., Lavie, O., Lev, E., Keinan-Boker, L., Schiff, E., & Ben-Arye, E. (2017). Effect of a patient-tailored integrative medicine program on gastro-intestinal concerns and quality of life in patients with breast and gynaecologic cancer. *Journal of cancer research and clinical oncology*, 143(7), 1243-1254.
- Shea, J. L. (2006). Applying evidence-based medicine to traditional Chinese medicine: debate and strategy. *Journal of Alternative & Complementary Medicine*, 12(3), 255-263.
- Sinclair, S. (2004). Evidence-based medicine: A new ritual in medical teaching. *British medical bulletin*, 69(1), 179-196.
- Smith, R. (2002). The biopsychosocial revolution. *Journal of General Internal Medicine*, 17(4), 309–310.
- Smith, C., Armour, M., & Betts, D. (2014). Treatment of women's reproductive health conditions by Australian and New Zealand acupuncturists. *Complementary Therapies in Medicine*, 22(4), 710–718.
- Smith, C. (2018). *Exploring the pressures of medical education from a mental health and wellness perspective*. IGI Global.
- Spencer, J., & Jacobs, J. (2003). *Complementary and alternative medicine: An evidence-based approach*. Mosby.
- Stephens, M. (2001). A Return to the Tohunga Suppression Act 1907. *Victoria University of Wellington Law Review*, 32, 437–462.
- Summerskill, W., & Pop, C. (2002). I saw the panic rise in her eyes, and evidence-based medicine went out of the door. An exploratory qualitative study of the

- barriers to secondary prevention in the management of coronary heart disease. *Family Practice*, 19(6), 605–610.
- Trevena, J., & Reeder, A. (2005). Perceptions of New Zealand adults about complementary and alternative therapies for cancer treatment. *NZ Med J*, 118.
- Truant, T., & Bottorff, J. L. (1999). Decision making related to complementary therapies: a process of regaining control. *Patient education and counselling*, 38(2), 131-142.
- Tysoe, L. (2012). The missionary as cultural mediator: Alexander Don and the Chinese and European communities in New Zealand. Victoria University of Wellington. <https://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/2144/thesis.pdf?sequence=2>
- Upchurch, D. M., Burke, A., Dye, C., Chyu, L., Kusunoki, Y., & Greendale, G. A. (2008). A sociobehavioral model of acupuncture use, patterns, and satisfaction among women in the United States, 2002. *Women's Health Issues*, 18(1), 62-71.
- Vincent, C., & Furnham, A. (1996). Why do patients turn to complementary and alternative medicine? An empirical study. *British Journal of Clinical Psychology*, 35, 37–48.
- Volz, N. B., Fringer, R., Walters, B., & Kowalenko, T. (2017). Prevalence of horizontal violence among emergency attending physicians, residents, and physician assistants. *Western journal of emergency medicine*, 18(2), 213.
- Voyce, M. (1989). Maori healers in New Zealand: The Tohunga Suppression Act 1907. *Oceania*, 60(2), 99-123.

- Wang, J. & Farquhar J. (2009). 'Knowing the Why but not the How': A dilemma in Contemporary Chinese Medicine. *Asian Medicine*, 5(1), 57-79.
- Weininger, E. (2005). Foundations of Pierre Bourdieu's class analysis. In *Approaches to class analysis*(pp. 92–187). Cambridge University Press.
- West Coast District Health Board. (2018). *How the health system works*. West Coast District Health Board. <https://www.wcdhb.health.nz/your-health/how-the-health-system-works/>
- Wetzel, M. S., Kaptchuk, T. J., Haramati, A., & Eisenberg, D. M. (2003). Complementary and alternative medical therapies: implications for medical education. *Annals of Internal Medicine*, 138(3), 191-196.
- White, A., Cummings, T., & Filshie, J. (2018). *An introduction to Western medical acupuncture*. Elsevier Saunders.
- Wiese, M., & Oster, C. (2010). 'Becoming accepted': the complementary and alternative medicine practitioners' response to the uptake and practice of traditional medicine therapies by the mainstream health sector. *Health*., 14(4), 415-433.
- Winnick, T. A. (2005). From quackery to "complementary" medicine: The American medical profession confronts alternative therapies. *Social Problems*, 52(1), 38-61.
- Wilson, K., Dowson, C., & Mangin, D. (2007). Prevalence of complementary and alternative medicine use in Christchurch, New Zealand: Children attending general practice versus paediatric outpatients. *Journal of the New Zealand Medical Association*, 120(1251).

