Abstract

Little is known about why traditional Chinese (TCM) continues to be used and practised by Chinese people despite the existence of evidence-based Western medicine (WM). This study aims to explore Chinese patients and TCM practitioners' attitudes and beliefs towards the utilisation and practice of TCM and to determine if there are any differences in the way in which Chinese people use and practice TCM in different regions of China, in this study, Hong Kong and Guangzhou. A mixed-method, sequential explanatory study was undertaken that involved two phases.

In the first phase, a structured questionnaire translated into Chinese was used to collect data from a convenience sample of Chinese patients attending outpatient clinics in Hong Kong and Guangzhou. A Chinese research assistant who could speak Cantonese and Mandarin distributed the questionnaires to patients attending the TCM outpatient clinics in Hong Kong and Guangzhou. Also, a random sample of Chinese medicine practitioners in Hong Kong was sent a questionnaire by post, as a list of Chinese medicine practitioners names, and clinic addresses in Hong Kong are available on the Chinese Medical Council's Internet website.

For TCM practitioners in Guangzhou, a Chinese research assistant distributed the questionnaire in-person to a random sample of TCM doctors working at the Guangzhou University of Traditional Chinese medicine in Guangzhou. In the second phase of the study, semi-structured interviews were conducted with patients and Chinese medicine practitioners in Hong Kong and patients and TCM practitioners in Guangzhou. Patients and TCM practitioners who took part in an interview were randomly selected from a list of patients and TCM practitioners who had previously filled out a questionnaire in the first phase of the study.

A total of 1,200 patients and 400 TCM practitioners took part in the study, which comprised of 600 patients attending an out-patient TCM clinic in Hong Kong and 600 attending an out-patient TCM clinic in Guangzhou. The response rate for patients who took part was 81.4% (n= 505) and for Guangzhou 91.6% (n=550). For TCM practitioners, the response rate was 55% (n=110) for practitioners in Hong Kong and 61.5% (n= 123) for practitioners in Guangzhou. Patients' mean age was 44.6 years, and the sample consisted of 41.2% males and 58.8% females. For TCM practitioners, the mean age was 45.4 years and the sample consisting of 66.1% males and 33.9% females.

In the second phase of the study, semi-structured interviews were conducted with 16 patients and 16 TCM practitioners in Hong Kong and Guangzhou, respectively. The results showed that for patients in Hong Kong and Guangzhou the most common use of TCM was for the treatment of acute medical conditions, such as colds and flu and also for chronic medical conditions, such as rheumatism and diabetes.

Also, patients in Guangzhou were found to use TCM to "recuperate" the body after taking Western medicines prescribed by WM doctors, or after suffering a chronic illness. Concurrent use of TCM and WM was found to be more common in patients in Guangzhou, than in patients in Hong Kong. The integration of TCM services in hospitals in Hong Kong is notably different from that of China. Unlike China, where TCM practitioners are permitted to treat in-patients inside state-run hospitals, in Hong Kong, TCM practitioners are only permitted to treat patients on an outpatient basis and not as in-patients.

The results of this study contribute to the existing body of literature about the utilisation and practice of TCM by Chinese people in Hong Kong and Guangzhou. The study also provides unique information about the practice of TCM in Hong Kong since the implementation of the Chinese medicine Ordinance and the establishment of the Chinese Medicine Council of Hong Kong. Although the study contributes to the existing body of literature concerning the utilisation and practice of TCM by Chinese people and TCM practitioners 'respectively, it does have several inherent limitations. Among the significant limitations is the fact that, as a cross-sectional survey design was used, therefore no "cause and effect" relationships can be drawn from the results. Furthermore, because statistical tests, in general, require a large sample size to ensure a representative distribution of the population being studied, the total number of patients and TCM practitioners who participated in the study is relatively small.

A Mixed Methods Sequential Explanatory Study of the Utilisation and Practice of Traditional Chinese Medicine by Chinese People in Hong Kong and Guangzhou

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Dedication

To Alex and all my friends and colleagues whose, moral support and kindness provided me with a source of energy and inspiration to undertake this research.

