Towards Integrative Health Care. The perspectives and experiences of Chinese Medicine Practitioners (CMPs) and General Medical Practitioners (GPs)

Dr Nga Chong Lisa CHENG
MBBS(UNSW), GradDipPH(UNSW), DCH(USyd),
BSc(Anat & Physio)(UNSW), BMedSc(USyd),
FRACGP, AFRACM, MRACI, AFCHSM, RCMP(Acup&CHM), JP

Principal Supervisor:

Associate Professor Christopher Zaslawski
DipAc, DipCHM, BAppSc, MHlthScEd, PhD (UTS)

Co-supervisor:

Distinguished Professor Jon Adams
BA Hons (Wales), PG Diploma (Wales) MA (Leeds), PhD (Edinburgh)

Faculty of Science
University of Technology Sydney
Jan 2020

CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Nga Chong Lisa CHENG declare that this thesis, is submitted in fulfilment of the requirements for the award of PhD, in the Faculty of Science at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise reference or acknowledged. The content of the project is the result of work that has been carried out since the official commencement date of the approved research program. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

Production Note:
Signature removed
prior to publication.

_____

Dr Nga Chong Lisa CHENG
Registered Medical Practitioner (General & Specialist Registrations),
Medical Board of Australia
Registered Chinese Medicine Practitioner (Acupuncture & Chinese Herbal Medicine),
Chinese Medicine Board of Australia

Date: _12th November 2019___

Table of Contents

List of Figures

List of Tables

ACKNOWLEDGEMENTS

I would like to thank the lecturing and administration staff from the University of Technology, Sydney for their help, support and expertise during my time at UTS.

I would like to show my gratitude towards my supervisors for their invaluable time and support throughout this study. In particular, I would like to express my deepest appreciation towards Associate Professor Christopher Zaslawski for his guidance, encouragement, inspiration and friendship throughout my study, including his assistance in overcoming all the obstacles that I have encountered over the years. I would also like to thank Distinguished Professor Jon Adams for his invaluable advice in the initial planning for this project.

I would like to take this opportunity to thank my parents, Mr Kwok Yuen Cheng and Mrs Kit Wan Liu, for their endless love, support and teaching throughout my life. Without their substantial and bountiful love and support, nothing would have been possibly achieved. I would like to express my appreciation to my brothers, Mr Andrew Cheng and Mr Edward Cheng, who have always been there for me whenever I needed them. I would also like to express my deepest gratitude to my dearest sister, Ms Alice Cheng. She has always been caring for me since I was young, provided support and protection to me throughout my high school years.

In addition, I would also like to thank my husband, Prof Chi Eung Danforn Lim, for his unlimited support, understandings and help throughout my studies. Without his support, I would not have the strength and time to pursue and finish my research. I would also like to thank my son, Enoch Lim for his understandings and patience in allowing me to pursue my dream.

Finally, I would like to thank all the participants in this project for their cooperation and promptness in their response that has allowed the data collection process ran smoothly.

Abstract

Australia is a country with multiculturalism. The collaboration between General Medical Practitioners (GPs) and Chinese Medicine Practitioners (CMPs) is vital for the holistic management and safety for patients who utilise both medical systems. This study aims to identify the differences in perspective and beliefs of GPs towards CMPs and their practices. This research will focus on New South Wales region, especially Sydney as the setting for the research. This research study consists of seven phases.

According to the literature review, there was a gap in knowledge concerning communication between CMPs and GPs. One study reviewed found that young GPs in Hong Kong have a negative bias against CMPs and believed them to be unscientific. There were scant researches that has been undertaken and no in-depth investigation on the perspectives and beliefs held by both the GPs and CMPs undertaken in the Australian environment where Chinese Medicine (CM) is registered under the national law.

Drawing on the literature review, a quantitative study was developed to obtain relevant information. According to the survey's finding, there were several questions where the two groups have different responses. CMPs believed that CM has a role in contributing to good health and wellbeing and had a high safety profile, whilst most GPs were impartial concerning the contribution of CM to good health and wellbeing. Only 57% of GPs believed that CM was fairly safe but 37% were unsure regarding CM's safety profile. Collaboration between the CMPs and GPs was believed to be beneficial by both groups. Nevertheless, CMPs would like GPs to make increasing use of referral and support the patient's request, however only 43% of GPs were willing to make the referral to CMPs.

The qualitative study (focus group) identified five main themes behind this lack in communication. These included 1) lack of knowledge of the legitimacy of CM, 2) lack of awareness of any proven

effectiveness, 3) observation of the negative effects, 4) belief that patients should consult a GP prior to attending a CMP, and 5) reluctance to referral to a CMP due to legal responsibilities and liabilities.

This study had a relatively small sample size. However, it is anticipated that futures studies will extend to a wider community and sample. Regulation of the referral process could also potentially address this communication gap. The ultimate aim for both groups of health care practitioners is to provide patient-centred care and high level of safety.

ABBREVIATIONS

ANOVA	Analysis of Variance
CAM	Complementary and Alternative Medicine
CM	Chinese Medicine
CMPs	Chinese Medicine Practitioners
FGD	Focus Group Discussion
GPs	General Medical Practitioners
NRAS	National Registration and Accreditation Scheme
TCM	Traditional Chinese Medicine
WHO	World Health Organisation

CHAPTER 1: INTRODUCTION

1.0: Study Background

Multiculturalism has been heavily embraced in Australia. Similar in health care, complementary and alternative medicine (CAM) has an increasing trend of use as well. One of the main CAM modalities in Australia has been Chinese Medicine (CM). In 2012, CM practice became a registered health profession nationally in Australia within the National Registration and Accreditation Scheme (NRAS). CM includes various practices such as acupuncture, herbal medicine, cupping, therapeutic massage, qigong, martial arts and tai chi. The World Health Organisation (WHO) has called for stronger collaboration between these two groups of practitioners (Chung V 2011).

The two studies undertaken and reported in this thesis aim to identify the beliefs and perspectives of medical professionals including GPs, towards Chinese Medicine use and CMPs. Due to the sum total of GP participants nationally in Australia, this research will focus on New South Wales as the research setting.

This research study consists of the following seven phases: 1, Comprehensive Literature Review; 2, Quantitative Survey Study; 3, Qualitative Focus Group Interview and Discussion; 4, Data Analysis & Statistics; 5, Results; 6, Discussion of findings; and 7, Conclusion and future research suggestions.

1.1: Background to the Professions and Definitions

Australian medical practitioners include both General Medical Practitioners (GPs) and medical specialists who have received medical training in anatomy, physiology,

pathophysiology and pharmaceutics and their clinical application. According to the latest figures (June 2019) from the Medical Board of Australia there are 118,996 registered medical practitioners across Australia with the state of New South Wales accounting for 36,194 practitioners (see table1).

Table 1: Medical practitioners - percentage by state or territory

Registration types	Registration subtypes	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	No PPP	Total
General		776	13,056	590	8,689	2,773	798	10,015	4,192	824	**41,713**
General (Teaching and Assessing)			9		11	1	3	11	2		**37**
General (Teaching and Assessing) and Specialist			1								**1**
General and Specialist		1,034	17,927	537	10,739	4,304	1,210	14,562	4,914	759	**55,986**
Specialist		191	2,239	131	2,556	634	247	2,195	1,571	520	**10,284**
Provisional		134	1,474	94	1,274	459	110	1,316	681	84	**5,626**
Limited	Area of need	5	54	21	76	26	24	215	69	1	**491**
	Postgraduate training or supervised practice	31	711	17	263	182	84	473	202	49	**2,012**
	Public interest										**0**
	Teaching or research		8		5	2		7	7	2	**31**
Non-practising		28	715	10	289	144	50	528	191	860	**2,815**
Total		**2,199**	**36,194**	**1,400**	**23,902**	**8,525**	**2,526**	**29,322**	**11,829**	**3,099**	**118,996**

When broken down into specialty areas of practice (see table 2), there are 26, 772 medical practitioners registered in the specialty area of General Practice (GPs) with New South Wales having the largest number (n=7,968).

Table 2: General Practice specialisation within Medical practitioners – with comparison to some examples of some other areas of specialist practice

Speciality name	Field of speciality practice	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	No PPP	Total
Addiction medicine		4	73	3	32	15	6	32	16	4	**185**
Anaesthesia		83	1,562	39	1,097	389	117	1,274	576	142	**5,279**
Dermatology		6	205	3	96	47	6	154	47	8	**572**
Emergency medicine	Paediatric emergency medicine		3		5		1	2			**11**
	No sub-specialty declared	47	654	52	597	144	60	588	277	76	**2,495**
Subtotal - Emergency medicine		**47**	**657**	**52**	**602**	**144**	**61**	**590**	**277**	**76**	**2,506**
General practice		**483**	**7,968**	**322**	**5,761**	**2,031**	**668**	**6,468**	**2,820**	**251**	**26,772**
Intensive care medicine	Paediatric intensive care medicine		5		6		1	5	1		**18**
	No sub-specialty declared	26	270	13	210	70	17	224	88	40	**958**
Subtotal - Intensive care medicine		**26**	**275**	**13**	**216**	**70**	**18**	**229**	**89**	**40**	**976**
Medical administration		10	106	4	86	15	7	71	25	12	**336**
Obstetrics and gynaecology	Gynaecological oncology		15	1	9	4	1	12	5	1	**48**
	Maternal-fetal medicine	1	12	1	11	3		9	4	1	**42**
	Obstetrics and gynaecological ultrasound		12		3	2		44	3	1	**65**
	Reproductive endocrinology and infertility		25	1	4	6	1	14	2		**53**
	Urogynaecology	1	9		9	1		7	5		**32**
	No sub-specialty declared	41	527	18	386	138	39	484	172	49	**1,854**
Subtotal - Obstetrics and gynaecology		**43**	**600**	**21**	**422**	**154**	**41**	**570**	**191**	**52**	**2,094**
Occupational and environmental medicine		15	91	1	43	29	5	61	50	9	**304**
Ophthalmology		15	377	7	177	68	24	257	83	20	**1,028**

In contrast, table 3 shows the current number (June, 2019) of Chinese medicine practitioners registered nationally as 4,892. Similar to GPs, the state of New South Wales has the largest number of registered Chinese medicine practitioners (n=2003).

Table 3: Registration type of Chinese medicine practitioners by principal place of practice

Registration types	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	No PPP	Total
General	68	1,917	8	847	177	38	1,238	242	58	**4,593**
General and Non-practising		2		1	1			1		**5**
Limited		2								**2**
Non-practising	1	82	1	40	8	1	73	10	76	**292**
Total	**69**	**2,003**	**9**	**888**	**186**	**39**	**1,311**	**253**	**134**	**4,892**

New South Wales has the largest proportion of practitioners within both groups, therefore, this research on the perceptions and attitudes amongst the two groups are likely applicable to the other States and Territories in Australia.

1.2: Research Rationale

Both General Medical Practice and Chinese herbal medicine utilise as an integral aspect of practice orally ingested medications. One would think that it is important for both the CMP and the GP to communicate and understand what is being prescribed to their shared patient to avoid possible adverse interactions of medicines and herbal products that have the potential to harm the patient.

Currently there is scant research comparing the perspectives of both CMP and GPs towards the practice of Chinese medicine in Australia. Furthermore, this information reported in this thesis is important in providing guidance for future collaborative development and establishing a formal communication/referral system to allow the provision of patient centred care and safe shared care of patients.

1.3: Research Aims

The aim of the current study is to identify the differences in perspectives and beliefs towards Chinese Medicine from General Medical Practitioners (GPs) in Australia. A secondary outcome of the studies would be a better understanding of how to establish a communication/referral system to improve and provide more holistic care to patients.

1.4: Study Hypothesis

The hypothesis is that there is currently a misunderstanding and lack of communication between Chinese Medicine Practitioners (CMPs) and General Medical Practitioners (GPs).

1.5: Research Objectives

The significance of this study is that to explore the gap in communication between Chinese Medicine Practitioners and General Medical Practitioners, specifically in the geographic location of New South Wales, Australia.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Chinese Medicine (CM) is defined as a whole system of medicine that is tied to Chinese cultural beliefs and practices (Bottiger, 2006). This medical system is based on four main principles including the understanding of energy sources within the body; the understanding of balancing principles of yin and yang; the balance of the five elements of nature that make up both living and non-living things; and the recognition of the flow of energy (qi) within the human body (Bottiger, 2006). Chinese medicine is also referred to as an alternative medical system under the broad categorisation of "Complementary and Alternative Medicine".

CM is different from General Medical Practice in that the latter is a science that has evolved by studying the dead (anatomy), progressing onto study in the laboratory and use of animal models (physiology and pathology) and then to human clinical trials to evaluate the clinical efficacy of pharmacological, psychological and physical interventions. This is in contrast to the development of CM, which studied living people and gained knowledge from the observation and direct testing on human patients. Also General Medical Practice is primarily a curative science where efforts are made to cure diseases when it occurs whereas the CM is a preventive medical system designed to prevent ailments from occurring or worsening (Yu and Ren, 2006), plus improving the general wellbeing of the body to fight the disease by itself.

Another notable difference is that General Medical Practice relies on evidence gained after studying the dead whereas CM relies on the subjective and holistic understanding of ongoing problems in living beings (Yu and Ren, 2006). Nevertheless practitioners of both General Medical Practice as well as CM have been increasingly using both forms of medicine in order to find solutions to complex medical problems that individual systems have not been able to find, despite the fact that just over thirty years ago, experts from both fields tended to dismiss the other system of medicine as being inadequate (Ko and Berbrayer 2000).

Whilst there has been an increase in demand for use of Chinese and other traditional forms of medicine in many developed countries, there has been a parallel rise in demand for use of General Medical Practice in countries that have a history of traditional medicine use like China. However, while there has been an increase in demand for integrated medicine, the question is what are the views or perceptions or attitudes about Chinese medicine from both GP and CMP. An understanding of the views of both General Medical Practitioners and CMP will promote respect between the two professions and better integration of the two fields. Due to the broad aspect of this discussion, the following review will appraise current studies published on the views including the perceptions and attitudes of General Medical Practitioner and CMP on the practice of Chinese Medicine.

2.2 Material and Methods

2.2.1 Systematic Literature Search

The method of search and data collection used for this study was a desktop search of journal databases (Elsevier and PubMed) to access peer reviewed articles on the subject of perceptions and attitudes of General Medical Practitioners to Chinese medicine. The study analyses the results of the studies found using the "constant comparative analysis method", which is a qualitative analytical method based on grounded theory of research where one study will be first summarised and then used as the basis for comparison with other studies so that the similarities and differences are highlighted and evaluated (Yamagata-Lynch 2010).

2.2.2 Inclusion Criteria

To identify the relevant articles, the following search key words/phrases were used such as "views of Chinese Traditional Medicine Practitioners on Western Medicine"; "perceptions of Chinese Traditional medicine practitioners towards Western Medicine"; "Perceptions of General Medical Practitioners towards Chinese Traditional Medicine"' "Perceptions/Attitudes of General Medical Practitioners towards Chinese Traditional Medicine practitioners" and other variations of these key words were used. Other terms used in the literature search include family medicine, medical practitioners, western medicine and western doctors.

2.2.3 Exclusion Criteria

The focus on this study is on CM, hence all the other complementary and alternative medicine modalities were excluded.

2.2.4 Result of the literature search

A total of 114 studies were identified through an initial search. After screening for relevant studies, only seven studies were relevant. The studies included both quantitative and qualitative reports, as well as mixed method studies. Three of the seven studies used qualitative methods and focussed on the perceptions/views/attitudes of Traditional Chinese Medicine practitioners towards western medicine and also General Medical Practitioners.

In these studies, General Medical Practice has been variously classified as “Western Medicine” or “Allopathy” or “Evidence based medicine”. Also, in these studies, Chinese medicine has been variously classified as “Chinese Traditional Medicine” or as a category of “Complementary and Alternative Medicine”. Of the remaining studies, three studies were quantitative survey-based reports, and one study was a mixed method study using focus group interviews and a questionnaire-based survey. The three quantitative studies and mixed study focussed on the views, attitudes and perceptions of General Medical Practitioners on CM and CM practitioners.

Figure 1. Flow diagram of studies for inclusion in the literature review

2.2.5 Primary literature review

Studies covering perceptions of CMP on General Medical Practice, and attitudes of GP towards Chinese medicine.

2.2.5.1 Qualitative studies

The two qualitative studies covering perceptions of CMP on western medicine and General Medical Practitioners used the focus group as a method of data collection. In one study, Lam and Sun (2013) sought to determine what CM practitioners in a biomedical setting thought of General Medical Practitioners. The study recruited participants attending a medical education program in Hong Kong and included two sets of participants comprising 13 CM practitioners who were interviewed prior to commencing the course, and another two sets of CM practitioners comprising ten CM practitioners who were interviewed following completion of the program. The study found that the participants were appreciative of the effectiveness of General Medical Practice.

The study found that even though the participants reported that General Medical Practice was effective, they did not feel that Chinese Medicine was ineffective. The study also reported that the majority of the participants believed that both General Medical Practice and CM could complement each other. They also responded that the General Medical Practitioners did not have any greater standing compared to CM practitioners and that they both enjoyed the same status. The study reported that CM practitioners believed that General Medical Practitioners did not sufficiently consult with their patients and did not

make them feel comfortable, thus preventing the development of a relationship. The study further found that in terms of the actual perceptions, attitudes and behaviour of the General Medical Practitioners about CM and CM practitioners, CM practitioners believed that the General Medical Practitioners thought of the CM practitioners as being unscientific. The study found that most of the CM practitioners felt that the General Medical Practitioners thought it was not possible for CM practitioners to create a summary of diagnosis without using the modern diagnostic equipment and that their diagnosis was too general and not specific.