- Wilson, N. W. (2012). Chaos in Western Medicine: How Issues of Social-Professional Status are Undermining Our Health: A Research Review on Issues of Medical Sociology related to Occupational Dominance of Medicine in Healthcare Environments. *Global journal of health science*, 4(6), 1.
- Wolever, R. Q., Abrams, D. I., Kligler, B., Dusek, J. A., Roberts, R., Frye, J., ... & Gaudet, T. (2012). Patients seek integrative medicine for preventive approach to optimize health. *Explore*, 8(6), 348-352.
- Wolpe, P. (1999). Alternative medicine and the AMA. In *The American medical ethics revolution: How the AMA's code of ethics has transformed physicians' relationships to patients, professionals, and society* (pp. 218–239). The Johns Hopkins University Press.
- Wong, W. C., Lee, A., Wong, S. Y., Wu, S. C., & Robinson, N. (2006). Strengths, weaknesses, and development of Traditional Chinese Medicine in the health system of Hong Kong: Through the eyes of future Western doctors. *Journal of Alternative & Complementary Medicine*, 12(2), 185-189.
- Wound, O., & Continence Nurses Society (WOCN) Wound Committee. (2012). Clean vs. sterile dressing techniques for management of chronic wounds: a fact sheet. *Journal of wound, ostomy, and continence nursing: official publication of The Wound, Ostomy and Continence Nurses Society*, 39(2 Suppl), S30.
- Xue, C. C., Zhang, A. L., Lin, V., Da Costa, C., & Story, D. F. (2007). Complementary and alternative medicine use in Australia: A national population-based survey. *The Journal of Alternative and Complementary Medicine*, 13(6), 643-650.
- Xue, C. C., Zhang, A. L., Greenwood, K. M., Lin, V., & Story, D. F. (2010). Traditional Chinese medicine: An update on clinical evidence. *The Journal of Alternative and Complementary Medicine*, 16(3), 301-312.

- Xue, P., Zhan, T., Yang, G., Farella, G. M., Robinson, N., Yang, A. W., & Liu, J. (2015). Comparison of Chinese medicine higher education programs in China and five Western countries. *Journal of Traditional Chinese Medical Sciences*, 2(4), 227-234.
- Yang, J., & Monti, D. (2017). *Clinical acupuncture and ancient Chinese medicine*. Oxford University Press.
- Zhaoguo, L., Qing, W., & Yurui, X. (2019). *Key concepts in traditional Chinese medicine*. Springer.

Appendix A: Information Sheet



Brittany Palatchie | Master of Arts (Sociology) student
College of Humanities and Social Sciences | Massey University Albany
Private Bag 102 904 | North Shore 0745 | New Zealand
Ph: 021 103 3940 | Brittany.lp@icloud.com

東(傳統中醫)、西方醫學模式的相互作用與張力：辨識生物醫學在新西蘭的知態權威

我的名字是Brittany Palatchie，我正在進行一項研究項目，探討傳統中醫從業者對在西方醫學主導醫療保健行業的國家中作為另類醫生有什麼看法。這研究是我於梅西大學修讀藝術碩士（社會學）需要完成的。

研究說明：世界各地的現代普遍的醫療系統在很大程度上支持基於科學實證的西方醫學模式。因此，不具備相同科學地位的醫學模式經常因不符合這些標準而受到批評。在西方社會，傳統的西醫在基層醫療保健領域占主導地位，而傳統中醫目前不被視為完全受規範的職業。這項研究和訪談的目的是揭示傳統中醫在西醫為主導的社會中，會否察覺到中、西醫學系統之間存在磨擦，並希望了解當中引起的作用。

參與者身份和研究程序：你將需要符合以下參與條件：1. 你在新西蘭工作，並在專業診所從事傳統中醫執業工作。2. 你持有與中醫相關的醫療證書。如果你同意參加這次研究，你將會參與一次約30至60分鐘的面試。而為感謝你對是次研究的參與，你將獲得50元的食品或燃油現金券。這次訪談旨在討論你目前在實踐中醫的經驗、你對西醫的主導地位如何影響你醫療實踐