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List of Acronyms and Abbreviations

ANOVA	Analysis of Variance
CAM	Complementary and Alternative Medicine
CFDA	Chinese Food and Drug Administration
CM	Chinese Medicine
CME	Continuing Medical Education
CMP	Chinese Medicine Practitioner
CAM	Complementary and Alternative Medicine
CHM	Chinese Herbal Medicine
CMCHK	Chinese Medicine Council of Hong Kong
CMCTR	Chinese Medicine Centre for Training and Research
CWMB	Chinese-Western Medical Belief Scale
CSSA	Comprehensive Social Security Assistance
DoH	Department of Health
EC	Ethics Committee
HA	Hospital Authority
ICWMPP	Integrated Chinese-Western Medicine Pilot Programme
IRB	Institutional Review Board
MHRA	Medicines and Healthcare Products Regulatory Agency
NCRM	National Centre for Research Methods
NHS	National Health Service
NHI	National Health Institute
PRC	People's Republic of China
SARS	Severe Acute Respiratory Syndrome
SPSS	Statistical Package for the Social Science
SATCM	State Administration for Traditional Chinese Medicine
TCM	Traditional Chinese Medicine
TCMP	Traditional Chinese Medicine Practitioner
THS	Thematic Household Survey
UGC	University Grants Committee

WHO	World Health Organization
WM	Western Medicine

Chapter 1: Introduction

You measure the size of the accomplishment by the obstacles you had
to overcome to reach your goals.
Booker T. Washington

1.1 Introduction

This study examines the utilisation and practice of traditional Chinese medicine (TCM) by Chinese people in Hong Kong and Guangzhou. These two regions of China are both politically and culturally different from each other, and the historical development of traditional Chinese and the way it is practised in the two regions is also quite different. A mixed-methods design was used, whereby quantitative and qualitative data were collected from Chinese patients and TCM practitioners (TCMPs) in Hong Kong and Guangzhou. The study aimed to examine Chinese patients and TCMPs attitudes and beliefs towards TCM and Western medicine (WM) and to identify if there are any similarities and differences in the way in which TCM is utilised and practised in the two regions.

Several studies have previously been published about the utilisation of TCM by Chinese people in Hong Kong (Chen, 2004, Chung et al., 2010, Chung et al., 2007, Critchley et al., 2005, Griffiths, 2006, Lai, 2007, Lau et al., 2001, Rochelle and Yim, 2014, Sun et al., 2017, Wong et al., 1995, Wong et al., 1997, Yan, 2013). Furthermore, similar studies have been published in English about the utilisation of TCM by Chinese people in mainland China, (Cai et al., 2015, Chung et al., 2007, Li, 2007, Liu and Xu, 2013, Liu et al., 2015, State Administration for Traditional Chinese Medicine of the People's Republic of China, 2003, Zhou and Baker, 2002).

However, few studies have been published to date concerning the practice of TCM by TCMPs in Hong Kong and China. In Hong Kong, one of the earliest studies and indeed, the only study to date that about the practice of TCMP in Hong Kong was a study conducted by Wong et al. (1993a). Subsequently, this was later followed by a paper by Griffiths and Chung (2009), about the development and regulation of TCMPs in Hong Kong, which also provided insight into the history and future of Chinese medicine in the territory. This was followed in the same year by a study published by Chung et al. (2009b) which examined postgraduate education and training of TCMPs in Hong Kong which focused on career development and postgraduate training for public university-trained TCM practitioners in Hong Kong. Other than the study by Liu et al. (2017), which was based on data collected from 4,503 doctors in 28 provinces of China, there has not been any further studies published to date about the practice of TCM in mainland China, that have

been published in English. Therefore, the study by Liu et al. (2017) is the most up to date source of information about the practice of TCM in China.

A brief introduction to the thesis is outlined in this chapter. Section 1.2 describes the background of TCM in Hong Kong and also provides an outline of the historical development and regulation of TCM in Hong Kong. Following this, a description of the education of TCMPs and the practice of TCM in Hong Kong is included. Section 1.3 focuses on TCM in China in which the historical development and regulation of TCM in China is outlined and also the education of TCMPs in China and aspects relating to the practice of TCM in China. The motivation for conducting this study is described in section 1.4 and the research questions and methodological approach used in the study in section 1.5, respectively. The research design and context of the study are described in section 1.6 and the significance of the study in section 1.7. Lastly, the organisation of the thesis is described in section 1.8, and the summary of the chapter concludes in section 1.9.

1.2 TCM in Hong Kong

When compared to the historical development of TCM in China, the development of TCM in Hong Kong is very different, mainly because Hong Kong was a former British colony from 1842 to 1997. From 1842 to 1870, under the British colonial government, TCM was considered to be an indigenous custom, and the colonial government largely adopted a "Laissez-faire" policy towards TCM and TCMPs mainly provided public medical service instead of WMDs

However, in 1870 the British government enacted the Chinese hospital Incorporation Ordinance, and Tung Wah Hospital was established. It was eventually completed in 1872. Later in 1896, Tung Wah hospital introduced Western medical services. In 1896, the first Chinese doctor (Dr Chung Boon-chor) who was trained in WM was appointed "Chief" of the hospital which marked the beginning of Tung Wah Hospital as a medical institution offering both CM and Western medical services.