The study also found that the CM practitioners considered that General Medical Practitioners did not respect the CM practitioners, and often told their patients not to see CM practitioners if they wanted to avoid adverse medical outcomes. This was despite believing themselves to be open minded, and who frequently recommended patients to see General Medical Practitioners. They also reported that the study did not find any evidence of difference between the different focus groups either before or after the course. This suggests that the general view of CM practitioners about western medicine and General Medical Practitioners was that while General Medical Practice had strengths and was equivalent to CM, the General Medical Practitioners were not conversational with patients, and that they were prejudiced against CM and CM practitioners, which made them discourage their patients from recommending CM for any treatment.

This is in contrast to the Lam and Sun (2013) study, in the second qualitative study using focus group interviews, and the study by Spence and Li (2013), which examined the perceptions of CM practitioners regarding evidence-based medicine, when practicing in Scotland. The study made the assumption that evidence-based medicine (EBM) was the

basis of General Medical Practice where scientific theories are generated, based on evidence. Unlike the Lam and Sun (2013) study, this study used a smaller sample size of only 12 participants. Also, unlike the previous study, this study did not focus on the views of CM practitioners concerning the behaviour of practitioners of General Medical Practice but on the use of EBM and on the role of the practitioner in the use of evidence.

However, like Lam and Sun (2013) the study aimed to explore the perceptions of CM practitioners practicing in a Western cultural context. The study found that most participants felt that evidence-based medicine was a part of General Medical Practice but did not understand its significance completely. Also the study found that the practitioners of CM felt that whilst the process of finding the root cause of the disease was similar to the process of finding evidence in EBM, they did not seem to appreciate the importance of critical appraisal in evidence seeking in the case of EBM, which was different from CM.

The study also reported that the CM practitioners also misunderstood the role of General Medical Practitioners in terms of evidence appraisal and evaluation where they thought the role was similar to that of CM practitioners where evidence was received by them passively over time as evidence was collected and aggregated instead of being received actively and evaluated actively. In addition, the study found that the participants (CM practitioners) felt that unlike the General Medical Practitioners they felt they did not have the time to practice evidence-based medicine. The conclusion from this study is that CM practitioners misunderstand the role of General Medical Practitioners in terms of their role in critiquing evidence, even while they thought that the gathering and use of evidence in CM was similar to modern biomedicine.

Compared to the above two studies, Ben-Arye et al (2008) aimed to examine the views of traditional Chinese Medicine (labelled as Complementary and Alternative Medicine) on the role of General Medical Practitioners by way of a focus group interview. Their study found that the CM practitioners held the view that the General Medical Practitioners had an important role in recommending CM to patients in order to enhance their overall health outcome. The study reported that in addition to the expectation of being recommended, CM practitioners expected that General Medical Practitioners should consult them to formulate integrated treatment plans. While the above two studies indicate what CM practitioners thought of General Medical Practice, the role of General Medical Practitioners in using evidence, and their attitude towards CM, this study highlights what CM practitioners expect from General Medical Practitioners when practicing integrated medicine.

The three studies above are comparable because they are all qualitative studies and have used similar methodology. The studies indicate that CMP believe that CM is equivalent to General Medical Practice in terms of status; that they had a complementary role and that there was a need for General Medical Practitioners to consult and collaborate with CMP. However, it is clear that CMP believe that General Medical Practitioners are prejudiced against CMP and are unwilling to consult with them or to refer patients to them, even though they are willing to consult General Medical Practitioners, and also that General Medical Practitioners are not conversational with patients. However, it is clear that CMP are somewhat ignorant about General Medical Practice and the role of General Medical Practitioners in the collection and critical evaluation of evidence. However the results from these studies need to be cautiously interpreted in that they were

qualitative studies using small sample sizes, making the findings less generalizable to a larger population.

In terms of studies on the attitudes and perceptions of General Medical Practitioners on Chinese medicine, from the four studies identified, three studies used quantitative techniques, whilst the remaining study used a mixed method technique. Therefore in terms of generalizability of any hypothesis resulting from the results, the fact that there is a combination of both qualitative and quantitative methods suggests that the generalizability will be higher.

2.2.5.2 Quantitative Studies

In one study, Griffiths et al. (2012) surveyed 3320 General Medical Practitioners in Hong Kong on their attitudes towards Chinese medicine and also CM practitioners. The study used a cross sectional survey design and the random sampling method to draw a sample from the list of General Medical Practitioners on the Hong Kong Medical Council. The study reported a response rate of 34%. The study found that the majority of General Medical Practitioners believed that Chinese medicine practitioners were unscientific or not competent to refer patients for integrated treatment programs or collaborate in joint consultation efforts. The study further suggested that younger General Medical Practitioners were more negative towards CM and CMP. However the study did find that when General Medical Practitioners had been educated in CM, they were more willing to refer patients to CM practices and collaborate with CMP. These finding agree with the Lam and Sun (2013) study concerning CMP's view of General Medical Practitioners in Hong Kong, where General Medical Practitioners reported they were prejudiced and

unwilling to refer patients to CMP. However, negative views held by General Medical Practitioners towards CMP may be due to ignorance of younger inexperienced doctors rather than informed opinion. This suggests that there is an agreement between the views of the CMP and General Medical Practitioners in Hong Kong. However the study is limited by its low response rate and its findings are therefore not highly generalizable (Babbie, 2012).

The above findings support another similar survey study conducted in Hong Kong by Chung et al. (2011). The study also aimed to determine the attitudes of General Medical Practitioners in Hong Kong towards CM and referrals to CMP. Like the Griffith et al (2012) study, Chung et al (2012) also found that General Medical Practitioners were unwilling to refer patients to CMP even when they themselves utilised CM and experienced positive benefits. However unlike the Griffiths et al (2012) study, this study found that the lack of formal referral networks, lack of laws regulating the referral of patients to CMPs, and dominance of British oriented General Medical Practices in Hong Kong prevented the physicians from referring patients to CMP rather than age related factors.

The above two studies suggest that younger HK General Medical Practitioners have a poor view of CMP because of the perception that they were unscientific, but older General Medical Practitioners had a more positive view of CM doctors, although they too were reluctant to refer patients to them because of lack of regulation with regard to such referrals. These results however need to be cautiously interpreted due to low response rates of 34%.

Two other studies (Hehir and Williams, 2012) however found slightly different results in their survey of General Medical Practitioners in Scotland working for the NHS. Hehir and Williams (2012) surveyed over 400 practitioners including physiotherapists and GPs and asked them about the usefulness of CM; about whether CM should be integrated into conventional medical treatments, and lastly about their willingness to recommend patients to visit CMP. The study had a response rate of 51%, which is higher than the 34% experienced by Chung et al (2011) and Griffiths et al. (2012) suggesting that the sample is more representative than the other two studies. The main finding was also different from the two studies in that the majority of the medical practitioners thought that CM was useful, and while the study found that the physiotherapists were unwilling to collaborate with the CMP to jointly solve medical problems and expected them to supplement western medicine as support medical teams. On the other hand the majority of general physicians were more willing to collaborate with the CMP and work towards integrated and joint solutions to medical problems. The study found that their positive attitude towards collaboration was irrespective of their prior education in CM. This suggests that unlike General Medical Practitioners in a "Western" setting in Hong Kong, General Medical Practitioners in a "Western" country like Scotland were more supportive towards CMP.

2.2.5.3 Mixed Studies

In contrast, another study found different results when evaluating the views of General Medical Practitioners in Mainland China (Harmsworth and Lewith, 2001). Harmsworth and Lewith (2001) conducted a questionnaire-based survey on 240 General Medical Practitioners in a major Chinese province and then completed five in-depth interviews

and four focus group interviews. The study sought to identify the attitudes of General Medical Practitioners towards CM. The study reported a high response rate of over 70% for the survey unlike the two Hong Kong studies (Chung et al 2011 and Griffiths et al. 2012). The study found that the majority (70%) of General Medical Practitioners used CM in their medical treatments of patients (especially acupuncture), unlike the Griffiths et al. (2012) and Chung et al. (2012) study. However, like the Griffiths et al. (2012) and Chung et al. (2012) study, the majority of the General Medical Practitioners who used CM or referred patients to CM practitioners along with Western medicine, were aged 40 to 60. An additional finding was that they believed that CM produces longer lasting relief than western medicine. The study also found in the open interviews that most General Medical Practitioners believed that CM should be used for minor diseases and ailments but not major diseases. However the study found that most General Medical Practitioners only referred to CMPs when there was no treatment available for the particular ailment in General Medical Practice or there was no General Medical Practitioners with CM knowledge. It appears that there seemed to be a greater openness to refer to CMPs when western medicine was thought to be less useful for a particular ailment.

2.2.6 Literature review summary

The above studies demonstrate that CMPs in Hong Kong reported that the medical practitioners, particularly young General Medical Practitioners had a negative bias towards CMPs and believed them to be unscientific. This view is consistent with quantitative studies on the views of medical practitioners in Hong Kong, where younger medical practitioners believed CMPs to be unscientific. However the fact that older medical practitioners in Hong Kong, Mainland China and Scotland had more positive

views of CMP means that the views held by younger medical practitioners may be due largely to ignorance about CM.

It is also clear that even though CMP believed that CM was equivalent to General Medical Practice and that they should consult each other to solve medical problems, they believed General Medical Practitioners did not converse long enough with patients which was an important part of treatment, and even if they were ignorant about the role of General Medical Practitioners in evaluating evidence in evidence based medicine. However it is also clear that even whilst more experienced medical practitioners had a positive view of CMPs and welcomed the idea of referring patients to CMPs even expressing willingness to collaborate with them they were either willing to refer to CM practitioners only for minor ailments (in Mainland China), or were limited by lack of regulations regarding referrals to CMP (Hong Kong). The studies show significant differences in methods used for the study and findings obtained in different places such as Hong Kong, Mainland China and Scotland and therefore it is difficult to generalise the findings. The studies also showed low response rates in the two quantitative studies in Hong Kong, which makes findings in Hong Kong less generalizable and imply use of different methods of data collection in quantitative studies.

Another study has recently been found which was conducted by Wahner-Roedler (2006) in the USA, and the findings are shown in table 4. Their focus from the General Medical Practitioners' perspective and found that only 30% has some knowledge on complementary and alternative medicine (CAM), whilst 82% believe that they should have knowledge about the most common CAM therapies. Fifty percent of the General Medical Practitioners felt that their attitude toward CAM therapies was affected by the availability, or lack of, randomised controlled clinical trials.

Table 4. Physician's attitude on complementary and alternative medicine therapies (Wahner-Roedler DL et al, 2006)

Table 4. Physicians' extent of agreement with statements regarding attitude

Statement	Response (%)			
	Agree	Neither agree nor disagree	Disagree	No response
Physician knowledge of CAM practices leads to better patient outcome	30	41	28	1
Physician's spiritual beliefs and practices important for patient healing	52	26	22	0
Patient's spiritual beliefs and practices important for patient healing	87	7	4	2
Physicians should have knowledge about the most common CAM therapies	82	13	5	0
CAM therapy has impact on symptoms, conditions and/or diseases	50	25	24	1
Some CAM therapies hold promise for treatment of symptoms, conditions and/or diseases	67	19	13	1
Counseling on nutrition toward prevention of chronic disease should be a major role of physicians	85	9	6	0

CAM, complementary and alternative medicine.

Table 5. Physicians' ratings of the impact of various factors on their attitude toward CAM therapies

Impact factors	Rating of impact (%)					
	None	Minimal	Moderate	High	Definite	No response
Personal experience; positive results when using therapy on myself	11	29	32	18	9	1
Recommendations by family and friends who have tried the therapy	22	48	21	7	1	1
Recommendations by colleagues who have used the therapy on themselves	14	36	33	14	2	1
Recommendation of a medical specialist or consultant to whom you have referred a patient	11	20	43	19	5	2
Case reports in CAM journals	38	43	16	2	0	1
Case reports in standard medical journals	17	32	33	12	3	3
Retrospective case–control studies reported in standard medical journals	8	28	40	17	5	2
Prospective randomized controlled clinical trials	1	1	9	38	50	1
Evidence demonstrating the treatment's physiologic mechanism	3	11	32	31	22	1
Your clinical experience in your patient population	5	16	48	21	9	1

CAM, complementary and alternative medicine.

2.3 Development of the survey instruments

Based on the literature review, a list of questions was developed for the two surveys for the two target groups CMP and GPs respectively, with the aim to obtain the most relevant information. Another consideration for the survey design was the time for respondents to complete the survey so it wasn't onerous for busy practitioners. It was decided that five minutes was the most appropriate time to facilitate completion rate. The two surveys are found in the appendix.

2.4 Summary

It appears there is minimal research that has been conducted in Australia concerning the attitudes of General Medical Practitioners towards Chinese Medicine Practitioners. After the national registration in July 2012, it would be beneficial to explore the attitudinal difference between GP and CMP and to promote collaboration and possibly initiate a referral system for the provision of care to patients.

CHAPTER 3: STUDY DESIGN - SURVEY

3.1 Aim

To identify the attitudes and beliefs of General Medical Practitioners (GP) and Chinese Medicine Practitioners (CMP) towards traditional Chinese medicine.

3.2 Methods

The survey was developed based upon the issues identified in the literature review. The survey was distributed in several meetings and collected at the end of the meeting in a sealed box to increase the response rate. In addition, the survey was administered online (Survey monkey) and participants were invited to access the survey via their mobile or email anytime at their convenience.

The survey was completed anonymously, however, the participants were also invited for a potential interview as the second part of the research. If the survey respondents were interested, they were asked to leave contact details for the researcher to contact them at a later date. All the information was stored in a secure place, and at the end of the research, the information will be disposed according to the legal and institutional ethics requirements including shredding of all the paperwork. The survey information will be tabulated into excel files and secured with encrypted and password protected function.

The participants were coded in order to maintain the privacy and confidentiality of the contact details and interview material. In addition, the personal details were separated from the data for analysis, and files encrypted.

3.2.1 Inclusion criteria

The target groups were:

- registered medical practitioners in the state of New South Wales (NSW), Australia who were also specialist general practitioners in Australian Medicare system;
- registered Chinese medicine practitioners also resided in NSW Australia.

3.2.2 Exclusion criteria

Any medical practitioner or Chinese medicine practitioner who were not able to communicate in English.

3.3 Recruitment procedures

The sample size required was 129, with a margin of error 5%, confidence level of 90%, population size of 500 and response distribution 80%. Hence, 65 participants were required for each group. The program used for analysis NVIVO for the qualitative data and SPSS/STRAT for the quantitative data.

3.4 Ethics Approval

Prior to commencing the study, ethics approval was sought and obtained from the UTS Human Research Ethics Committee (Ref No. ETH16-0655) and subjects signed an informed consent form for the interviews.

CHAPTER 4: SURVEY RESULTS

4.1 Introduction

This section of the study contains the presentation of the findings from the quantitative analyses of data. The purpose of the current study was to identify the differences in beliefs and attitudes towards Chinese medicine from General Medical Practitioners in Australia. A secondary outcome of the study was to pose a better understanding of how to establish a communication system to improve and provide holistic care to patients. A survey that gathered the opinions of 139 (72 Chinese Medicine Practitioners and 67 General Practitioners) respondents was conducted online of Chinese Medicine practitioners and General Medical Practitioners. This chapter contains the discussion of the demographics from all data sources, data analysis applied, presentation of findings, and a summary of the results.

4.2 Demographics

A total of 72 Chinese Medicine Practitioners were surveyed for the study. Of the 72 respondents, 39 respondents were male, 32 participants were female, and one failed to provide his/her gender. The majority of the respondents were aged 46 to 55 years old (27 of the 72), 18 were aged 55 years old and above, 15 respondents were aged 36 to 45 years old, 10 participants were aged 26 to 35 years old, and two respondents were aged 18 to 25 years old. The surveyed respondents mostly were educated at a College or University (58 of 72). In addition, nine respondents inherited the practice from their family and another five respondents received an apprenticeship from other Chinese Medicine practitioners. Of the 72 surveyed Chinese Medicine Practitioners, 27 have been practicing CM for more than 21 years, 15 respondents for 16 to 20 years, 12 respondents for 5 to 10 years, and three respondents for less than 4 years. Finally, the majority of the respondents (14 of the 72) had been living in Australia for 11 to 15 years, six respondents had been in Australia since birth, six respondents

had been in the country for less than 5 years, another six for 6 to 10 years, and three respondents for 16 to 20 years. It must be noted that there were a number of participants who skipped or failed to answer some of the categories discussed thus not reaching the total number of 72 respondents. Table 5 contains the breakdown of the demographics of the 72 surveyed Chinese Medicine Practitioners.

Table 5. Demographics of the 72 Chinese Medicine Practitioners

Gender of Respondents	Number	Percentage
Male	39	55%
Female	32	45%
Age of Respondents	Number of Respondents	Percentage
18-25	2	3%
26-35	10	14%
36-45	15	21%
46-55	27	38%
55+	18	25%
Where the Practitioner learned the TCM	Number of Responses	Percentage
Family inherited	9	13%
Apprenticeship to other Chinese medicine practitioners	5	7%
College / University	58	81%
Years in Practice	Number of Responses	Percentage
< 4 years	15	21%
5-10 years	12	17%
11-15 years	3	4%
16-20 years	15	21%
> 21 years	27	38%
Years of Stay in Australia	Number of Responses	Percentage
Born here	6	8%
< 5 years	6	8%
6-10 years	6	8%
11-15 years	14	19%
16-20 years	3	4%

A total of 67 General Medical Practitioners were surveyed to explore the differences between Chinese Medicine and General Medical Practitioners in Australia. Of the 67 respondents, 36 were female and 31 were male. The majority (39 of 67) of the respondents were aged 36 to 45 years old, 14 respondents were aged 26 to 35 years old, eight respondents were 46 to 55 years old, and another six respondents were 55 years old or older. Fifty of the 67 respondents earned their degree within the State of New

South Wales, Australia. Furthermore, 13 received their degree from overseas; and eight participants received their degree from an interstate Australian university. The majority of the respondents (27 of 62) have been in practice for 11 to 15 years, 12 respondents for 16 to 20 years, 11 respondents or 5 to 10 years, eight respondents for more than 21 years, and another eight respondents have been in the profession for less than 4 years. Finally, 11 of the 67 participants have been in Australia for 11 to 15 years, another nine participants have been living in the country for 16 to 20 years, eight participants were native residents, four participants have been in the country for 6 to 10 years, and one participant has been in the country for less than 5 years. Again, it must be noted that there were a number of participants who skipped or failed to answer some of the categories discussed thus not reaching the total number of 67 respondents. Table 6 contains the breakdown of the demographics of the 67 surveyed General Medical Practitioners.