的想法、以及你是否認同一個綜合的醫療體系（即在一個基層醫療體系中認受及規管傳統中醫和西醫）有利於社會。

數據管理: 如果你認為合適，訪談將會在獲得你同意之下利用錄音配合進行以協助數據分析。
如果你不想接受錄音訪談，整個採訪過程中我只會用紙筆作記錄。

需要考慮的事情: 本次採訪僅涉及中醫在新西蘭醫療體系中的作用。 你不會被要求透露任何有關病人的信息。 此外，你亦沒有義務回答會使你感到不自在的問題或議題。 為了保護你作為參與者的身份，歡迎你於我發表的最終報告及任何與其相關的出版刊物中使用假名。 如果你感興趣，我可透過電子郵件向你發送研究結果的摘要。

另一個考慮因素是翻譯需求。 如果英語不是你的第一語言，或你不習慣用英語進行訪談，我會安排一名口譯員從旁協助你用中文(普通話或廣東話)進行。 請於下列空格內以✓標示你的選擇。

英文訪談 (與研究者 - 本人)	
中文訪談 (與口譯員；研究者(本人) 亦在場參與)	

參與者的權利: 如果你決定參與，你均有以下權利：

- 拒絕回答任何特定問題;
- 隨時提出有關這次研究的發問;
- 除非獲得你的同意，你的言論不會以實名發表;
- 在這次研究結束後提供研究結果的摘要

倫理

此研究已被同行評審評定為低風險，因此，此研究並未被大學的人類倫理委員會審查。本文提及的研究人員會為本研究的道德行為負責。如果你對本研究的做法有任何疑慮，而你希望向研究人員以外的人提出，請聯繫研究倫理主任Craig Johnson教授，電話是06 356 9099 (直線 85271)，電子郵件是humanethics@massey.ac.nz。

研究聯絡

這次研究項目由我，以學生身份進行，作為完成我碩士課程的一部分。 這次研究是在Alice Beban博士的監督下進行的。 如果你對是次研究有任何問題或疑慮，歡迎你使用以下方式與Alice或我聯繫

學生研究員	課程控制員/主管
Brittany Palatchie	Dr Alice Beban
021 103 3940	06 356 9099 (直線 85271)
Brittany.lp@icloud.com	a.beban@massey.ac.nz

Brittany Palatchie | Master of Arts (Sociology) student
College of Humanities and Social Sciences | Massey University Albany
Private Bag 102 904 | North Shore 0745 | New Zealand
Ph: 021 103 3940 | Brittany.lp@icloud.com

The interaction and tensions between Eastern (Traditional Chinese Medicine) and Western Medical Modalities: Recognising the Epistemic Authority given to Biomedicine in New Zealand

My name is Brittany Palatchie and I am conducting a research project that will assess how Traditional Chinese practitioners feel about practicing as an alternative practitioner in a country where Western medicine dominates the healthcare industry. The project is required for the completion of my Master of Arts (Sociology) at Massey University.

Project Description: Contemporary conventional medical systems across the world largely endorse western models of care that are scientifically evidenced-based, consequently, medical models that do not hold the same scientific stature are often criticised for not meeting these standards. This research is interested in seeing what it is like for traditional Chinese practitioners to practice medicine in a western society where conventional western medicine dominates the primary health care sector and where traditional Chinese medicine is not currently considered a regulated profession. The aim of this research and the interview session is to uncover whether traditional Chinese practitioners have noticed any tensions between eastern and western medical systems in terms of the legitimacy given to western medicine over alternative forms of medicine and hopes to understand the degree to which this tension functions.

Participant identification and project procedures: You have been requested to participate on the basis that 1. You are based in New Zealand and practice as a Traditional Chinese practitioner in a professional clinic and 2. You hold medical credentials associated with Traditional Chinese medicine. If you agree to participate, you will take part in one interview that is approximately 30-60 minutes long. As a token of appreciation, you will be provided with a \$50.00 food or fuel voucher. The interview aims to discuss your current experiences practicing Traditional Chinese Medicine, your thoughts on how the dominance of western

medicine affects your medical practice, and whether you believe an integrative healthcare system (the regulation and adoption of both Traditional Chinese medicine and Western medicine under one primary healthcare system) would be beneficial.

Data management: If you are comfortable, and if you approve, the interview will be audio recorded to assist with data analysis. If you're not comfortable being recorded on audio I will take written notes throughout the interview.

Things to think about: This interview is solely about traditional Chinese medicine's role in the healthcare system of New Zealand. You will not be expected to divulge any information regarding your patients. Furthermore, you are not obligated to respond to questions or themes that cause any feelings of discomfort. To protect your identity as a participant, you are welcome to choose a pseudonym that will be used in my final report and any publications arising from this project. If you are interested, I will email you a summary of the project findings.