In 1940, a selection of prescriptions compiled by TCMPs at Tung Wah Hospital improved prescriptions of Chinese medicines. In 1942, Hong Kong came under Japanese occupation, and Chinese herbs were in short supply. The Japanese Authority at the time told the hospital to stop all CM services. As a result, only limited Western medical services were provided to in-patients. After the Japanese occupation, only Chinese

medicine outpatient services were resumed. As time elapsed, WM gradually took over the significant role of health care in Hong Kong.

In early 1980, several reports about the safety and practice of Chinese medicine in Hong Kong were reported by the public. Because of these growing concerns in August 1989, the British Hong Kong Government appointed a Working Party on Chinese medicine. The task of the Working Party was to review the practice and use of TCM in Hong Kong and to advise the government about measures that should be taken to promote the proper and ethical practice of TCM.

In October 1994, the Working Party submitted their report to the Government, and following the submission of the Working Party's report, several recommendations were proposed. Based on the outcomes of the report, the Government appointed a Preparatory Committee on Chinese Medicine in April 1995, to make recommendations to the Government about the promotion, development and regulation of TCM in Hong Kong.

During its four years of appointment, the Preparatory Committee conducted a survey on TCM medicine practitioners in Hong Kong and reviewed the use and control of Chinese medicines and recommended measures for the regulation and development of TCM in Hong Kong. The Preparatory Committee subsequently submitted two reports to the government in March 1997 and March 1999, respectively.

In their reports, the Preparatory Committee made several recommendations to the government for better protection of public health. One of the Preparatory Committee’s first recommendations was that a statutory body should be set-up to regulate, the practice, use and trading of TCM in Hong Kong. They also recommended that a system of accreditation and regulation which include registration, examination and discipline of TCMPs be established, with transitional arrangements for existing practitioners. Furthermore, In addition, the Preparatory Committee also recommended that a control mechanism, through systems of registration, licensing and labelling be set up to regulate the manufacture, distribution, retail and import and export of Chinese medicines.

The Preparatory Committee also recommended that full-time undergraduate courses in TCM be developed and be made available in Hong Kong. Furthermore, they also recommended that scientific research and development into TCM should be encouraged, supported and integrated into Hong Kong's medical and healthcare system on a gradual basis. The public and members of the TCM medicine profession and traders

of Chinese medicines generally supported the Preparatory Committee's recommendations on the direction of development of TCM in Hong Kong. Based on the Preparatory Committee's recommendations and public views collected in the consultation, the Chinese Medicine Bill was introduced into the Legislative Council in February 1999, which was subsequently passed in July the same year.

1.2.1 Regulation of TCM in Hong Kong

The Chinese Medicine Ordinance (Cap. 549) provided for the setting up of the Chinese Medicine Council of Hong Kong ("The Council"). The statutory body comprises of practising TCMPs, members of the trade of Chinese medicines, academics, laypersons and government officials was established in September 1999 and became responsible for implementing regulatory measures for Chinese medicines in Hong Kong (Chinese Medicine Council of Hong Kong, 1999).

To date, the Council has completed all its work relating to the registration and transitional arrangements of TCMPs who had been previously practising TCM in Hong Kong before the introduction of the Chinese Medicine Ordinance. The Council has also implemented regulation concerning the registration, examination, continuing education and discipline of all TCMPs in Hong Kong (Chinese Medicine Council of Hong Kong, 1999).

After subsidiary legislation concerning the regulation of Chinese medicines in Hong Kong was passed in January 2003, in order to regulate the sale and manufacture of Chinese medicines in the territory the Council began accepting applications for the licensing of Chinese medicine from traders, in April and December 2003 respectively. The safety, efficacy, and quality of proprietary Chinese (herbal and proprietary) medicines would, therefore, be assessed before the products could be registered. The dispensing, storage and labelling of Chinese (herbal and proprietary) medicines were also subject to regulation. After the licensing system of Chinese herbal and Chinese proprietary medicines, a registration system of Chinese medicines was implemented in 2003. Legislative provisions specifying that Chinese herbal and proprietary medicines traders had to apply for a licence and regulations on import and export of Chinese medicines also came into effect in January 2008 (Chinese Medicine Council of Hong Kong, 1999). Legislative provisions specifying that proprietary Chinese medicines shall also be registered, and clinical trials, or medicinal tests should be conducted on proprietary Chinese medicines upon application, also became effective with effect from December 2010.

Moreover, legislative provisions specifying that proprietary Chinese medicines shall be labelled and contain package inserts as prescribed by the regulations also came into effect in December 2011. Up until the present, all legislative provisions under the Chinese Medicine Ordinance relating to the regulation of Chinese medicine have now come into force.