Table 6. Demographics of the 67 General Medical Practitioners

Gender of Respondents	Number of Respondents	Percentage
Male	31	46%
Female	36	54%
Age of Respondents	Number of Respondents	Percentage
18-25	0	0%
26-35	14	21%
36-45	39	58%
46-55	8	12%
55+	6	9%
Where the Degree was earned	Number of Responses	Percentage
NSW	50	76%
Interstate	8	12%
Overseas	13	20%
Years in Practice	Number of Responses	Percentage
< 4 years	8	12%
5-10 years	11	17%
11-15 years	27	41%
16-20 years	12	18%
> 21 years	8	12%
Years of stay in Australia	Number of Responses	Percentage
I was born here	8	12%
< 5 years	1	1%
6-10 years	4	6%
11-15 years	11	16%
16-20 years	9	13%

4.3 Data Analysis

For the quantitative component, surveys were conducted online to gather the perceptions of the Chinese Medicine Practitioners and the General Medical Practitioners with regard to the CM use and the overall acceptance of CM treatments. The quantitative and statistical results will also assist in understanding the perceptions of the two sets of practitioners with regard to the CM use and treatment and the production of a communication / referral system to improve and provide holistic care of patients.

CHAPTER 5: SURVEY RESULTS SUMMARY

5.1 Chinese Medicine Practitioners

Under the quantitative component of the study, the questions asked in the survey and the results of the respondents' answers would be used to compare and analyse with the themes uncovered from the qualitative data of the study. Each relevant question and the responses of the respondents will be presented and reported below. The first group will be the Chinese Medicine Practitioners' data followed by the Medicine Practitioners' data.

The first question in the survey was the list of the CM treatments that the Chinese Medicine Practitioners practiced during the past year. From the survey, all 72 respondents were able to provide their individual responses accordingly. The most frequently practiced treatment was acupuncture (100%), followed by herbal medicines and cupping (78% respectively). The respondents also reported the use of moxibustion (58%) and massage therapy (54%). One respondent shared that he/she also practiced another type of treatment but did not concretely specify the type of treatment. Figure 2 and Table 7 contain the display of the results from the Chinese Medicine Practitioners' survey answers.

Figure 2. Chinese Medicine Practitioners: TCM treatments practiced during the past year

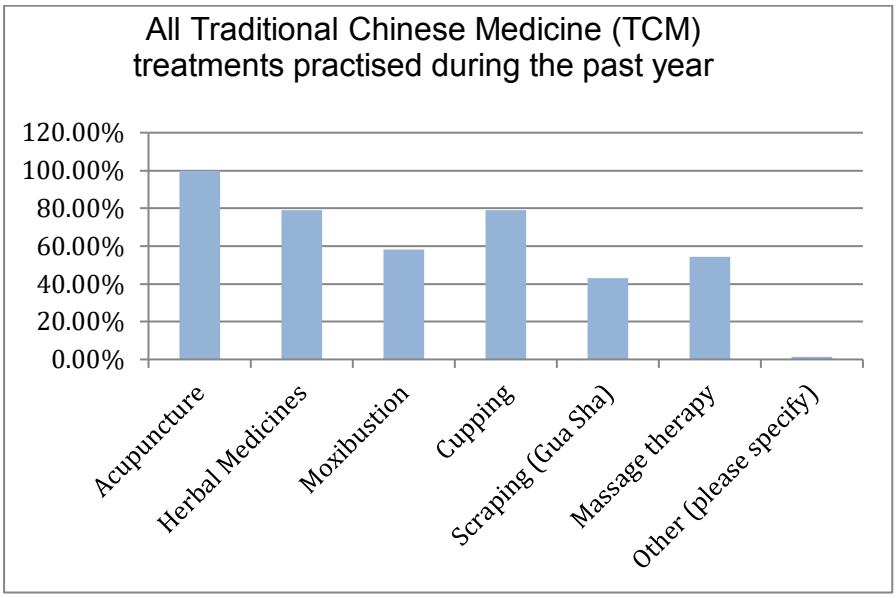

Table 7. Chinese Medicine Practitioners: CM treatments practiced during the past year

Answer Choices	Responses	
Acupuncture	100%	72
Herbal Medicines	79%	57
Moxibustion	58%	42
Cupping	79%	57
Scraping (Gua Sha)	43%	31
Massage therapy	54%	39
Other (please specify)	1%	1
	Answered	72
	Skipped	0

When asked about the reasons why their patients consult with them, the Chinese Medicine Practitioners mainly reported that they were recommended by a friend or relative of their patients (100%). Meanwhile, 58% of the respondents had patients who had already tried the treatment previously and had a personal experience in CM usage. Another 42% of the respondents were recommended by other medical practitioners while 39% were consulted by the patients and were discovered online or through the Internet. Seven percent of the respondents were seen or consulted for other unspecified reasons. Figure 3 and Table 8 contain the results from the Chinese Medicine Practitioners' survey answers on question number two.

Figure 3. Chinese Medicine Practitioners: Reasons why patients see the practitioners

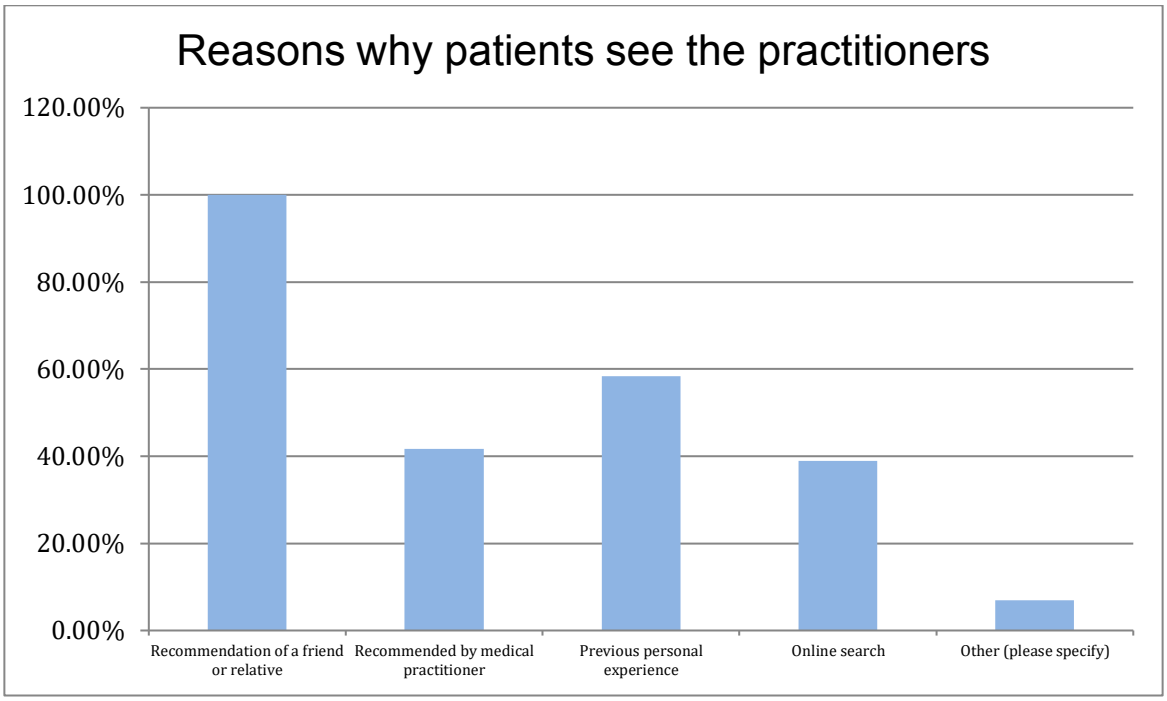

Table 8. Chinese Medicine Practitioners: Reasons why patients see the practitioners

Answer Choices	Responses	
Recommendation of a friend or relative	100%	72
Recommended by medical practitioner	42%	30
Previous personal experience	58%	42
Online search	39%	28
Other (please specify)	7%	5
	Answered	72
	Skipped	0

The third question asked about the extent to which the CM treatments contribute to maintaining good health and well-being. For the majority of the respondents (52%), the treatments were very helpful to the overall well-being of their patients. Meanwhile, 47% found the treatments to be extremely helpful while only 1% believed the treatment to be somewhat helpful. Figure 4 and Table 9 shows the results from the Chinese Medicine Practitioners' survey answers for question number three.

Figure 4. Chinese Medicine Practitioners: Extent to which the CM treatments contribute to maintaining good health and well-being

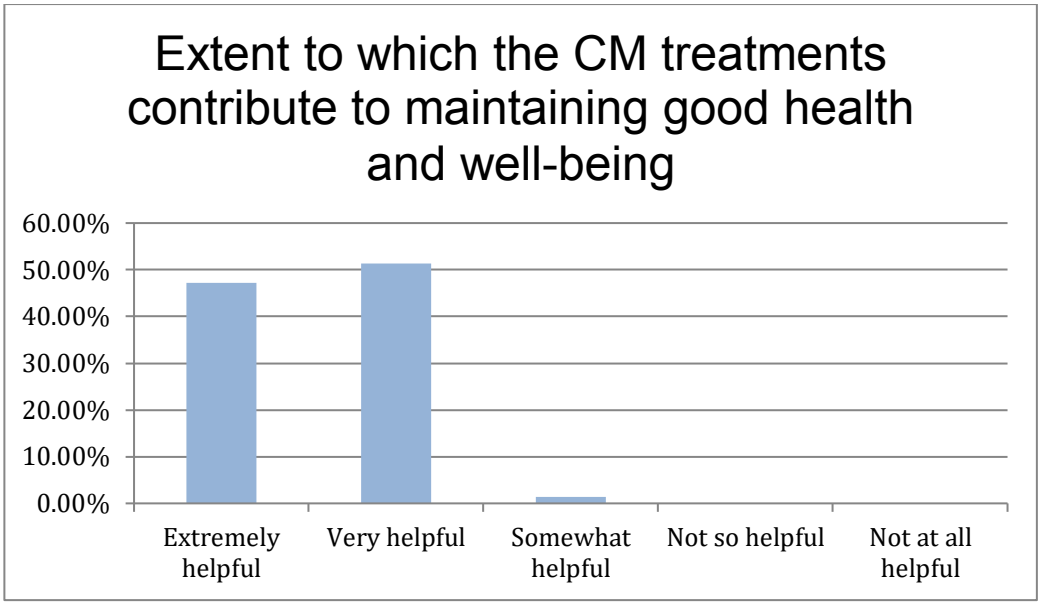

Table 9. Chinese Medicine Practitioners: Extent to which the CM treatments contribute to maintaining good health and well-being

Answer Choices	Responses	
Extremely helpful	47%	34
Very helpful	52%	37
Somewhat helpful	1%	1
Not so helpful	0%	0
Not at all helpful	0%	0
	Answered	72
	Skipped	0

The fourth survey question asked the Chinese Medicine Practitioners about the extent to which the TCM treatments are believed to be safe. The majority of the participants believed that the treatments overall are very safe (49%) and fairly safe (47%). One percent of the surveyed respondents found the treatments to be maybe unsafe. Figure 5 and Table 10 contain the presentation of the results from the Chinese Medicine Practitioners' survey answers on question number four.

Figure 5. Chinese Medicine Practitioners: Extent to which the CM treatments are believed to be safe

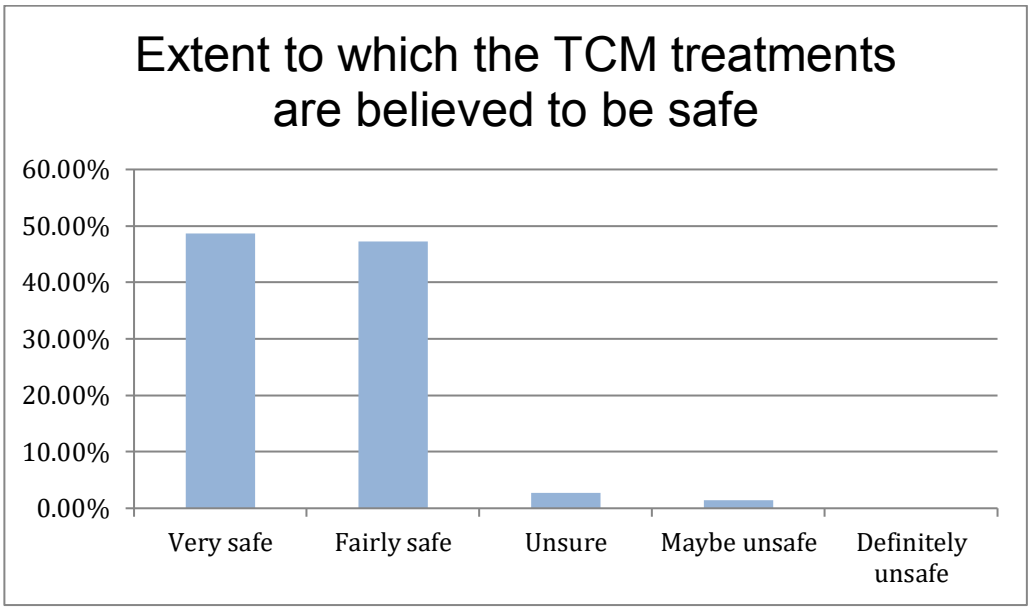

Table 10. Chinese Medicine Practitioners: Extent to which the CM treatments are believed to be safe

Answer Choices	Responses	
Very safe	49%	35
Fairly safe	47%	34
Unsure	3%	2
Maybe unsafe	1%	1
Definitely unsafe	0%	0
	Answered	72
	Skipped	0

The fifth survey question asked about the perceptions of the Chinese Medicine Practitioners on collaboration between CM providers with General Medical Practitioners. From the survey responses, the Chinese Medicine Practitioners believed that collaboration could improve patient care. In comparison, only 6% of the respondents believed that collaboration could make no difference to patient care. Figure 6 and Table 11 contain the results from the Chinese Medicine Practitioners' survey answers on question number five.

Figure 6. Chinese Medicine Practitioners: Perceptions on the result/s of the collaboration between CM providers with medical practitioners

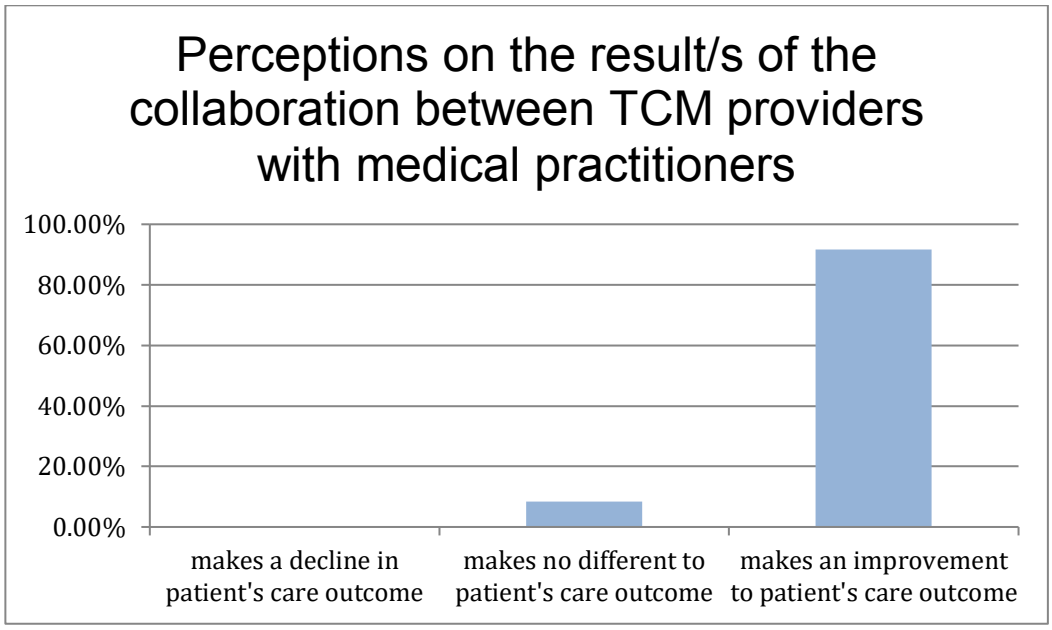

Table 11. Chinese Medicine Practitioners: Perceptions on the result/s of the collaboration between CM providers with medical practitioners

Answer Choices	Responses	
Makes a decline in patient's care outcome	0%	0
Makes no difference to patient's care outcome	8%	6
Makes an improvement to patient's care outcome	92%	66
	Answered	72
	Skipped	0

When asked about the Chinese Medicine Practitioners' expectations from the patient's General Medical Practitioners regarding CM usage, 67% of the respondents stated that the referral to CM based on efficacy and safety aspects is expected. Meanwhile, 54% indicated that the General Medical Practitioners can listen to patients regarding CM; and another 46% shared their desire for their patients' General Medical Practitioners to have a piece of updated knowledge about CM. Thirty three percent of respondents also expected the General Medical Practitioners to ask patients about CM or initiate discussion; 26% wanted the General Medical Practitioners' openness to the feasibility of offering CM treatment based on appropriate training. Nineteen percent of the respondents had no

expectations from the General Medical Practitioners. Figure 7 and Table 12 contain the display of the results from the Chinese Medicine Practitioners' survey answers on question number six.