Another consideration is with regards to translation needs. If English is not your first language and you do not feel comfortable carrying out the interview in English, I will arrange for an interpreter to help carry out the interview in Mandarin Chinese. Please tick your preference for the interview.

English speaking interview (with myself the researcher)	
Interview with Chinese speaking interpreter (with researcher present)	

Participant's Rights: If you decide to participate, you have the right to:

1. Decline to answer any particular question;
2. Ask any questions about the study at any time;

3. Provide information on the understanding that your name will not be used unless you give permission to the researcher;
4. Be provided with a summary of the project findings when it is concluded

Ethics

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher named above are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher, please contact Prof Craig Johnson, Director, Research Ethics, telephone 06 356 9099 x 85271, email humanethics@massey.ac.nz.

Project Contacts

This research project is conducted by me as a student as part of the completion of my Master of Arts. It is carried out under the supervision of Dr Alice Beban. If you have any questions or concerns about this project, you are welcome to contact Alice or myself using the details below.

Student researcher	Course controller/supervisor
Brittany Palatchie	Dr Alice Beban
021 103 3940	06 356 9099 ext. 83851
Brittany.lp@icloud.com	a.beban@massey.ac.nz

Appendix B: Participant Consent Form

/ College of Humanities and Social Sciences | Massey University Albany
Private Bag 102 904 | North Shore 0745 | New Zealand

The interaction and tensions between Eastern (Traditional Chinese Medicine) and Western Medical Modalities: Recognising the Epistemic Authority given to Biomedicine in New Zealand

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read, or have had read to me in my first language, and I understand the Information Sheet attached. I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given sufficient time to consider whether to participate in this study and I understand participation is voluntary and that I may withdraw from the study at any time.

1. I agree / do not agree to the interview being sound recorded.
2. I agree to participate in this study under the conditions set out in the Information sheet.

If you would like to use a pseudonym, please write it below:

Pseudonym: _____

Declaration by Participant:

I _____ hereby consent to take part in this study.
[Print full name]

Signature: _____ Date: _____

Appendix C: Semi-structured Interview Prompts

General background questions:

- What are the differences you've noticed practicing traditional Chinese medicine in China versus practicing traditional Chinese medicine in New Zealand?
- What made you want to practice traditional Chinese medicine in New Zealand?

Epistemological concerns:

- Currently western medicine receives a lot of recognition in New Zealand and in other western societies whilst Chinese medicine is often questioned about its safety and efficacy. Has this impacted your ability to practice Chinese medicine in New Zealand where western medicine is considered the gold standard of medical practice?
- Have there been any instances where you've noticed the tension between western medicine and Chinese medicine? And this doesn't have to only include your own experiences but with your colleagues who also practice Chinese medicine in New Zealand, have they also noticed the conflict between eastern and western medicine?

Medical pluralism:

- With an increased demand for complementary and alternative therapies in New Zealand do you think that traditional Chinese medicine could be practiced in an integrated setting where both Western and Eastern practitioners work alongside one another? And why / or why wouldn't an integrated system work?
- (If they agree about integration) What would an ideal integrated system look like to you - for example, would both institutions remain separate yet collaboratively work with one another in terms of offering referrals, or would you prefer that they work within the same clinics/hospitals?

Regulation and the Political Economy:

- In 2010 there was a submission for traditional Chinese medicine to become a regulated profession, did you have any say in the submission, or do you know anything about this submission?
- It appears that there is quite a bit of autonomy for Chinese practitioners in New Zealand in that they do not have to adhere to the same stringent standards set for biomedicine and biomedical treatments. Do you think that becoming a regulated profession would take away your autonomy in any way? And how might it change the way you practice medicine?
- What would you state are the pros and cons of becoming a regulated profession?
- Do you believe that there are risks with becoming regulated, and if so, what do you think those risks are?
- The Ministerial Advisory Committee on Complementary and Alternative Health (2004) claim that “some groups of practitioners see statutory regulation as a means to gain legitimacy with consumers and biomedical practitioners, [to] facilitate integration and [to] access public health funds” (p. 17). Do you know if there is any truth to that statement? Did some Chinese practitioners want to gain legitimacy with biomedical practitioners, the general public, and have the ability to access public funds?
- Do you believe becoming regulated could lead to a more balanced medical system where traditional Chinese medicine and western medicine are seen on more equal grounds?

- Do you have any final comments on the tensions between eastern and western medicine that I perhaps haven't covered? Or any final comments about anything we have discussed today.