In 2000, the Food and Health Bureau issued a consultation document on healthcare reform, covering ways to promote the development of Chinese medicine in Hong Kong. An essential part of the document is to incorporate Chinese medicine into the public healthcare system, including the provision of outpatient Chinese medicine services in the public sector, and introduction of Chinese medicine practice in selected public hospitals, such as carrying out clinical research and facilitating the development of standards and models of integration of Western and Chinese medicines. The plan included the setup of a Chinese medicine clinic in each of the 18 districts of Hong Kong. Moreover, three local universities provided full-time degree courses on Chinese medicine, which can produce an adequate pool of high calibre professionals to support Hong Kong's development as an international centre for Chinese medicine. Furthermore, according to the 2010 Policy Address, the government would work out a timetable for mandatory compliance with the "Good Manufacturing Practice" for the manufacture of proprietary Chinese medicines, to enhance the quality of proprietary Chinese medicines manufactured in Hong Kong. The government and the Council are now extensively soliciting opinions of the trade to map out details of the plan and implementation timetable.

In April 2012, the Chinese Medicine Division of the Department of Health was designated as the "World Health Organization Collaborating Centre for Traditional Medicine" to help promote a regional strategy for traditional medicine in the Western Pacific Region and develop and improve WHO Traditional Medicine Strategy. Because of the principles that underly the practice of Western and Chinese medicine. Some Chinese people believe that although Chinese medicine and Western medicine are quite distinct from one another, they also believe that Western medicine and Chinese medicine are complementary to each other. The belief that Western medicine and Chinese medicine are both different, yet complementary to each other stems from an ideology that some Chinese patients have about the relationship of specific symptoms with certain diseases. An example of this is that some Chinese people believe that conditions chronic arthritis and advanced cancer cannot be only treated by the use of Western medicine, but also by using Chinese

medicine. As such, they may consult both WM doctors and TCMPs concurrently under certain circumstances.

In Hong Kong, besides TCMPs, people in Hong Kong also have access to a wide range of doctors who have undertaken training in WM from a variety of specialities, ranging from those who work in private clinics to those employed by the government to work in public hospitals and clinics.

With the implementation of regulations and the standardisation of Chinese medicine practices by the Hong Kong Government, Hong Kong people now have access to registered TCMPs and although many TCMPs in Hong Kong work mainly in the private sector. As a result of further government initiatives, many TCMPs now work in Government sub-vented clinics government administered by Hospital Authority (HA) in Hong Kong.

Because of the implementation of government regulations concerning the qualifications, training and practice of TCMPs in Hong Kong, some private health insurance providers have offered plans that provide private healthcare insurance plans that allow Hong Kong people to consult TCMPs. However, not all private healthcare insurance plans cover all forms of TCM, as one plan could cover acupuncture and herbal medicine, but may not cover visits to qigong practitioners. Also, one private insurer's plan may only provide cover for TCM acupuncture; however, it may limit the number of consultations a patient can have with a TCMP.

In late 1930, Zeng Tianzhi established the Scientific Acupuncture College and Lu Jueyu established the Practical Acupuncture Institute in Hong Kong (Xue et al., 2015). These were the earliest educational institutions of acupuncture in Hong Kong. In 1991, Hong Kong University offered advanced courses in Chinese medicine through the Hong Kong Institute of Vocational Education, which is the earliest publicly-run school in Hong Kong. The establishment of the Chinese Medicine School of HKBU in 1998 marked the beginning of TCM higher education in Hong Kong. The first group of professional TCMPs in Hong Kong graduated with bachelor's degrees in 2003.

The most popular TCM educational method remains the traditional father-son and master-apprentice education pattern. Although institutional education is a relatively recent phenomenon, it will continue to develop in the future.

There is currently no independent TCM hospital in Hong Kong; therefore, expertise is drawn from other educational sources in China. For example, Hong Kong cooperates with the Shanghai University of TCM and Guangzhou University of TCM in education and research; this enables the adoption of Chinese educational standards for TCM education and the use of university experience in running teaching schools.

The School of Chinese Medicine at the Chinese University of Hong Kong is an example and is affiliated to the Li Ka Shing Faculty of Medicine (LKSFM). The LKSFM comprises of mainly local Hong Kong students and admits about 25 students each year. The LKSFM offers full-time, part-time, and graduate programs in Chinese medicine. The undergraduate education lasts six years and includes Chinese medicine and biomedicine courses, as well as early and substantial clinical training. The courses utilise three teaching languages (English, Cantonese and Mandarin).

In the School of Chinese Medicine, Chinese medicine courses are taught in Mandarin, and Cantonese is used during clinical training practice sessions. WM and other public university courses are taught in English. Clinical skills training courses are also offered. During the first five years, students undergo clinical training with supervisors in Hong Kong to cultivate and establish their Chinese medicine clinical thinking. During the sixth year, students go to mainland China for further clinical training. There is also a tradition of in-the-field investigation that includes gathering herbs in Sichuan and Yunnan provinces and visit farms to study medicinal materials and toxicology.