Figure 7. Chinese Medicine Practitioners: Expectations from the patient's family physician regarding TCM usage

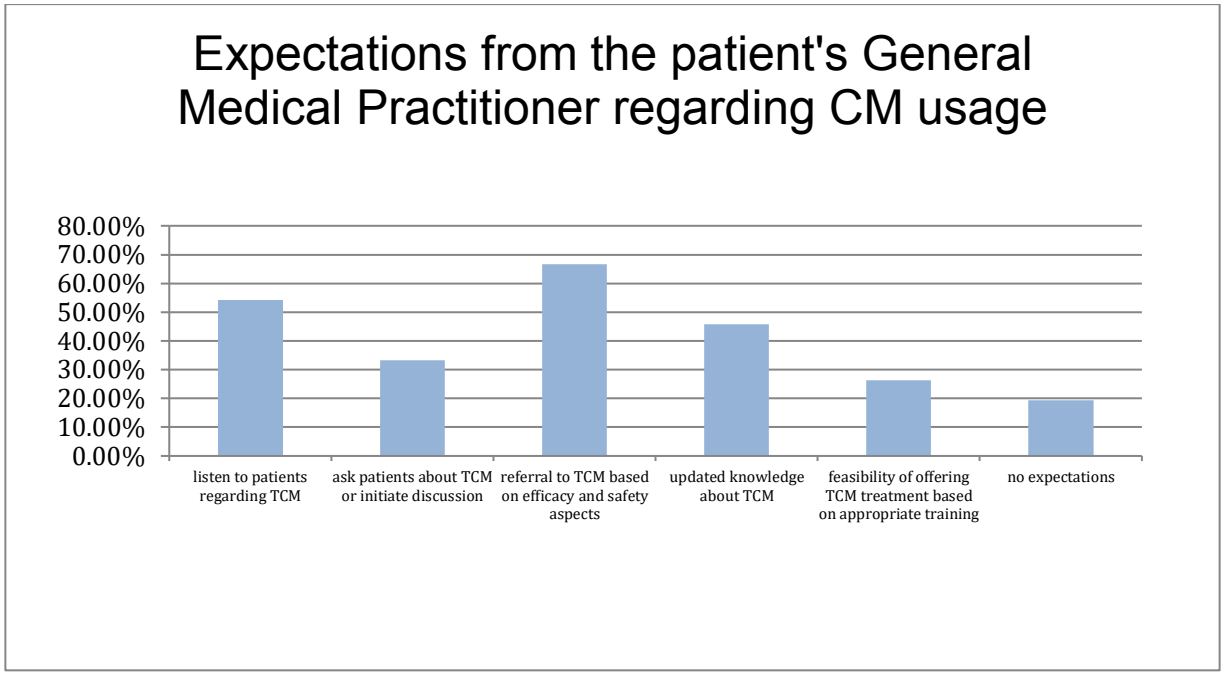

Table 12. Chinese Medicine Practitioners: Expectations from the patient's General Medical Practitioners regarding CM usage

Answer Choices	Responses	
Listen to patients regarding CM	54%	39
Ask patients about CM or initiate discussion	33%	24
Referral to CM based on efficacy and safety aspects	67%	48
Updated knowledge about CM	46%	33
Feasibility of offering CM treatment based on appropriate training	26%	19
No expectations	19%	14
	Answered	72
	Skipped	0

The seventh survey question sought the Chinese Medicine Practitioners' preferred setting for the CM to be provided to their patients. For the majority of the respondents (92%), they believed that it would

be most ideal if the treatments can be done within a medical centre, alongside with GP. Meanwhile, 83% of the respondents also wanted the treatments to be performed in private care; 81% also wanted to have the treatments in a hospital clinic; while 81% preferred a specialist clinic. Finally, 17% also believed that the treatments could be administered in a health food store. Figure 8 and Table 13 present the results from the Chinese Medicine Practitioners' seventh survey question.

Figure 8. Chinese Medicine Practitioners: Preferred setting for the CM to be provided to patients

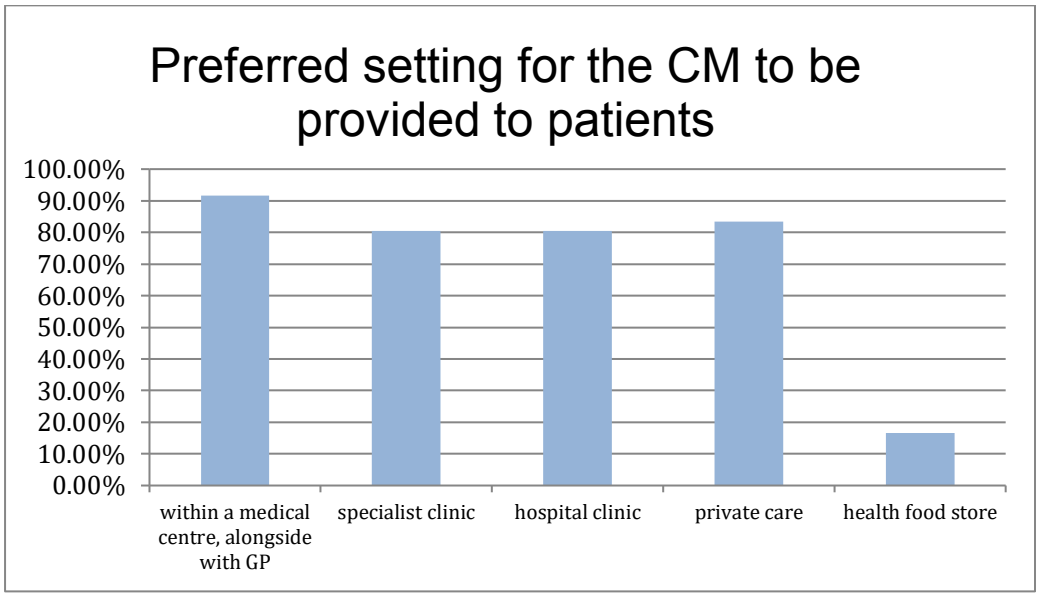

Table 13. Chinese Medicine Practitioners: Preferred setting for the CM to be provided to patients

Answer Choices	Responses	
Within a medical centre, alongside with GP	92%	66
Specialist clinic	81%	58
Hospital clinic	81%	58
Private care	83%	60
Health food store	17%	12
	Answered	72
	Skipped	0

For the eighth survey question, respondents were asked who should refer the CMPs' patients to receive treatment. For the majority of the respondents (99%) believed that it would be best to receive referrals from the General Medical Practitioners. Meanwhile, another 86% also agreed that patients can self-

referral when needed. Half of the respondents (50%) answered that the referrals can be made by a pharmacist/s and 46% believed that the referrals can be undertaken by a nurse/s. Only 1% answered others but did not specify who he/she preferred. Figure 9 and Table 14 contain the breakdown of the results from the eighth survey question.

Figure 9. Chinese Medicine Practitioners: Who should refer patient/s to receive these therapies

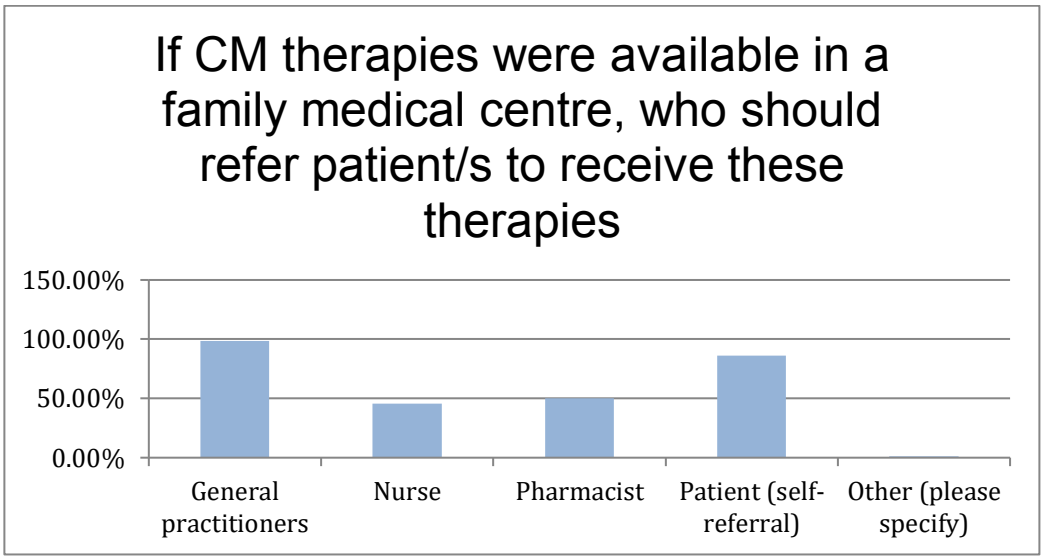

Table 14. Chinese Medicine Practitioners: Who should refer patient/s to receive these therapies

Answer Choices	Responses	
General practitioners	99%	71
Nurse	46%	33
Pharmacist	50%	36
Patient (self-referral)	86%	62
Other (please specify)	1%	1
	Answered	72
	Skipped	0

The final research question asked "Who should provide CM treatments in a family medical centre?" From the survey responses, all of the 72 respondents (100%) believed that a CMP (registered acupuncturist, herbalist, etc.) should administer the treatments. Meanwhile, 38% of the respondents also believed that the treatments can be administered by a CMP in collaboration with a General

Medical Practitioner. Another 21% of the respondents added that a General Medical Practitioner trained to provide CM can perform the treatment/s. Finally, 7% of the sample suggested the conventional healthcare providers, e.g. nurses, pharmacists, under a doctor's supervision can also be entrusted to administer the CM treatments. Figure 10 and Table 15 contain the presentation of the results from the Chinese Medicine Practitioners' survey answers on the eighth survey question.

Figure 10. Chinese Medicine Practitioners: Who should provide CM treatments in a family medical centre

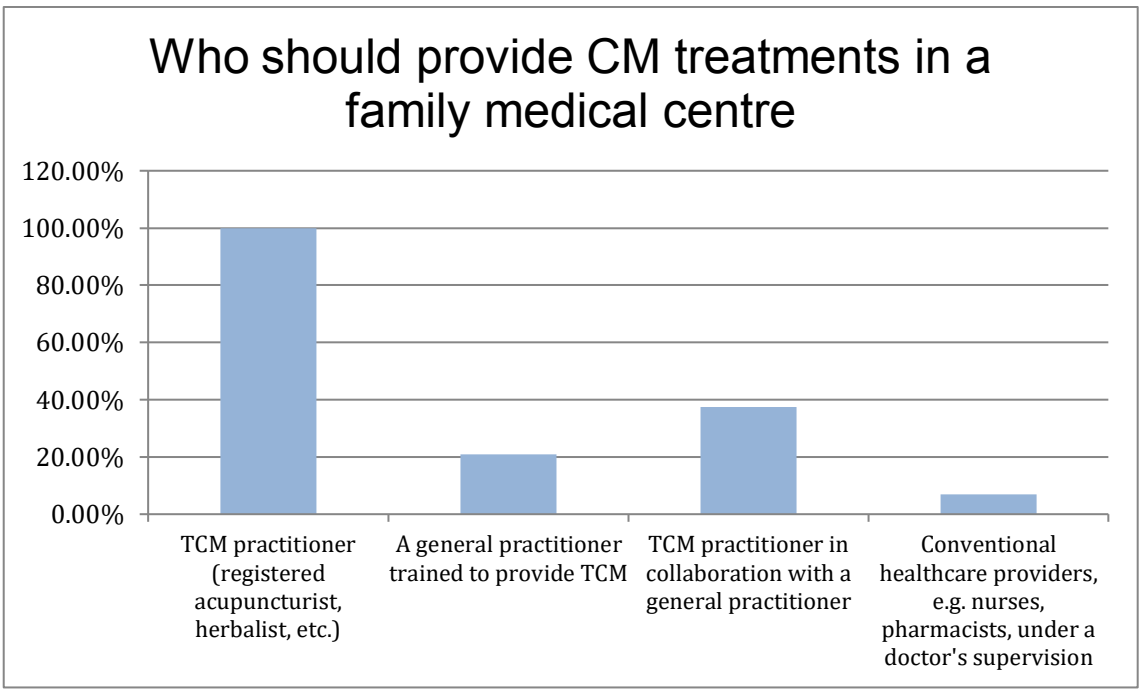

Table 15. Chinese Medicine Practitioners: Who should provide CM treatments in a family medical centre

Answer Choices	Responses	
CM practitioner (registered acupuncturist, herbalist, etc.)	100%	72
A general practitioner trained to provide CM	21%	15
CM practitioner in collaboration with a general practitioner	38%	27
Conventional healthcare providers, e.g. nurses, pharmacists, under a doctor's supervision	7%	5
	Answered	72
	Skipped	0

5.2 General Medical Practitioners

The second surveyed group for the quantitative component of the study were the General Medical Practitioners (GP). The group was composed of 67 GPs wherein 58% of the sample expressed their interest in administering CM treatments in the coming year and the other 42% were not keen on doing so. These GP respondents also answered that most of the time, the discussion of CM is started or initiated by their patients (52%), while 42% had not discussed CM at all with their patients, and only 11% of the respondents initiated the discussion with their patients.

For the first survey question, the General Medical Practitioners identified the CM treatments they practiced during the past year. For 53% of the respondents, acupuncture was the most commonly practiced treatment followed by massage therapy (36%). Meanwhile, 27% of the respondents indicated that they practiced other kinds of CM but did not specify the actual type/s of treatment; another 20% have used and recommended herbal medicines to their patients. Finally, the following treatments received very few responses such as moxibustion (5%), cupping (5%), and scraping (Gua Sha, 3%). Figure 11 and Table 16 contain the display of the results from the GPs' survey answers for the eighth survey question.

Figure 11. General Practitioners: CM treatments practiced during the past year

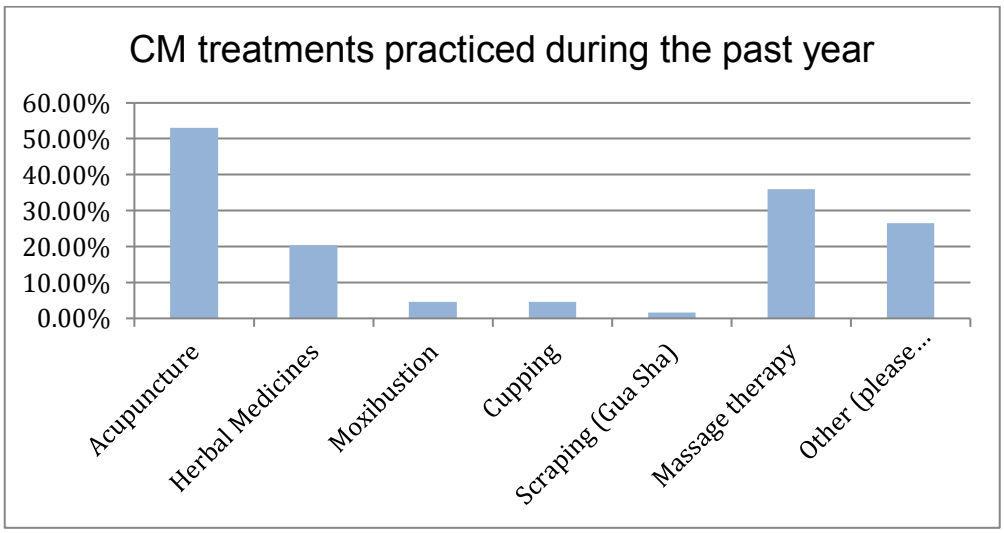

Table 16. Western Medicine Practitioners: CM treatments practiced during the past year

Answer Choices	Responses	
Acupuncture	53%	34
Herbal Medicines	20%	13
Moxibustion	5%	3
Cupping	5%	3
Scraping (Gua Sha)	3%	1
Massage therapy	36%	23
Other (please specify)	27%	17
	Answered	64
	Skipped	3

The second question sought the reasons why GPs recommended CM to their patients. For the majority of the participants, 49% of the practitioners recommended the use of the CM because of a request from patients. Another 27% suggested the use of CM as per the request of the patients with the addition of a recommendation from a friend or relative. Meanwhile, another 27% recommended CM based on a previous personal experience and 21% of the respondents answered others but failed to specify why. Six percent of the respondents shared that CM was recommended based on an online search. Furthermore, respondents of the study identified the internet and their own friends/colleagues as their main sources for CM information. They also shared how they gather some information from their patient's own search. Figure 12 and Table 17 contain the results from the General Medical Practitioners' survey answers for the second survey question.