Part-time programmes are provided for TCMPs, acupuncturists, and TCM pharmacists with at least five years of work experience to further improve their professional and clinical skills. The programmes offered include Master of Chinese Medicine (Acupuncture), Master of Medicine (Internal Medicine), Master of Science (Chinese Materia Medica), and Bachelor of Pharmaceutics of TCM. Alongside the development of TCM, these graduate programmes have also enrolled students with MPhil or PhD degrees, including TCM and biomedical science, to foster the modernisation and scientific development of TCM.

1.2.2 Education of TCMPs in Hong Kong

Prior to the return of sovereignty of Hong Kong to China, Hong Kong did not have any government-funded tertiary education institutions that taught TCM. However, in 1917, the Qingbao Chinese Medicine Evening School (QCMES) was established by Chen Qing Bao, a renowned TCMP from Guangdong. The QCMES

was the first amateur TCM school and was established before the establishment of a specialised training college in Shanghai, PRC.

After the Japanese War, a significant number of TCM "masters" immigrated to Hong Kong in order to escape from the politically unstable Communist Party government in China. As a result of increasing popularity and reputation, the study of TCM increased, and the number of private educational institutions that specialised in teaching TCM in Hong Kong increased to more than 15 schools during the 1950s.

As TCM was outside of the public healthcare education system, TCM education was primarily supported privately by Chinese advocates and philanthropists. However, the establishment of a course at an institution in Hong Kong known as the Chinese Medicine Institute (CMI), in 1947, was considered to be an institution that provided a comprehensive form of TCM education. As the first school to provide a systematic TCM education, this pioneering programme established the basis for TCM education in future. The school offered a three-year undergraduate and a 4-year master's course of study, with the content composed of both Western and traditional Chinese medical knowledge such as physiology, pathology, acupuncture and internal medicine.

In 1998, the same year as the establishment of the School of Chinese Medicine in Hong Kong at the Baptist University of Hong Kong, the CMI decided to close its doors. The CMI's well-respected TCM programme, which had attracted students from Asia and America, embraced its 50th anniversary and ended its mission due to the repetitive ambition in TCM education as HKBU (Chan, 2015).

After 1997, acknowledging that TCM was a vitally important sector of the healthcare system, the Hong Kong government amended and regulated the development of TCM in Hong Kong, by the introduction of Article 138 of the Basic Law (The Government of the Hong Kong Special Administrative Region of the People's Republic of China, 1997).

Following the Chief Executive's policy address in 1997, HKBU became the first academic institution in Hong Kong to introduce the first undergraduate degree course in Chinese medicine. In 1998, the Bachelor of Chinese Medicine and Bachelor of Science in Biomedical Science degree was introduced, which was also the first undergraduate degree programme to be funded by the University Grants Committee (UGC). In 1999 HKBU then established a School of Chinese Medicine. Besides, the undergraduate degree course in Chinese medicine, HKBU also launched a Bachelor of Pharmacy course in Chinese Medicine, the only

one of its kind in Hong Kong. Subsequently, in 1999 an undergraduate degree course in Chinese Medicine was offered by the Chinese University of Hong Kong (The Chinese University of Hong Kong, 2018). In 2002, a course in Chinese medicine was offered by the University of Hong Kong (HKU) (The University of Hong Kong, 2018).

Today, there are three officially recognised universities in Hong Kong offering undergraduate and postgraduate degree courses in TCM in Hong Kong. Unlike China, Western medical doctors in Hong Kong do not have the legal authority to prescribe Chinese medicine herbs. Similarly, TCMPs in Hong Kong are not permitted to prescribe any Western medicines or use Western medical diagnostic equipment or laboratory diagnostic results.

1.2.3 The Practice of TCM in Hong Kong

To promote the development of "evidence-based" Chinese medicine and provide training placements for graduates of local Chinese medicine bachelor's degree programmes, the Hong Kong Government set-up, in phases, one Chinese Medicine Centre for Training and Research (CMCTR) in each of the 18 districts in Hong Kong (Hospital Authority Hong Kong, 2018). These CMCTRs are run by Non-Government Organisations (NGOs) who are responsible for the day-to-day operation of the CMCTRs.

The CMCTR operate Chinese medicine clinics under a tripartite collaboration model involving the Hospital Authority (HA), non-government organisations (NGOs) and local universities in Hong Kong. The universities include the Hong Kong Baptist University (HKBU), the Chinese University of Hong Kong (CUHK) and the University of Hong Kong (HKU), all of whom offer undergraduate and postgraduate degree courses in Chinese medicine (Hospital Authority Hong Kong, 2018). Currently, the 18 CMCTRs provide a total of 216 training places for graduates of Chinese medicine. They also serve as a platform to take forward an initiative known as the "Integrated Chinese-WM Pilot Programme" (ICWMPP), which enables HA patients to receive Chinese and WM treatments, at the same time (Hospital Authority Hong Kong, 2018).

Services provided by the CMCTRs are not part of the regular services provided by the HA. Currently, each CMCTR is required to provide not less than 60,000 consultations per year, of which, not less than 30,000

consultations should be Chinese medicine general consultations. The remaining consultations should include other Chinese medicine services such as acupuncture and tuina, a type of TCM therapeutic massage.

In 2016, the total number of attendances at the 18 CMCTRs exceeded 1,160,000. Other than the CMCTRs, there are also Chinese medicine clinics, run by NGOs and universities that provided reasonably-charged Chinese medicine services (The Government of the Hong Kong Special Administrative Region, 2017).

The objectives of CMCTRs and the public general out-patient clinics that operate under the HA are different. Since the establishment of the first CMCTR in 2003, the standard fee for a Chinese medicine general consultation service has been maintained at HK$ 120 (which includes the consultation fee and two doses of Chinese medicines). The fees for other Chinese medicine services such as acupuncture and tuina provided by the CMCTRs are determined by the NGOs concerned (Hospital Authority Hong Kong, 2018). Each CMCTR is required to set aside at least 20% of the attendance quota of the Chinese medicine general consultation service for recipients of Comprehensive Social Security Assistance (CSSA), who can receive the service with the fee of $120 waived. Besides this, some individual CMCTRs run by NGOs also provide discounts for different groups of people such as the elderly (Hospital Authority Hong Kong, 2018).

At the time of writing this thesis, the Hong Kong government is actively planning the construction of a Chinese medicine hospital in Hong Kong. However, before the government can proceed with building the hospital, several aspects relating to the planning and development of the hospital that needs to be taken into consideration. As the construction of the Western hospitals in Hong Kong and overseas countries are quite different.

1.3 TCM in China

Chinese medicine has a very long history which spans over 3,000 years. Its earliest roots are thought to be around the second century BC. However, it is not clear though if TCM began any earlier than this, as no records have been identified to date that describes how Chinese people treated medical conditions before the second century.

The earliest written records about TCM is a medical text titled “Huang Di Nei Jing” or the Yellow Emperor’s Inner Canon. It was compiled over 2,200 years ago during (475-221 BC) and is regarded as the first and most representative medical text about early TCM in China.

Western missionary doctors went to the Qing Empire (1644-1911) by the hundreds and taught Chinese scholars about WM using textbooks they brought with them. It was also during this time that political leaders of China wanted to rid China of ancient medical ideas, as they believed them to be superstitious and non-scientific.

In 1911, after the collapse of the Qing Dynasty, Western concepts, of medicine started to pervade China slowly, and by the 1900s Western ideas were becoming more and more embraced as a means to modernise the country. In 1942 the new Kuomintang government came to power in Nanjing, under Dr Sun Yat Sen and it was during this time that TCM started to be considered as backward ways of doing things, particularly to those who wished to modernise China. Wang Daxie, who was the Minister of Education in Sun Yat Sen's government was, therefore, one of the first officials to call for the abolition of TCM.

In March 1929, members of 132 TCM associations congregated in Shanghai and a National Union of Associations for Chinese Medicine was formed. From that day forward, March 17th was declared the birthday of Chinese medicine in China

In 1949, the People's Republic of China (PRC) was established with Mao Zedong as its Chairman. However, up to and before the establishment of the PRC, several areas of China experienced a shortage of food, shelter and clothing, and the health of the Chinese population in these areas suffered greatly. Epidemics and diseases such as cholera, plague, smallpox, black fever, diphtheria, scarlet fever, malaria, and tuberculosis, were prevalent and caused hundreds of thousands of deaths. As a result, in 1942, Mao Zedong instructed his army to uproot all "shamanic beliefs and superstitions" (Fruehauf, 1999) and form model public health villages. Despite all the negative sentiment about Chinese medicine during this period, its practice was impossible to eradicate. In 1942, as previously stated, Mao Zedong had ordered the government to banish all superstitious and shamanic beliefs from the Yanan region and to create public health villages.

In 1949 after Mao Zedong, drove the Kuomintang out of China, to what is today known as Taiwan, the Peoples Republic of China was established, under Mao Zedong. In the first half of the 20th century, the Chinese population suffered many diseases and plagues.

Between 1953-1959, well before the cultural revolution was launched, Mao reversed his anti-Chinese medicine stance. Chinese medicine was used as a symbol for China and considered a national treasure by the government.