Figure 12. General Medical Practitioners: Reasons why CM was recommended

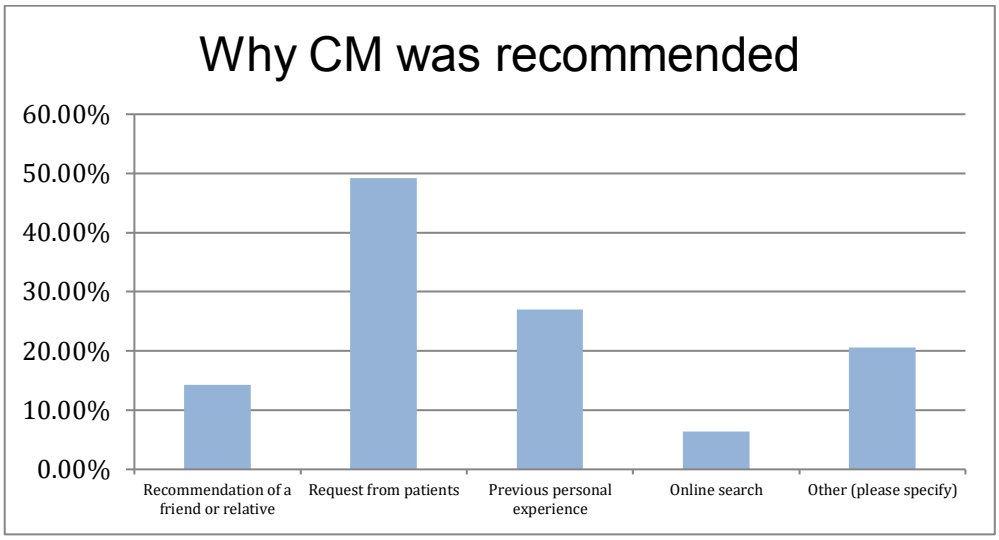

Table 17. General Practitioners: Reasons why CM was recommended

Answer Choices	Responses	
Recommendation of a friend or relative	14%	9
Request from patients	49%	31
Previous personal experience	27%	17
Online search	6%	4
Other (please specify)	21%	13
	Answered	63
	Skipped	4

The third survey question explored the extent to which the CM treatments contribute to maintaining good health and well-being according to GPs. The majority of the respondents (72%) believed CM to be somewhat helpful. Another 13% stated the CM was very helpful while 8% believed that the CM was not so helpful. Only four percent of the respondents found the CM to be extremely helpful and another 3% responded that the CM was not at all helpful. Figure 13 and Table 18 contains the results from the General Medical Practitioners' survey answers from the third survey question.

Figure 13. General Medical Practitioners: Extent to which the CM treatments contribute to maintaining good health and well-being

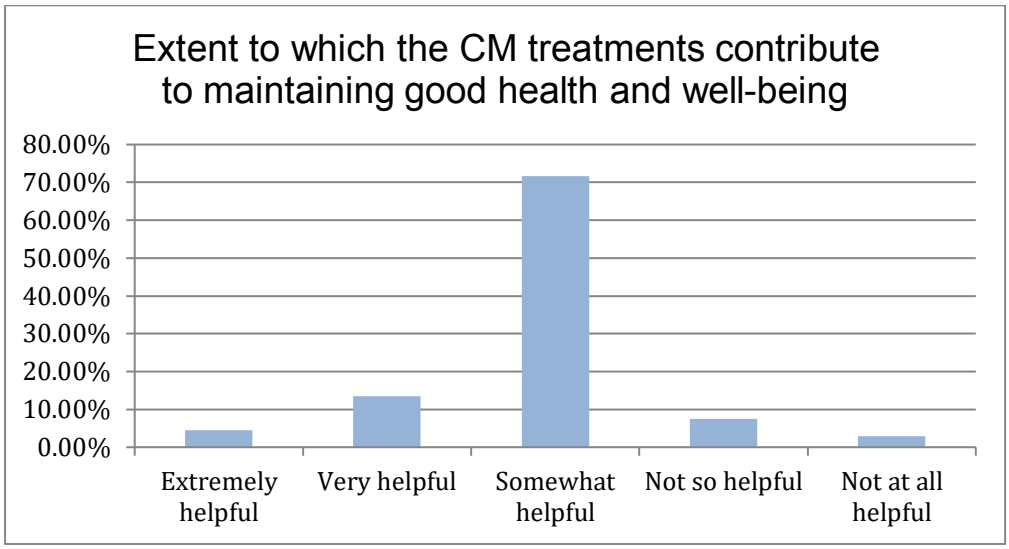

Table 18. General Practitioners: Extent to which the CM treatments contribute to maintaining good health and well-being

Answer Choices	Responses	
Extremely helpful	4%	3
Very helpful	13%	9
Somewhat helpful	72%	48
Not so helpful	8%	5
Not at all helpful	3%	2
	Answered	67
	Skipped	0

From the fourth survey question, the extent to which the CM treatments are believed to be safe is explored. The majority of the respondents (57%) stated that the treatments are fairly safe while 28% were unsure if the treatments are safe. Another 9% of the respondents indicated that the treatments were maybe unsafe, 3% found the treatments to be very safe, and 3% also believed that the treatments were definitely unsafe. Figure 14 and Table 19 display the results from the GPs' answers for the fourth survey question.

Figure 14. General Medical Practitioners: Extent to which the CM treatments are safe

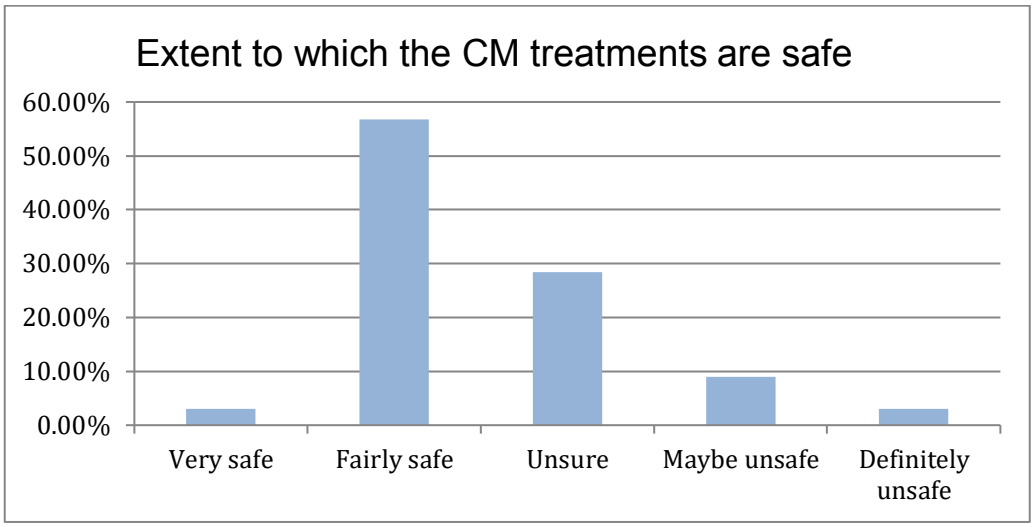

Table 19. General Medical Practitioners: Extent to which the CM treatments are safe

Answer Choices	Responses	
Very safe	3%	2
Fairly safe	57%	38
Unsure	28%	19
Maybe unsafe	9%	6
Definitely unsafe	3%	2
	Answered	67
	Skipped	0

The majority of the GP respondents (84%) believed that a collaboration between CM providers with medical practitioners could make an improvement to patient's care outcome. This was followed by the belief of 12% of the respondents that the collaboration makes no difference to patient's care outcome. Lastly, 4% of the respondents shared that the collaboration will facilitate a decline in patient's care outcome. Figure 15 and Table 20 shows the results from the GPs' survey answers for the fifth survey question.

Figure 15. General Medical Practitioners: Perceptions on the result/s of the collaboration between CM providers with medical practitioners

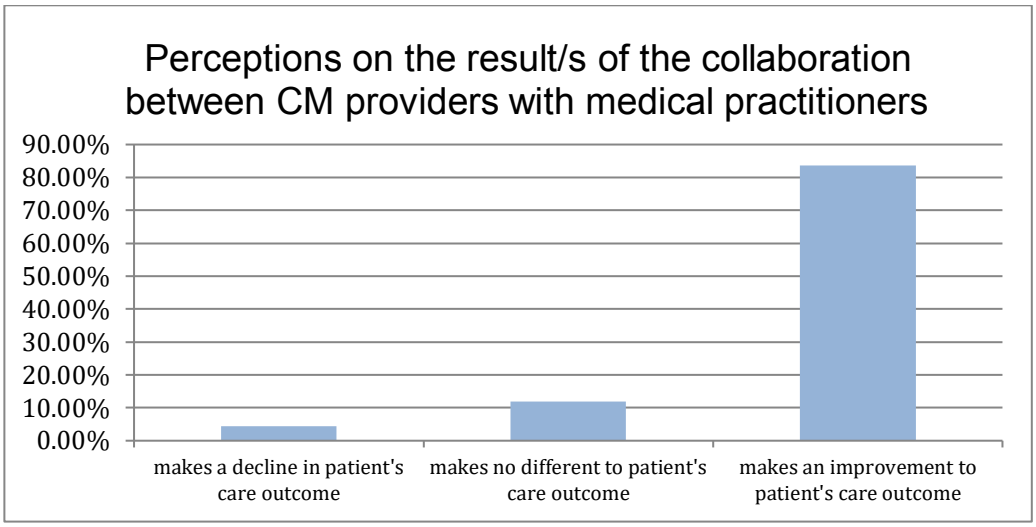

Table 20. General Medical Practitioners: Perceptions on the result/s of the collaboration between CM providers with General Medical Practitioners

Answer Choices	Responses	
Makes a decline in patient's care outcome	4%	3
Makes no different to patient's care outcome	12%	8
Makes an improvement to patient's care outcome	84%	56
	Answered	67
	Skipped	0

Concerning the sixth question of the survey, the majority of the respondents (43%) expected their patients' General Medical Practitioner to initiate referrals to CM based on efficacy and safety aspects. Another 39% expected the patients' General Medical Practitioner to listen to patients regarding CM and 34% of the respondents anticipated the General Medical Practitioners' updated knowledge about CM. Meanwhile, 18% of the respondents expected the GP to ask patients about CM or initiate discussion; and 15% discussed the feasibility of offering CM treatment based on appropriate training. Finally, 12% of the respondents had no expectations from the GP. Figure 16 and Table 21 contain the breakdown of the results from the General Medical Practitioners' survey answers for question six.

Figure 16. General Medical Practitioners: Expectations from the patient's family physician regarding CM usage

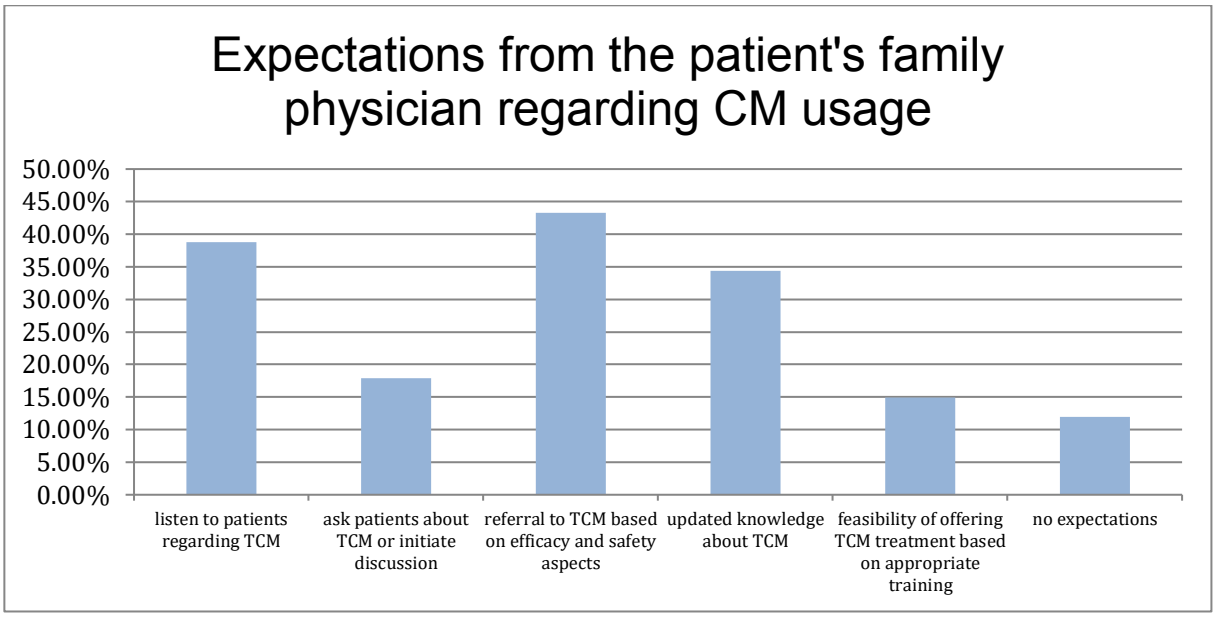

Table 21. General Medical Practitioners: Expectations from the patient's family physician regarding CM usage

Answer Choices	Responses	
Listen to patients regarding CM	39%	26
Ask patients about CM or initiate discussion	18%	12
Referral to CM based on efficacy and safety aspects	43%	29
Updated knowledge about CM	34%	23
Feasibility of offering CM treatment based on appropriate training	15%	10
No expectations	12%	8
	Answered	67
	Skipped	0

When asked about the GPs' preferred location or setting for the CM treatments to be provided to the patients, the majority of the respondents (55%) wanted to conduct the treatments within a medical centre. Another 53% of the respondents suggested administering the treatments within a specialized clinic. For 20% of the respondents, it would also be best to have the treatments in private care while 14% reported that the hospital clinic can also be used by practitioners. Finally, 2% of the

respondents answered the health food store as a probable setting. Figure 17 and Table 22 contain the display of findings from the General Medical Practitioners' survey answers on survey question seven.

Figure 17. General Medical Practitioners: Preferred setting for the CM to be provided to patients

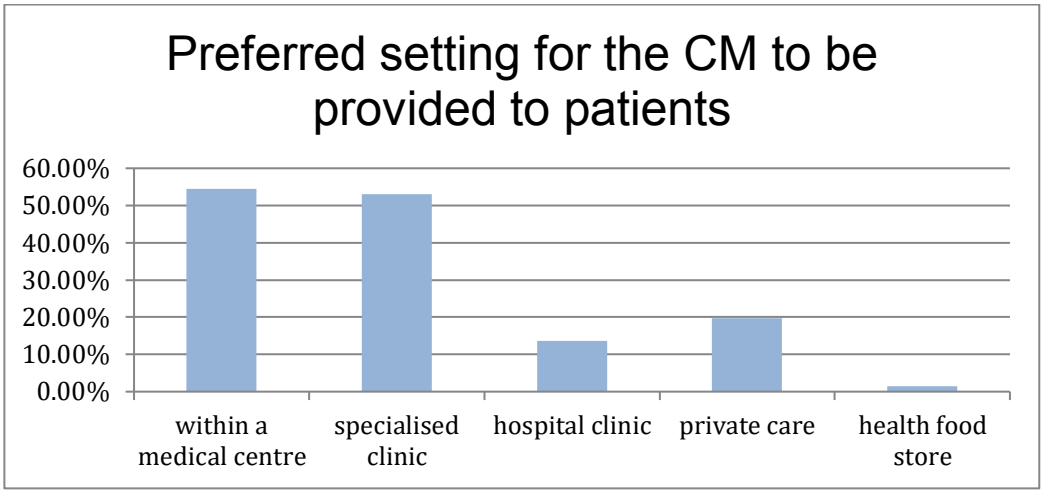

Table 22. General Medical Practitioners: Preferred setting for the CM to be provided to patients

Answer choices	Responses	
Within a medical centre	55%	36
Specialized clinic	53%	35
Hospital clinic	14%	9
Private care	20%	13
Health food store	2%	1
	Answered	66
	Skipped	1

The eighth survey question asked about the General Medical Practitioners' preference on who should refer the patient/s to receive the CM therapies. The majority of the study respondents (70%), responded that general practitioners must refer the patients. Another 52% of the respondents believed that self-referrals can also be made by the patients. In addition, 9% shared that nurses can also refer patients and 7% indicated others as their preferred response. Figure 18 and Table 23 contain the display of findings from the GPs' survey answers on the eighth survey question.

Figure 18. General Medical Practitioners: Who should refer patient/s to receive these therapies

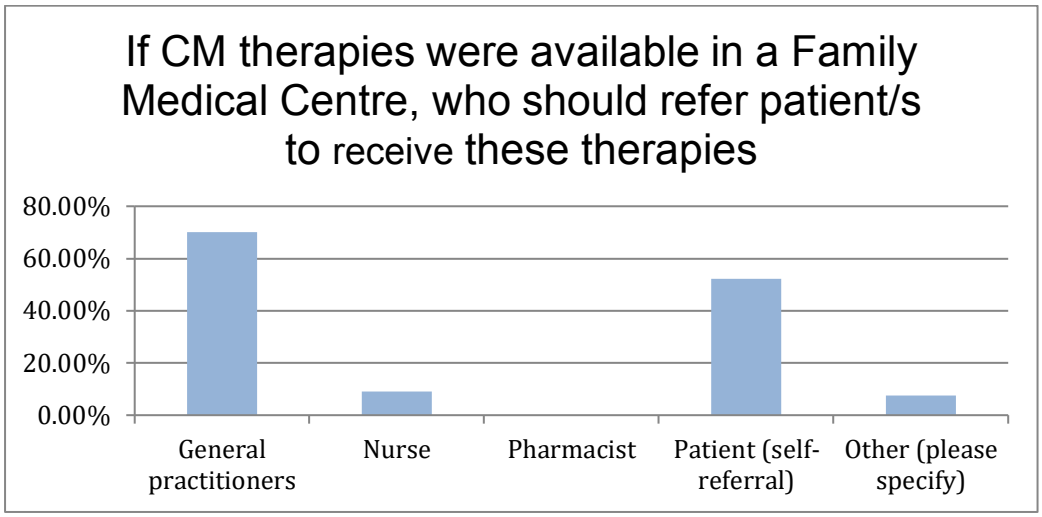

Table 23. General Medical Practitioners: Who should refer patient/s to receive these therapies

Answer Choices	Responses	
General practitioners	70%	47
Nurse	9%	6
Pharmacist	0%	0
Patient (self-referral)	52%	35
Other (please specify)	7%	5
	Answered	67
	Skipped	0

The final survey question inquired about who should provide the CM treatments in a family medical center. For the majority of the surveyed General Medical Practitioners (64%), a CM practitioner (registered acupuncturist, herbalist, etc.) should perform the treatments. Another 54% also believed that a medical practitioner trained to provide CM is also able to administer CM treatments. For 46% of respondents, a CM practitioner in collaboration with a medical practitioner could administer CM treatment to the patients. Finally, 3% of respondents suggested the employment of allied health providers, e.g. nurses, pharmacists, under a medical practitioner's supervision. Figure 19 and Table 24 contain the breakdown of the results from the GPs' survey answers on their last survey question.

Figure 19. General Medical Practitioners: Who should provide CM treatments in a family medical centre

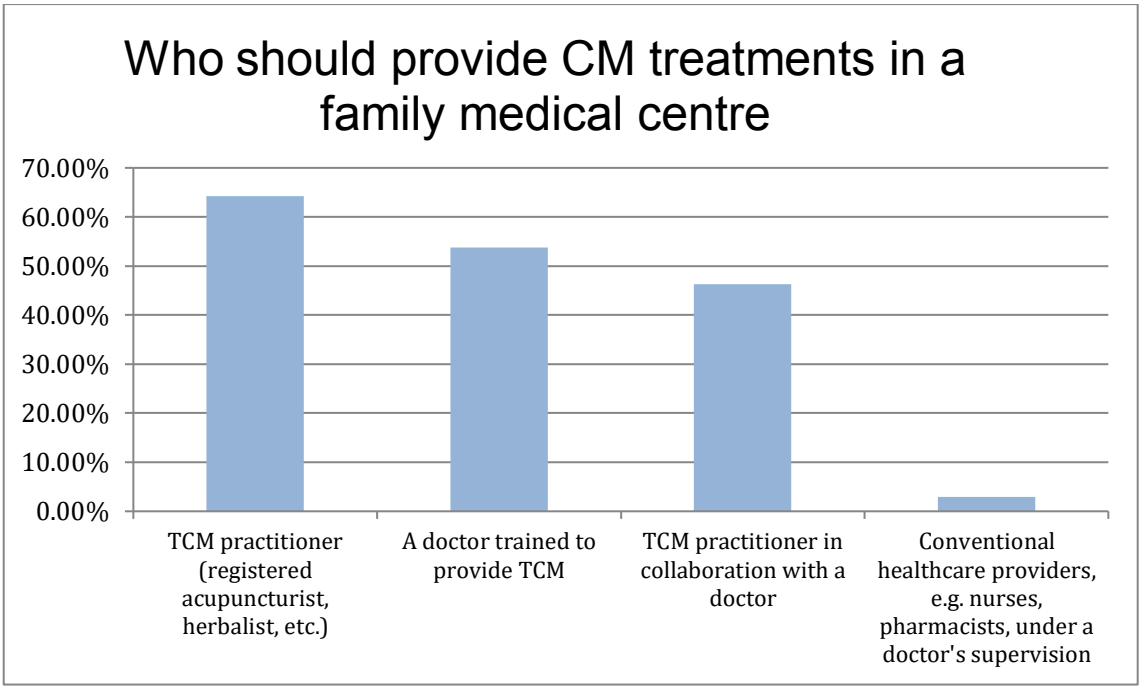

Table 24. General Medical Practitioners: Who should provide CM treatments in a family medical centre

Answer Choices	Responses	
CM practitioner (registered acupuncturist, herbalist, etc.)	64%	43
A doctor trained to provide CM	54%	36
CM practitioner in collaboration with a doctor	46%	31
Conventional healthcare providers, e.g. nurses, pharmacists, under a doctor's supervision	3%	2
	Answered	67
	Skipped	0

CHAPTER 6 – SURVEY CONCLUSION

The demographics between the two groups did not reveal any marked difference in attitudes and beliefs. The majority of the CMPs obtained their Chinese medicine qualification from a College or University. The majority of CMPs have been practising for over 15 years and been residing in Australia for over 11 years. The majority of the GPs obtained their medical degree in NSW and practice duration ranged from 4 years to 21 years, with most either born in Australia or resided in Australia for over 6 years.

After analysing the survey, there were several questions that had differing responses when comparing the two groups. CMPs practise all five common types of CM, including acupuncture, herbal medicine, cupping, moxibustion and massage therapy. However, the 58% of GPs who considered CM only utilise acupuncture and massage therapy. CMPs found that most of their patients had been referred by friends, and GPs will only discuss CM therapy upon the patient's own request.

CMPs believed that CM has a role in contributing to good health and well-being, with a high safety profile. On the other hand, most GPs are impartial about the contribution of CM for the patients' good health and well-being. Only 57% of GPs believe that CM are safe but 37% are unsure of CM's safety profile. Collaboration between CMPs and GPs is believed to be beneficial by both groups.

CMPs would like the GPs to make a referral and listen to the patient's request, whilst only 43% of GP are willing to make the referral to CMPs and 39% are comfortable to listen to the patient's request for CMPs. CMPs are willing to practice CM in any medical centre or clinic settings, whilst GPs believe that it is most appropriate within a medical centre or a specialised clinic. Both groups suggested either the GP make the referral or the patient to self-referral.

Interesting, for the last question response, the CMP believed that the treatment is best delivered by CM trained practitioners, whilst GPs responded that anyone trained in CM would be permitted to administer treatments.

CHAPTER 7: STUDY DESIGN – FOCUS GROUP DISCUSSION

7.1 Aim

The aim of the study was to identify the beliefs and attitudes of General Medical Practitioners in NSW towards CM and CMP.

7.2 Methods

Following the survey collection, the key points of interest were evaluated and then, interview questions developed for a twenty minutes focus group discussion for further exploration of the major issues. The content of the interview schedule was developed to explore the following issues:

- The understanding of CM;
- The perceived scientific evidence underlying CM;
- The current education program for CMPs;
- The major barriers for collaboration;
- The methods for improving referral between CMPs and GPs;
- The safety of CM;
- The conditions/illnesses that a GP will refer to a CMP.

7.3 Recruitment procedures

The survey was distributed during the educational meetings within the association and collected in a sealed box. If the participants were willing to participate in interviews/ focus group discussion, then a tear off sheet was located at the end of the survey form and the respondents contact details could be listed on this tear off section, which was then separated from the survey data. The interviews were conducted at the UTS city

campus. The sample size was initially determined as five participants however seven participants were recruited and took part in the focus group.

7.4 Ethics Approval

Prior to commencing the study, ethics approval was sought (Ethics no ETH16-0655) from the UTS Human Research Ethics Committee and subjects signed an informed consent form.

CHAPTER 8: QUALITATIVE COMPONENT RESULTS

There were seven GPs recruited for the focus group discussion (FGD). NVivo12 by QSR was employed in the systematic coding of the FGD transcript. These participants were interviewed face-to-face in order to gather their firsthand perceptions and experiences on the CM usage and treatments. Their responses are vital in further comparing and contrasting the viewpoints of the two groups of practitioners.

In this qualitative portion of the study, the focus group transcript was analysed using Braun and Clarke's (2006) thematic analysis. According to Braun and Clarke, a thematic analysis is a method that allows the researcher to search for and identify, the most meaningful patterns or themes from the data. Braun and Clarke's six steps to uncover the themes from the FGD were undertaken with the seven participants. The general steps consisted of: (1) "Familiarizing of oneself with the data; (2) Generating of initial codes; (3) Searching for themes across the FGD data; (4) Reviewing of themes; (5) Defining and naming of themes; and the (6) Production of the report".

To completely address the aim of the current study, which was again to identify the differences in perspective towards Chinese medicine from general medical practitioners in Australia, another method to collect data was employed. The focus group discussion with GPs was conducted to further examine the differences and have a better understanding of how to establish a communication/referral system to improve and provide holistic care to patients. During the qualitative portion of the study, five themes were generated from the thematic analysis of the data. These themes were the following: (1) limited evidence for CM treatments; (2) avoidance of legal responsibilities and liabilities; (3) observation of the side effects and adverse events of CM; (4) the need to consult with GPs prior to beginning consultation with a CMP; (5) the lack of knowledge concerning the legitimacy of CM. Table 26 lists the themes from the FGD, which are discussed in detail below.

8.1 Theme 1: Limited evidence of CM treatments

The first theme uncovered from the analysis was that the GPs' belief that the CM treatments are

"not proven and are limited".

Three of the practitioners who joined the focus group discussion agreed that they had recommended the CM treatment for arthritis as they had observed positive outcomes over the years. Meanwhile, other possible CM treatments they would recommend but with limited proven results were for fertility and eczema conditions. As Dr A stated,

> *"Arthritis, Infertility … a few of them I have recommended, but don't know who to send them to*."

Similarly, Dr C had observed the positive results of CM for arthritis. However, for fertility issues, this Dr C was unsure if he would recommend CM, saying:

"For arthritis - Positive outcome. While for Fertility I am not sure."

Another doctor shared the possible usage of acupuncture for conditions such as hyperemesis gravidarum and ovulation induction. Dr D then commented:

> *"I heard from a patient, she did it and it worked. And another condition is an Italian lady with eczema and went to see a Chinese medicine practitioner and it apparently worked."*

From the responses of the participants, it can be inferred that GPs remain unsure of the complete effectiveness of the CM treatment to patients. They also indicated how they do not recommend CM due to the low number of positive outcomes for the patients.

8.2 Theme 2: Avoiding legal responsibilities and liabilities

The second theme identified was the interviewed GPs' perception of the effects of the CM use and recommendations on their personal and professional accountability. During the focus group discussion, the GPs revealed the possible implications of referring their patients to CM practitioners. The GPs were honest in reporting that referrals needed to be undertaken cautiously given the medico-legal aspect where the referring practitioner is fully liable for the outcomes of the referred practitioner's treatment. For Dr B, liability was the greatest issue of the General Practitioners. He even added that he would not recommend his patients to CM practitioners because of his fear of needing to take full responsibility for the treatment outcomes later on. The participant stated,

> *"To be honest with you regard to the medico-legal aspect, if we referred them to medical practice, we are liable for that referral, so I probably wouldn't. Let's say if you want to, but I wouldn't recommend it. You accept full responsibility for what that practitioner does*."

For Dr A, CM practitioners may simply not need a referral. Several firsthand experiences of this doctor resulted in his negative perception of CM usage. He then narrated how he has treated patients who would urgently seek treatment following potentially severe health damage from taking Chinese medicines. Dr A then stated,

"They are taking lots of herbs which lead to some effect like liver function damage, and they are on some Chinese medication that we don't know what's in it."

The responses of the interviewed participants indicated another challenge in the usage of CM. Currently, there is a lack of trust between the GPs and the CMPs. They expressed how it is difficult to refer their patients due to the medical liabilities that they may experience following the referral. .

8.3 Theme 3: Observing the negative effects of CM

The third theme of the study was the firsthand observation of the negative effects of the CM on some of the patients that the GPs had treated or encountered. They shared their experiences regarding how the use of CM had compromised the health of some of the patients they had consulted after being treated with Chinese herbal medicine. Dr A again used his personal experience as an example to validate the probable negative implications of the CM. The participant stated,

"Yes, I'm working at a medical center, and lots of patients would go to traditional Chinese medicine first before seeing the GP. . . Sometimes patient came in with very severe liver function derangement because of the medication they are taking."

Dr D also further supported this perspective from Dr A and provided another example, saying:

"The other symptom I have noticed is lots of patients having epigastric pain when they are taking herbal."

These are two examples pertaining to the possible reasons as to why the interviewed GPs may refuse to recommend their patients to consult CMP.

8.4 Theme 4: Needing to consult with General Medical Practitioners first before the Chinese Medicine Practitioners

The fourth theme of the study was the felt need for patients to consult with GPs prior to consulting a CMP. The GPs were forthright in stating that they cannot refer or recommend their patients to the CMP. Additionally, they also indicated that it would be more acceptable for them if the CMP would refer their patients to GPs for medico-legal reasons. Dr B explained how they cannot give answers to the patients' inquiries with regard to the Chinese or other herbal medicines they may be taking. This is because they were not the ones who prescribed the herbal medicines and therefore, they could not provide reliable responses to the patient's request. In addition, they responded saying that be liable for the probable negative implications of the medicines given or provided by the Chinese Medicine practitioners, saying:

> *"I think the only way it would work is if the traditional Chinese medicine practitioner refers patients to us. I don't think it would work going the other way around, obviously for a medico-legal reasons. As long as the patients are aware that they are going to the Chinese medicine normally, and they come back to us for information, I don't think we will have an issue like that.*

> *The only problem I have is that a lot of patients taking these herbal medicines, they come to me and ask if it is going to interfere with my other medicines. You can't even get… because you don't even know what it is. I always tell them that you have to go*

back to the person who gave it to you. Throw it back to them, because we can't say yes, there is no problem, you can have this."

Further, Dr A stated that it would be difficult for them to see and treat patients who have consulted CMP first as they do not have enough knowledge concerning the history of their illness and the reasons as to why they were prescribed the Chinese medicines. However, like doctors, they can still inquire and look for the proper and actual medicines they should be taking. One GP narrated,

"So, you see these patients, but they want to try different person to get lots of treatment from the traditional Chinese medicine practitioner. They try herbs, supplement, acupuncture, guasha, these kinds of things, a lot of things going on.

As Dr L mentioned, we don't know what's been prescribed in Chinese medicine. As of the question you asked about communication between us and the traditional Chinese medicine practitioner, I don't think it needs to, because we don't refer patients to them, we don't need to be copied. But if a patient is having a problem, we can ask them what kind of medication they are taking, these kinds of information."

8.5 Theme 5: Lacking knowledge on the legitimacy of the CM

The fifth and final theme that was to emerge was the lack of knowledge of the GP. From their responses, they shared how they had very limited knowledge of the background, factors, and policies related to CM. During the discussion, the participants actively talked about their lack of information and knowledge, about the change in policies and updates on the CM and their practitioners. Dr. A

shared to his peers that CM practitioners can now register under Medicare and other Health Insurance companies. Dr A stated,

"yes, they claim Medicare as well."

The confusion with regard to CM was again demonstrated as Dr E answered,

"No, I don't know that they are registered already."

Meanwhile, Dr G provided a very detailed comment about the recent changes in the status of CM practitioners in the health care industry. This GP participant narrated,

> *"Do you know they enjoy the same privilege as a medical practitioner, nurse, dentist, midwife - 14 different professions have been full nationally registered? And most recently, from 1st of January 2019, paramedics are registered as well. So, they should be treated the same as a registered medical practitioner."*

> *"They can't claim Medicare. They still want to get into Enhanced Primary Care (EPC) program, but it's still a long way because the federal government has not given them the funding yet, but that's what they are arguing. They want to get into EPC since they have been registered for 6 years. I think it would help. I'm not sure if you guys agree or not. I think if they are registered, they should be doing exactly what the physiotherapists, occupational therapists and everyone else are doing. So, if they have seen one of our patients, they should write back to us. But so far there is*

no such exercise. I don't think you guys have received anything from any acupuncturist."

Additionally, Dr F admitted how he does not have much knowledge about Chinese medicine and the language barrier adds to the barrier experienced by the GPs. As Dr F. stated,

"I find it hard because I don't know much about Chinese medicine. I understand acupuncture, and I read something about it, but when it comes to herbal medicine, I just don't know enough. There is a knowledge barrier for me. Is it the same? Every Chinese medicine using similar things or is it different?"

The final theme summarises the discussion of the GPs as they shared their limited knowledge and information about the CM and its usage. From their responses, it can be inferred that the GPs currently have a lack of familiarity concerning CM. These factors all contribute to the inability and refusal of the GPs to refer their patients to the CMP.

CHAPTER 9: SUMMARY

This chapter summarises the results from the quantitative and qualitative analyses of the two data sources, the surveys and the focus group discussion. It was established from the survey data of the CMP that the CM usage and treatments were believed to be effective and helpful. Meanwhile, for GPs, CM use was somewhat effective and helpful (see Table 25). The responses for the remaining questions for both groups in the survey were similar. However, the themes from the qualitative data demonstrated some major issues including several negative perceptions of the GPs on CM and CMP (see Table 26).

Table 25. Survey Results: CMP compared with GP responses

Categories	Chinese Medicine Practitioners	Western Medicine Practitioners
All Chinese Medicine (CM) treatments practiced during the past year	Acupuncture	Acupuncture
Reasons why patients see the practitioners	Recommendation of a friend or relative	Request from patients
Extent to which the CM treatments contribute to maintaining good health and well-being	Very helpful	Somewhat helpful
Extent to which the CM treatments are believed to be safe	Very safe	Fairly safe
Perceptions on the result/s of the collaboration between CM providers with medical practitioners	Makes an improvement to patient's care outcome	Makes an improvement to patient's care outcome
Expectations from the patient's family physician regarding CM usage	Referral to CM based on efficacy and safety aspects	Referral to CM based on efficacy and safety aspects
Preferred setting for the CM to be provided to patients	Within a medical centre, alongside with GP	Within a medical centre
Who should refer patient/s to receive these therapies	General Medical Practitioners	General Medical Practitioners
Who should provide CM treatments in a family medical centre	CM practitioner (registered acupuncturist, herbalist, etc.)	CM practitioner (registered acupuncturist, herbalist, etc.)

Table 26. Themes based on the General Medical Practitioners' Focus Group Discussion

Themes from the General Medical Practitioners
Theme 1: Limited proven CM treatments.
Theme 2: Avoiding legal responsibilities and liabilities.
Theme 3: Observing the negative effects of CM.
Theme 4: Needing to consult with General Medical Practitioners first before the Chinese Medicine Practitioners
Theme 5: Lacking knowledge on the legitimacy of the CM.

CHAPTER 10: DISCUSSION

Following is a discussion of the results in relation to the issues identified in the literature review. In addition, some recommendations and implications are raised and presented that can be drawn from the results of the two studies.