In 1954, the Department of Chinese Medicine was established under the Ministry of Public Health, as a result of Mao's endorsement, institutions, such as the Shanghai College of TCM, Beijing College of TCM, Chengdu College of TCM, Guangzhou College of TCM and Nanjing College of TCM were established.

In 1958, at the beginning of Mao's “Great Leap Forward” campaign, the practice of TCM again experienced more changes. Mao revealed his vision of integration of Eastern and WM, which led to a search for 2,000 Chinese physicians highly trained in WM to attend special seminars dedicated to the study of Chinese medicine over two years. Only about 200 Chinese physicians graduated from this programme, and many of these doctors became top administrators in the 1980s and 1990s, as China once again sought to open its doors to both Eastern and Western thought after the cultural revolution. Mao's integration policy also led to the establishment of TCM inpatient and out-patient departments in hospitals in China and TCM education was restructured to include some WM instruction. Thus, many patients turned to TCM treatments when they believed that Western therapies were not successful.

In 1965, in Beijing on 26 June 1965, Mao stressed the need to reform medical education. Consequently, the old medical curriculum was buried, and the most revered medical practitioners were killed, imprisoned or sent to indoctrination camps for their "traditional" ways of thinking. The doors of learning were now opened to workers, peasants, soldiers and other members of the underprivileged classes. Entrance exams were scrapped, admission was based on family background and political status. Those passing through this system received minimal training in Western and Chinese medicine. This movement provided the bulk of the "barefoot doctors," who had minimal medical knowledge but served a significant role in addressing medical needs in the countryside. In 1976, Mao died, and academics, artists, professionals, and TCM and Western doctors slowly re-emerged into society.

Today, medicine in China focuses very much on integration, seeking a fusion of East and West. The challenge is to extract the best from both systems to maximise the benefit for the patient. Health statistics have shown that the practice of both WM and TCM has proliferated. Western and integrated medicine - has emerged, which offers patients better healthcare choices than any one of the systems alone.

1.3.1 Regulation of TCM in China

TCM is subject to different laws and regulations in China SATCM is the official body in China that makes and implements laws regulating the practice of TCMPs and maintains catalogues of Chinese medicines.

On June 26, 1998, at the 3rd Meeting of the Standing Committee of the 9th National People's Congress, five Chapters of law governing the examination, registration, practice, assessment and training and legal responsibilities of TCM doctors were implemented by the People's Republic of China, information (State Administration for Traditional Chinese Medicine of the People's Republic of China, 2017b)

Today, TCM continues to be used extensively in China by many Chinese people. In 1997, TCM was estimated to contribute to approximately 40% of all healthcare in China. TCM is officially state-supported and institutionalised (Hesketh and Zhu, 1997), and approximately 95% per cent of Chinese hospitals has a TCM department (Chen, 1997).

1.3.2 Education of TCMPs in China

The education and training of TCMPs in China who practice WM is also unique. Approximately 98% of physicians in China who have trained in WM have also received some TCM training (Harmsworth and Lewith, 2001).

In China, the earliest tertiary institution for TCM was the Nanjing University of TCM, which was evolved from the Jiangsu Province Advanced School of Chinese Medicine established in 1954 (Xue et al., 2015). In 1956, the first batch of TCM tertiary institutions approved by the State Council included four universities, namely, Beijing University of Chinese Medicine, Chengdu University of TCM, Shanghai University of TCM, and Guangzhou University of Chinese Medicine (Xue et al., 2015).

According to data provided by the SATCM, in 2013, there are 45 TCM tertiary institutions and another 215 tertiary institutions provide in mainland China (Xue et al., 2015). The duration of TCMP degree courses in China at an undergraduate level generally take five years to complete (Xue et al., 2015) and for master's degrees and doctoral degrees 3 years duration.

In 2011, Beijing University of Chinese Medicine started a 9-year Chinese medicine program called the "Qihuang Programme" a combined undergraduate and doctoral degree. During the first five years of which, students follow the undergraduate teaching curriculum, then in the fourth year, an entrance examination is held to enable eligible students to enrol directly into the subsequent doctoral curriculum (Xue et al., 2015).

Later, in 2012 a new curriculum was developed called the "cultivation model of Chinese medicine. The new curriculum saw the introduction of different Chinese medicine medical degrees, such as integrative medicine, and other types of training. Other courses were also provided for acupuncturists and tuina practitioners (Xue et al., 2015). All of these programmes use an integral training model called "five plus three," which comprises five years of undergraduate training, with pre-clinical courses and three years of internship training. On graduation from these academic course's students obtained a Bachelor of Medicine and Master of Clinical Medicine degree.

In 2015, Beijing University of Chinese Medicine implemented what is known as new cultivation models of programmes towards non-Chinese Medicine majors. For instance, the new Chinese Materia Medica program, called the "Shizhen Guoyao Programme", is an 8-year integral programme comprising both domestic and international training and combining bachelors and doctoral degrees (Xue et al., 2015).