The relationship between the CMP and GPs is, at best, poor and limited within the Australian health care environment. One of the major problems identified from the studies was the lack of communication and limited knowledge about each other's field of practice. This is a problem that, if not well addressed, will have a very negative implications for patients and their general health. In 2012, CM became one of the nationally registered health professional occupations, hence, the registration process and standards that are now set and regulated by the Chinese Medicine Board of Australia with administrative support by the Australian Health Practitioners Registration Agency (AHPRA). In 2019, there were 4,892 registered Chinese Medicine practitioners, which comprised 0.7% of all registered health practitioners. In NSW alone there are 2,003 Chinese Medicine practitioners that represents 40.8% of the registered CM practitioners for this profession (www.ahpra.gov.au). Moreover, there is a great need to improve communication between the two groups of healthcare practitioners. Effective communication will ensure that there is a more efficient coordination between the two groups in the shared care of patients. The stakeholders (including the regulatory body, professional CMP organisations, patient representative bodies) should therefore develop strategies to improve communication between these two groups of healthcare practitioners. This study has established an important foundation in regard to research evidence, in terms of what to address in the future to enhance the professional relationship and connectivity between the two healthcare professions.

Chinese Medicine Practitioner Registration System and AHPRA (Australian Health Practitioners Registration Agency) in Australia

Australia is the first country in the world outside China to have a national registration system for Chinese medicine practitioners (Moore et al, 2016). All Chinese medical practitioners have to go through a registration procedure in Australia that ensures they have the required qualification and knowledge in the profession before he/she is registered as a Chinese medicine practitioner (CMBA, 2012). This means that for a person to be eligible for registration, he/she must be able to demonstrate that he/she can meet the Chinese Medicine Board of Australia's requirements and standards for registration (Adams, Tovey & Easthope, 2017). When a person applies for registration, AHPRA will process the administration of this application. AHPRA is an administrative organisation in Australia that is responsible for supporting the accreditation and registration of 16 health professions. The operation of the body is governed by the health practitioner laws that were established in each state and territory. The law came into force in 2010 and for the first time in the history of Australia, 16 health professions were regulated under one single body (Walton et al, 2012). The reason for this development was to ensure that there is stability and order among the professions as well as ensuring ethical practice and a process for handling complaints about the registered health professions. AHPRA supports 15 different national boards, which are responsible for regulating the professions in focus. The main objective of the national registration system was to ensure that members of the public are protected (Walton et al, 2012). This is an objective that achieved through setting the required standards and policies that must be adhered to by all the health practitioners in Australia. Each national registration board has entered into professional agreement with the body that sets out the registration fees to be paid by the healthcare practitioners.

In 2018, AHPRA became a partner with the World Health Organization and as a collaborator with the World Health Organization, it has three important functions. The first function is to provide technical

support to the organization to strengthen the health workforce across the country. Moreover, the body assists WHO in the development of important health policies and regulations thus ensuring that the regulations are adhered to by all (Walton et al,. 2018). Lastly, the body facilitates WHO in developing educative strategies that ensures that all the medical practitioners are up to date with current knowledge, trends and requirements for the health profession. As a regulatory administrative body in the country, AHPRA also receives complaints from the members of public and resolves the complaints in an ethical manner with an appropriate level of discipline where required. Examples of complaints handled by AHPRA include those involving practitioners who are yet to be fully registered but are carrying out their health services, such as a student in a health care professional degree (Grace, 2012). In such a case, the members of the public make complaints to AHPRA about such cases under which the appropriate disciplinary action is taken against the practitioner or student. AHPRA is therefore mandated to ensure that the health practitioners remain within the law and practise as a competent and ethical health care practitioner whereby any violation will require a complete assessment and where required a disciplinary response. All registered healthcare practitioners are therefore required to maintain the appropriate standards within their profession.

The surveys that were undertaken in this research project have shown that the 58% of GPs who considered CM, will only recognise acupuncture and massage therapy. CMPs believed that CM has a role in contributing to good health and wellbeing, and that CM has a high safety profile. On the other hand, most GPs are impartial on the contribution of CM to a patients' good health and wellbeing. Only 57% of GPs believe that CM is fairly safe but 37% are unsure of CM's safety profile. Collaboration between CMPs and GPs is believed to be beneficial by both groups. Nevertheless, CMPs would like GPs to make referral and acknowledge and act upon the patient's request, whilst only 43% of GPs are willing to make the referral to CMPs and 39% being comfortable to listen to patient's request for CM services. CMPs are willing to practice CM in any medical centre or clinic settings, whilst GPs believed

that it is most appropriate within a medical centre or a specialised clinic. Both groups suggested either the GP to make the referral or for the patient to do self-referral. From the results obtained, it is obvious that there is a large gap between the expectation and reality of what occurs between both groups of practitioners.

Australia has excellent Medicare system and public healthcare setting, where the GP acts as the family medicine provider who manage and provide a holistic approach to care for their patients. Under normal circumstances GPs do, and will, refer to secondary care specialist medical practitioners or other allied health practitioners (e.g., physiotherapists) when appropriate. Specialist medical practitioners are required to communicate back to the patient's GP to allow coordination of healthcare services and monitor the patient's overall health conditions and medications. This study has found that there is a significant lack of communication between GPs and CMPs. Following on, the qualitative study has been able to identify five main themes behind this poor level of communication. It included the GP lack of knowledge on the legitimacy of CM, lack of awareness of scientific evidence of the effectiveness of CM, the first hand observation of adverse events and side effects of CM, the belief that patients should consult a GP prior to attending a CM consultation, and the reluctance to make referral due to the legal responsibility and liability of the GP.

Potential Reasons for the Lack of Communication in Patient's Care between the Chinese Medicine Practitioners and Medical Practitioners in Australia

Communication is a very important element for effective and responsible patient's care. In every case, there should be effective communication between the healthcare practitioners and the patients to ensure better service delivery. However, this research found several reasons that may affect effective communication in patent's care between the CMP and the GP (Ha & Longnecker, 2010). The first reason is the service structure of the health centres and facilities that provide health services. When

the structures fail, there will inevitably be the breakdown of communication between healthcare practitioners. It might be possible the existing structures have failed to provide a clear guidance on the manner in which the CMP and GPs need to carry out their communication (Kitson, et al., 2013). The lack of the clear structures therefore affects the communication chain between the involved parties leading to serious implications for the health status of the patient. Another potential reason for the lack of communication in patient care between the CMP and GP is over-reliance on one form of communication. It has been established that due to language difficulties or differences as well the knowledge barrier between the two groups of healthcare practitioners, there exists a likelihood to resort to one form of communication which in this case might be the written one (Kitson, et al., 2013). In this regard, there might arise some difficulties in communication between the two groups as far the patients are concerned.

Language barriers can also provide another reason for the lack of communication between the CMP and GP. Currently there are a large number of Australian Chinese medicine practitioners that have a language condition on their registration i.e., they do not share a common language of communication with the local English-speaking patient. As such, this group of CMP would rely heavily on Chinese language when they consult patients in contrast to GPs whereby all consultations are undertaken using the English language. Unless the two groups are able to agree on a single language to guide their communication, then there can be little communication between them (Ha & Longnecker, 2010). Basically it has been a requirement that all medical practitioners be acquitted to English as the common language of communication. However, not all the Chinese medical practitioners have taken the initiative to become competent in the English language due to the historical consideration given during the grand-parenting period of the initial establishment of the national registration system for the CMP in Australia. This has therefore had the effect of impacting on the communication between the two groups. This may change over time as the older generation of practitioners from China who were

registered with a language condition cease to practice and the new generation of CMP are educated solely in Australia.

Methods to Enhance the Communication between the Chinese Medicine Practitioners and Medical Practitioners in Australia

One of the strategies that can be adopted to enhance communication between CMPs and GPs is to introduce professional communication studies during the undergraduate or postgraduate studies. This is a valuable and reasonable consideration that should be made as it will enable the medicine trainees to be well aware of how to enhance communication. Moreover, the students will be able to understand how to address some of the problems that might affect communication while in practice (Epstein, 2010). With the appropriate educational programs it will be easy to address the problem of communication lapses between the CMP and GPs. Another strategy that can be adopted in solving the communication problem is by introducing seminars and workshops on effective communication, targeting those already practising GPs. The workshops and seminars should be held frequently and should be compulsory for all the medicine practitioners from both groups (Kurtz, Draper & Silverman, 2016) as part of their continuing practice development (CPD) plans for ongoing registration. This strategy will help in creating an emphasis to GPs on the importance of effective communication in the provision of health services. The workshops and seminars will also help in evaluating the progress of the different groups as far as their communication skills are concerned. This evaluation will be important in developing further strategies to help those who are still deemed poor in terms of effective communication.

The need for direct form of communication should be emphasised. A direct or verbal form of communication is the best especially when dealing with important patient care. This will therefore require that Chinese medicine practitioners learn English and ensure that they are fluent. Being fluent will allow them to have more of direct communication with Western medicine practitioners (Epstein,

2010). They should therefore be provided with English language classes and tests that will help in evaluating the level of skill in English language before being registered by the board in charge. In the case where there is a total breakdown of communication between the CMP and GP, the use of interpreters can be adopted. The interpreters, who should be selected based on high level of skills on different languages including Chinese and English, can assist in direct consultations and overtime can address the problem. However, it is important to understand that this might be a temporary solution as it may not provide the desired results (Kurtz, Draper & Silverman, 2016). It can also have problems as far as the confidentiality of the patient is concerned. It should therefore be used on temporary basis as more permanent solutions are put in place to address the problem.

How to Increase Referrals between Chinese Medicine Practitioners and Medical Practitioners in Australia

It is also important to ensure that the number of referrals between the Chinese and Western medicine practitioners is increased. This can be achieved through several ways. The first way to ensure that simplifying the referral process between the practitioners (Chung et al., 2012). This can be done by incorporating the CM profession into the national Medicare system so that the CMP can be part of the enhanced primary care program (EPC) which is currently funded under the federal Medicare system. The simplification of the process will make it easy for the connection between the different parties involved. When there is no system or with a complicated referral system, which is the major problem at the moment, GPs in fact have found it very difficult to coordinate referrals between the different parties thereby endangering the clinical safety of the patient involved.

Once the CMPs are allowed to be referred under the Medicare system, it is important to ensure that all the referral sources are constantly reviewed in order to prevent Medicare fraud as well as to ensure the referral need and quality is maintained. This can be achieved through implementing regular services

audits which are currently administered by the Medicare authority. Moreover, there is a need to cultivate a new culture of patient referrals. The referral sources and associated documentation should be made more transparent for the purpose of increasing understanding (Kurtz, Draper & Silverman, 2016). It is essential that this be done as there already exists a problem between the CMPs and GPs involving a common language as highlighted in the previous discussion. Since this has already been identified as problematic, there is a need for the system to be reviewed and simplified for coordination between the different medicine practitioners in Australia. A standardised national referral form can be developed so that it can be used with ease and to ensure the essential information is recorded for the purpose of referral. This can also assist in the effectiveness of any administrative or clinical audits, which is currently performed by the Medicare authority.

There is also a need for more training in the area of referrals and how the problem can be addressed between the different healthcare practitioners. The Chinese Medicine Board of Australia should work in conjunction with the peer professional organisations to ensure that continuing professional education on referral processes and communication is maintained within the profession. This will be important as the healthcare practitioners will need to understand the process and work towards ensuring that they make it an effective and efficient process (Chung et al., 2012). Training and education should be conducted frequently as well as being mandatory for all the involved healthcare practitioners. Such a strategy will enable all healthcare practitioners to understand the process and appreciate how important it is to the health system and the Health authorities. The training should involve all the practitioners from all the registered practitioner groups including those overseas trained practitioners who may have training registration.

The State and National Government can also consider providing some incentive scheme to encourage those CMPs and GPs who implement a referral practicing system to receive some extra incentive

payments (e.g., service incentive program) at the end of each year. This will create a positive reinforcement for the importance of communication amongst all healthcare practitioners.

CHAPTER 11: CONCLUSION

In this thesis, the following aims have been achieved in the two research projects that were undertaken: a general overview of the beliefs and attitudes of GPs that have experience in referring patients for CMP/CM consultation; an understanding of the level of comprehension by GPs of CM and their experience of its effectiveness; the identification of the barriers that prevent GPs from participating in the referral process with CMPs; and finally; the barriers that prevent CMPs from communicating with a patient's GP.

For clinical quality and patient's safety, it is important to increase coordination and communication between the CMP and the GP. As discussed this can be achieved through several ways. Since the major problems of referral between the CMP and GP concern communication, trust and knowledge barriers on both sides exists. The registration and regulatory bodies as well as the peer professional associations should make efforts to ensure that the practitioners are assisted to address these problems. Some of the strategies that can be used are introducing more training opportunities in effective communication as well as in language competency to allow certain CMPs with language barriers to become better versed with the English language. Moreover, the professional communication training should also be incorporated in undergraduate (for the future CMP) and "on the job" postgraduate training (for the existing CMP) to allow the practitioners develop the essential skills for an effective communication between healthcare practitioner colleagues. A review, potential incentives and the implementation of a national referral system would also be important in promoting cooperation between the CMP and GP.

Looking into the future, the next research project that can extend this research study would be to investigate the integrative model of care involving the CMP, GP as well as other allied health practitioners. The GP has a pivotal role in initiating a GP Management Plan, Team Care Arrangements, and Case conferences with the secondary care specialist team and all the necessary allied health services. The GP is also vital in maintaining communication and provide support to the patient, their relatives and caregivers and develop the appropriate time to develop a holistic care plan. A series of research studies should aim at: exploring the view of GPs in the management of psychological, physical, social, and spiritual aspect of patients when utilising CM; researching the experience and extent of support provided by the CMP to the GP and; the role of professional and regulatory bodies in designing personalised educational program and materials for GPs and CMPs. This will raise the level of professionalization of CMPs and establish them as a key partner in the holistic approach of health care service for their patients with the GP and allied health practitioners.

References

Adams, J 2000, General practitioners, complementary therapies and evidence-based medicine: the defence of clinical autonomy. *Complementary Therapies in Medicine*. 8(4):248-52.

Adams, J., Tovey, P., & Easthope, G. (2017). Mainstreaming Complementary and Alternative Medicine: Studies in social context. *Routledge.*

Babbie, E 2012, The practice of social research, *Cengage Learning*, Mason, Ohio.

Ben-Arye, E, Frenkel, M, Klein, A and Scharf, M, 2008, 'Attitudes toward integration of complementary and alternative medicine in primary care: Perspectives of patients, physicians, and complementary practitioners', *Patient Education and Counselling*, vol. 70 (3), p. 395-402.

Bottiger, W 2006, Chinese traditional medicine: An approach towards holistic medicine, *Lulu Publishers*, Raleigh, North Carolina.

Braun, V., & Clarke, V. 2006, Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*:2, 77-101

Chan, M.F., Mok, E, Wong, Y.S., Tong, T.F., Day, M.C., Tang, C.K.Y., Wong, D.H.C. 2003. Attitudes of Hong Kong Chinese to traditional Chinese medicine and Western medicine: survey and cluster analysis. *Complementary Therapies in Medicine*. 11 (103-109).

Chi, Chun Huei 1994, Integrating traditional medicine into modern health care systems: examining the role of Chinese medicine in Taiwan. *Social Science Medicine*. Vol 39 (3): 307-321.

Chung, V, Hiller, S, Lau, C, Wong, S, Yeoh, E and Griffiths SM. 2011, 'Referral to and attitude towards traditional Chinese medicine amongst Western medical doctors in postcolonial Hong Kong', *Social Science and Medicine*, no.72 (2), p. 247-255.

Chung, V. C., Ma, P. H., Hong, L. C., & Griffiths, S. M. (2012). Organizational determinants of interprofessional collaboration in integrative health care: Systematic review of qualitative studies. *PloS One,* 7(11), e50022.

Chinese Medicine Board of Australia CMBA (2012). https://www.chinesemedicineboard.gov.au/Registration.aspx, reviewed 28 Jun 2019.

Epstein, R. M., Fiscella, K., Lesser, C. S., & Stange, K. C. (2010). Why the nation needs a policy push on patient-centered health care. *Health Affairs*, 29(8), 1489-1495.

Grace, S. (2012). CAM practitioners in the Australian health workforce: an underutilized resource. *BMC Complementary and Alternative Medicine*, 12(1), 205.

Griffiths, S, Chung, V, Yeoh, E, Wong, C and mok, P 2012, 'Attitude towards traditional Chinese medicine among allopathic physicians in Hong Kong', *Hong Kong Medical J*ournal, vol. 18, no.6, p. 27-29.

Ha, J. F., & Longnecker, N. (2010). Doctor-patient communication: A review. *Ochsner Journal*, 10(1), 38-43.

Harmsworth, K and Lewith, G 2001, 'Attitudes to traditional Chinese medicine amongst doctors in the People's Republic of China', *Social Science and Medicine*, vol. 52, no.1, p. 149-153.

Hawthorne, L. (2012). Health workforce migration to Australia. Melbourne: Health Workforce Australia.

Hehir, L and Williams, S 2013, 'A survey of health professionals views about integration of traditional Chinese medicine Acupuncture into NHS Scotland', *European Journal of Integrative Medicine*, vol. 4, p. 55-61.

Hon KL, Leung TF, Tse HM, Lam LN, Tam KC, Chu KM, Wong Y and Fok TF. A survey of attitudes to traditional Chinese medicine among Chinese medical students. *American Journal of Chinese Medicine* 2005; 33(2):p.269-79.

Kitson, A., Marshall, A., Bassett, K., & Zeitz, K. (2013). What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *Journal of Advanced Nursing*, 69(1), 4-15.

Ko, G and Berbrayer, D (2000), 'Complementary and Alternative Medicine: Canadian Physiatrists' Attitudes and behaviour', *Archives of Physical Medicine and Rehabilitation*, vol. 81. p. 662-667.

Kurtz, S., Draper, J., & Silverman, J. (2016). Skills for communicating with patients. *CRC Press*.

Lam, T and Sun, S (2013), 'Dilemma of integration with Western medicine – views of Traditional Chinese medicine practitioners in a predominant Western Medical Setting', *Complementary Therapies in Medicine*, vol. 21 (4), p. 300-305.

Li, CL. A brief outline of Chinese medical history with particular reference to acupuncture. (1974) *Perspectives in Biological Medicine*. 18(1):132-43.

Mitchell, D. 2014. Wu Xing and the Emotional Spirits, *Chinese Medicine Meditation*. www.scholarsage.com. *Visited 26th April 2016*.

Moore, A., Komesaroff, P., O'Brien, k., Xu, H., & Bensoussan, A. (2016). Chinese Medicine in Australia. *The Journal of Alternative and Complementary Medicine.* 22(7): 515-525.

Novoherb website 2012. Understand Qi (Vital Energy) from a TCM Perspective. www.novoherb.com. *Visited 26th April 2016.*

Spence, W and Li, N 2013, 'An exploration of Traditional Chinese Medicine practitioners' perceptions of evidence-based medicine', *Complementary Therapies in Clinical Practice*, vol. 19 (2), p. 63-68.

Templeman, K; Robinson, A. 2011. Integrative medicine models in contemporary primary health care. *Complementary Therapies in Medicine*, 19: 84-92.

Walton, M., Smith-Merry, J., Healy, J., & McDonald, F. (2018). Health complaint commissions in Australia: Time for a national approach to data collection. *Australian Review of Public Affairs*, 11, 1-18.

Wardle, J. L., Sibbritt, D. W., & Adams, J. (2013). Referral to Chinese medicine practitioners in Australian primary care: a survey of New South Wales rural and regional general practitioners. *Chinese Medicine*, 8(1): 8.

Wahner-Roedler, DL; Vincent, a; Elkin, PL et al. Physicians' attitudes toward complementary and alternative medicine and their knowledge of specific therapies: a survey at an academic medical centre. *Evidence Based Complementary and Alternate Medicine*. 2006 Dec; 3(4): 495-501.

Xue, CC; Lee, C; Karagiamis, J; Li, CG; Yang, AW; and Zhang, T. 2005. Public attitudes towards Chinese medicine in Melbourne, Australia. *Journal of Complementary and Integrative Medicine* 2 (18).

Yamagata-Lynch, L 2010, Activity Systems Analysis Methods: Understanding Complex Learning Environments, *Springer Science and Business Media, Springer Publications*, New York, NY.

Yu, Yan and Ren, Ke 2006, Medical and Health Among Chinese Minorities, *China Intercontinental Press*, China.

APPENDICES

Appendix 1 – Survey invitation and Information statement

Survey

Dear practitioners,

I am inviting you to participate in a research study that I am conducting to assess the perception of western medical practitioners with Chinese ethnic background towards Chinese medicine practitioners in Sydney. We hope to learn about the understanding and any potential barriers in communication and referral between western medicine and Chinese medicine practitioners. This will help to build the communication bridge that will allow a holistic approach to patient care.

If you decide to participate, you will be asked to take 5-10 mins to fill in the short survey and returning it to me by email, fax, or simply drop back into the sealed box at the end of the meeting. If you may be interested to participate further in this study, with a 20 mins interview, please provide the best contact details at the end of the survey and Dr Lisa Cheng will contact you in due course to arrange for a convenient time and place with you.

I have enclosed an information sheet on the study that will provide you with further details.

Thank you for considering this invitation.

Yours sincerely,

Dr Lisa Cheng
General Practitioner
FRACGP, MBBS, DCH, Grad Dip in Public Health

Please kindly return both signed consent form and completed survey via:

DROP into the sealed box provided

OR

FAX: (02) 95547733

OR

EMAIL: drlisacheng@gmail.com

UNIVERSITY OF TECHNOLOGY SYDNEY

INFORMATION STATEMENT

TOWARDS INTEGRATIVE HEALTH CARE? THE PERSPECTIVES AND EXPERIENCES OF CHINESE MEDICINE PRACTITIONERS (CMP) AND GENERAL PRACTITIONERS

INTRODUCTION

I am inviting you to participate in a research study that I am conducting to assess the perception of western medical practitioners with Chinese ethnic background towards Chinese medicine practitioners in Sydney.

STUDY PROCEDURES

If you decide to participate, you will be asked to take 5-10 minutes to fill in the short survey and returning it to me by email, fax, or simply drop back into the sealed box at the end of the meeting. If you may be interested to participate further in this study, with a 20 minutes interview, please provide the best contact details at the end of the survey and Dr Lisa Cheng will contact you in due course to arrange for a convenient time and place with you.

VOLUNTARY PARTICIPATION

Your participation is completely voluntary for both components. If you do take part in this study, you are free to withdraw at any time without having to give a reason. However, your participation will allow you to enter into a draw to win the latest iPad with 64G and Wi-Fi. Each participant for the interview will receive a $50 voucher.

RISKS

The risks of participating in this study include the inconvenience and time take to complete the survey and interview.

BENEFITS

The results of this study will provide important information on any discrepancy in the perspective towards TCM from different groups. It will also allow the exploration of perceptions amongst the two groups and the development of education to accommodate both groups' need.

CONFIDENTIALITY

Study results may be presented at a conference or in a scientific publication, but your confidentiality will be maintained, only the researcher named above will have access to it. Any personal information will be coded and encrypted in a password-protected file.

FURTHER INFORMATION

If you would like to be involved or have any further questions, please do not hesitate to contact me on the details below. If you know any other practitioners who may be interested in participating, please feel free to forward this message to them. Dr Lisa Cheng (02) 95546880 or Fax: (02) 95546837 or drlisacheng@gmail.com

ETHICS APPROVAL AND COMPLAINTS

This study has been approved by the UTS Human Research Ethics Committee.

Appendix 2 – Informed Consent Form

INFORMED CONSENT FORM

TITLE OF RESEARCH – Towards Integrative Health Care? The perspectives and experiences of Chinese medicine practitioners and general medical practitioners.
AND UTS HREC APPROVAL NUMBER ETH16-0655.

I _____ *(participant's name)* agree to participate in the research project - Towards Integrative Health Care? The perspectives and experiences of Chinese medicine practitioners and general medical practitioners. *(UTS HREC approval reference number ETH16-0655)* being conducted by Dr Lisa Cheng, University of Technology Sydney, (02) 95546880.

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research as described in the Participant Information Sheet.

I understand that I have been asked to participate in this research because *I am a medical practitioners with a Chinese ethnic background* and that my participation in this research will involve about 10 mins of my time to fill in a survey, and I might be asked in near future to participate in a face-to-face interview of about 20 mins and the interview will be recorded and transcribed.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time without affecting my relationship with the researchers or the University of Technology Sydney.

I understand that I will be given a signed copy of this document to keep.

I agree to be: (please tick if agree, otherwise, please leave it blank)
☐ Audio recorded

I agree to keep confidential all information including all conversations and discussions, materials and methods provided to me by the UTS research team.

I agree that the research data gathered from this project may be published in a form that:
☐ Does not identify me in any way
☐ May be used for future research purposes

I am aware that I can contact Dr Lisa Cheng *(researcher's name)* if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason. Any withdrawal from the research will not prejudice my relationship with my association in any way.

I agree that Dr Lisa Cheng has answered all my questions fully and clearly.

_____ _____/_____/_____
Name and Signature (participant) Date

_____Dr Lisa Cheng_____ _____/_____/_____
Name and Signature (researcher or delegate) Date

NOTE:
This study has been approved by the University of Technology Sydney Human Research Ethics Committee (UTS HREC). If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: Research.Ethics@uts.edu.au, and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

Appendix 3: Surveys

Survey 1 – Chinese Medicine Practitioners (Frenkel 2008)

UTS
UNIVERSITY OF TECHNOLOGY SYDNEY

Part A - Introduction:

(Frenkel 2008)

Chinese Medicine (CM) Survey
Chinese Medicine includes herbal medicines, acupuncture, moxibustion, cupping, scraping (gua sha) and massage therapy.
We would appreciate if you can share with us your thoughts and expectations about these therapies by responding to the following questions:

Part B - Main survey questions:

(Ben-Arye 2008)

Chinese Medicine Use

1. Please indicate all Chinese Medicine treatments that you have practised during the past year:

- ○ Acupuncture
- ○ Herbal medicines
- ○ Moxibustion
- ○ Cupping
- ○ Scraping (Gua Sha)
- ○ Massage therapy
- ○ Others, please state _____

2. Please indicate the reason why your patients have come to see you?

- ○ Recommendation of a friend or relative
- ○ Recommended by medical practitioner
- ○ Previous personal experience
- ○ Online search
- ○ Others, please state _____

3. Have you had any discussion with general practitioner (GP) about Chinese Medicine? If so, who initiated the discussion?

- ○ Yes – the GP has initiated
- ○ Yes – myself
- ○ Yes – patients have requested
- ○ No discussion

Subjective Assessment of CM efficacy and safety

4. To what extent do you believe CM treatments contribute to maintaining good health and well-being?

- ○ Extremely helpful
- ○ Very helpful
- ○ Somewhat helpful
- ○ Not so helpful
- ○ Not at all helpful

5. To what extent do you believe CM treatments are safe?

- ○ Very safe
- ○ Fairly safe
- ○ Unsure
- ○ Maybe unsafe
- ○ Definitely unsafe

6. Do you think a collaboration between CM providers with general practitioners will:

- o Makes a decline in patient's care outcome
- o Makes no different to patient's care outcome
- o Makes an improvement to patient's care outcome

Expectations about the family physician

7. What do you expect your patient's general practitioner regarding CM usage:

- ○ Listen to patients regarding CM
- ○ Ask patients about CM or initiate discussion
- ○ Referral to CM based on efficacy and safety aspects
- ○ Updated knowledge about CM
- ○ Feasibility of offering CM treatment based on appropriate training
- ○ No expectations

Level of Care

8. Where would you like these CM therapies to be provided to patients?

- ○ Within a medical centre, alongside with GP
- ○ Specialist clinic
- ○ Hospital clinic
- ○ Private care
- ○ Health food store

Referral and treatment in an integrative family medicine clinic

9. If CM therapies were available in a family medical centre, who do you think should refer patient to receive these therapies?

- ○ General practitioners
- ○ The nurse
- ○ The pharmacist
- ○ Patient (self-referral)
- ○ Other (please specify)

10. Who should provide CM treatments in a family medical centre?

- ○ CM practitioner (acupuncturist, herbalist, etc.)
- ○ A general practitioner trained to provide CM
- ○ CM practitioner in collaboration with a general practitioner
- ○ Conventional healthcare providers e.g. nurses, pharmacists, under a doctor's supervision

Part C – Demographic

11. Are you:

- ○ Male
- ○ Female

12. What is your age (years)?

- ○ 18-25
- ○ 26-35
- ○ 36-45
- ○ 46-55
- ○ >55

13. Which suburb is your practice?

City/Town: _____
Postal Code: _____

14. Where did you learn Chinese medicine?

- ○ Family inherited
- ○ Apprenticeship to other Chinese medicine practitioners
- ○ College / University, which one? _____

15. How many years have you been practising CM?

- ○ Under 4 years
- ○ 5 – 10 years
- ○ 11 – 15 years
- ○ 16 – 20 years
- ○ over 21 years

16. How long have you been in Australia?

- I was born here
- Less than 5 years
- 6 – 10 years
- 11 – 15 years
- 16 – 20 years
- over 21 years

---------- Please tear this part off ----------

If you may be interested in participating in more in depth discussion in this research, please kindly provide your contact details for our researcher:

Name: _____

Mobile no / email: _____

Prefer day to be contacted: _____

Survey 2 – General Practitioners (Wahner-Roedler 2006)

Part A - Introduction:
(Frenkel 2008)

Chinese Medicine (CM) Survey
Chinese Medicine includes herbal medicines, acupuncture, moxibustion, cupping, scraping (gua sha) and massage therapy.
We would appreciate if you can share with us your thoughts and expectations about these therapies by responding to the following questions:

Part B - Main survey questions:
(Ben-Arye 2008)

Chinese Medicine Usage

1. Please indicate all Chinese Medicine treatments that you have recommended to your patients during the past year:

- ○ Acupuncture
- ○ Herbal medicines
- ○ Moxibustion
- ○ Cupping
- ○ Scraping (Gua Sha)
- ○ Massage therapy
- ○ Others, please state _____

2. Would you be interested in utilising any of the above CM treatments over the next year?

- ○ Yes
- ○ No

3. If you have recommended CM treatments, please indicate why you decided to use it?

- ○ Recommendation of a friend or relative
- ○ Request from patients
- ○ Previous personal experience
- ○ Online search
- ○ Others, please state _____

4. Have you had any discussion with your patients about CM? If so, who initiated the discussion?

- Yes – doctor initiated
- Yes – patients have requested
- No discussion

5. Where do you obtain information about CM?

- Internet
- Patients own search
- Friends / Colleagues

Subjective Assessment of TCM efficacy and safety

6. To what extent do you believe CM treatments contribute to maintaining good health and well-being?

- Extremely helpful
- Very helpful
- Somewhat helpful
- Not so helpful
- Not at all helpful

7. To what extent do you believe CM treatments are safe?

- Very safe
- Fairly safe
- Unsure
- Maybe unsafe
- Definitely unsafe

8. Do you think collaboration between CM providers with general practitioners will:

- Makes a decline in patient's care outcome
- Makes no different to patient's care outcome
- Makes an improvement to patient's care outcome

Expectations about the family physician

9. What do you think is the patient's expectation of their family physician regarding CM:

- Listen to patients regarding CM
- Ask patients about CM or initiate discussion
- Referral to CM based on efficacy and safety aspects
- Updated knowledge about CM
- Feasibility of offering CM treatment based on appropriate training
- No expectations

Level of Care

10. Where would you like these CM therapies to be provided to patients?

- ○ Within a medical centre
- ○ Specialist clinic
- ○ Hospital clinic
- ○ Private care
- ○ Health food store

Referral and treatment in an integrative family medicine clinic

11. If CM therapies were available in a family medical centre, who do you think should refer patient to receive these therapies?

- ○ General practitioners
- ○ The nurse
- ○ The pharmacist
- ○ Patient (self-referral)
- ○ Other, please state _____

12. Who should provide CM treatments in a family medical centre?

- ○ CM practitioner (acupuncturist, herbalist, etc.)
- ○ A doctor trained to provide CM
- ○ CM practitioner in collaboration with a doctor
- ○ Conventional healthcare providers e.g. nurses, pharmacists, under a doctor's supervision

Part C – Demographic

13. Are you:

- ○ Male
- ○ Female

14. What is your age (years)?

- ○ 18-25
- ○ 26-35
- ○ 36-45
- ○ 46-55
- ○ >55

15. Area / Postcode of your practice: _____

16. Where did you obtain your degree?

- ○ NSW
- ○ Interstate, which state _____
- ○ Overseas, which country _____

17. How many years have you been practising?

- Under 4 years
- 5-10 years
- 11-15 years
- 16-20 years
- over 21 years

18. How long have you been in Australia?

- I was born here
- Less than 5 years
- 6 – 10 years
- 11 – 15 years
- 16 – 20 years
- over 21 years

---------- Please tear this part off ----------

If you may be interested in participating in more in depth discussion in this research, please kindly provide your contact details for our researcher:

Name: _____

Mobile no / email: _____

Prefer day to be contacted: _____

Appendix 4: Interview schedule

UTS
UNIVERSITY OF TECHNOLOGY SYDNEY

Interview schedule:
GP-specific questions (Wahner-Roedler 2006)

1. Have you ever referred any patient to a Chinese Medicine Practitioner before? And what type of condition have you referred your patient to them?

2. Amongst those patients you know that they have seen a Chinese Medicine practitioner, do they come back to you to let you know if it was beneficial? What was the outcome?

3. Have you heard of using Chinese Medicine in antenatal conditions before?

4. Do you believe there might be some usage of acupuncture in conditions like Hyperemesis Gravidarum? Ovulation induction? Labour induction?

5. If your patient ask you to refer them to CM, what would you usually do?

6. What is your main concern with regards to CM therapies and what would you warn your patient?

7. Do you think if there is any role in communication between GP and CM practitioners or vice versa?

8. Do you know acupuncture and Chinese herbal medicine practitioners are registered professional?

Appendix 5 – External organisational approval letters

ACMA

CMASA

ABN 90 310 828 414
Email: office@acma.org.au + Website: www.acma.org.au

Confirmatory letter

To whom it may concern,

This is to confirm that Australian Chinese Medical Association (ACMA) Community Health and Research Subcommittee will fully support Dr Nga Chong Lisa Cheng's research project on her research topic of Towards Integrative Heatlh Care? The perspectives and experience of Chinese medicine practitioners (CMP) and general practitioners (GP).

ACMA will assist her in the subject recruitment process. If further clarification is requied, please feel free to contact me on the number listed.

Yours sincerely,

Production Note:
Signature removed
prior to publication.

Emily Hung
General Manager
The ACMA Secretariat

Australian Chinese Medical Association Inc.
Suite 604, 309 Pitt Street, Sydney 2000
Tel 9267 0155 Fax 9267 0003

CHINESE MEDICINE & ACUPUNCTURE SOCIETY OF AUSTRALIA LTD
澳大利亞中醫藥學會 (CMASA)
1F 23 JOHN ST CABRAMATTA NSW 2166
Tel: 02 9727 6831 Email: cmasatcm@hotmail.com
www.australiantcm.com.au

Confirmatory letter

To whom it may concern,

This is to confirm that Chinese Medicine and Acupuncture Society of Australia (CMASA) will fully support Dr Nga Chong Lisa Cheng's research project on her research topic of Towards Integrative Health Care? The perspectives and experience of Chinese medicine practitioners (CMP) and general practitioners (GP).

CMASA will assist her in the subject recruitment process. If further clarification is required, please feel free to contact me on the number listed.

Yours sincerely,

Production Note:
Signature removed
prior to publication.

Guoqing Wei
Chief Executive Officer
CMASA