1.3.3 The practice of TCM in China

TCM is a healthcare sector in China that consists of TCM services provided by TCM doctors using TCM products (Chinese patent medicine and Chinese herbs). TCM hospitals are medical institutions that provide TCM treatment and products to patients to maintain public health. (Wang et al., 2016). Before the founding of the People's Republic of China, there were no established TCM hospitals in China only private pharmacies operated by TCM doctors.

In 1954, in order to protect TCM as a national treasure of China and provide affordable medical services, the Central government initiated a TCM hospital system. However, during the Cultural Revolution in the late 1960s and 1970s, the practice of TCM in China was curtailed. The Integration of TCM and WM was advocated by the government, to encourage both TCMPs and WM doctors to learn from each other and to improve their medical practices (Wang et al., 2016).

With China's opening-up to the outside world in 1978, more and more Western medical discoveries and practices have been introduced to China, as a result of which, many TCM hospitals in China had to adopt more and more WM out-patient prescriptions and in-patient treatments. WM drugs, including chemical and biopharmaceutical drugs, were also introduced into TCM hospitals (Wang et al., 2016).

According to an article published by Xinhua Mr Ma Jianzhong, Deputy Head of the SATCM stated that China now has 4,238 TCM hospitals, with 877,000 beds, therefore, "this indicates that the public well accepts the TCM," he said. (XinhuaNet, 2018). Two major categories of TCM professionals are found in TCM hospitals, TCMPs and herbalists. TCMPs are responsible for clinical diagnosis and treatment of various common diseases, and TCM herbalists are responsible for the preparation and dispensing of TCM.

1.4 The motivation for conducting this study

Although Chinese people have particular values and perceptions about health and illnesses, some may have different attitudes and beliefs concerning the use of TCM and WM when they feel unwell or are suffering

from a disease. When this happens, what factors determine whether a Chinese person will utilise TCM, WM or indeed both forms of medicine to treat their medical condition or whether they will consult a TCM practitioner, or a doctor who practices WM, or both, is not fully understood. It is feasible that some Chinese people utilise TCM because they believe that WM cannot cure their illness or disease, or because they believe that TCM is safer than WM, or that it has TCM has fewer side-effects than WM. In some cases, it could also be because some Chinese people are unable to afford the high cost of WM treatment.

Whatever their reasons, little information exists to date in the published literature why Chinese people use one form of treatment over another or both. Furthermore, there is no published data that examines TCMPs attitudes and beliefs towards TCM and WM and why they practice TCM and not WM.

My motivations for conducting this study stem from the fact that I have lived and worked in Hong Kong for many years. During this time, I would often discuss with various Chinese people in Hong Kong their thoughts and perceptions about TCM and WM, and how its practice differed between Hong Kong and China. As such, I became aware that Chinese people in Hong Kong compared with Chinese people in China had quite different attitudes and beliefs towards TCM and WM. I questioned whether this was due to their attitudes and beliefs towards TCM, their culture or because of other reasons.

Since I have lived and worked in Hong Kong for over twenty-five years, I was able to witness, first-hand, the introduction of legislation governing the training and practice of TCM in the territory. Furthermore, during my time at the University of Hong Kong, I was also involved in the writing of clinical trial protocols for studies involving TCM products. I also interacted with various academic personnel in different government departments, including the Chinese Medicine Regulatory Office of the Department of Health.

The Chinese Medicine Regulatory Office (CMRO) of the Department of Health is, among others responsible for the enforcement of the Chinese Medicine Ordinance (CMO) and also for providing professional and administrative support to CMCHK.

Although the practice of TCM and WM is integrated and well-established, in mainland China. In Hong Kong, TCM and WM are practised separately, and the training of TCMPs and WM doctors is separate to the training of TCMPs in Hong Kong. Because of this, I was particularly interested in whether Chinese people who used TCM in Hong Kong and China had different attitudes and also TCMPs attitudes and beliefs towards TCM and why they chose to practice TCM.

Although many studies have, over the years, explored Chinese patients' attitudes and beliefs about TCM and WM, very few studies have examined the practice of TCM. This study, therefore, focuses on Chinese patients and practitioners' attitudes towards TCM and its practice in Hong Kong and Guangzhou, two geographically separate regions of China. Hong Kong and Guangzhou are both culturally and politically different from one other. This study, therefore, attempts to determine whether any differences exist between Chinese patients' attitudes towards TCM and WM in Hong Kong Kong and Guangzhou and also examines the practice of TCM in the two regions, as well as TCMPs attitudes and beliefs towards TCM and WM.

1.5 Research questions and methodological approach

Based on the research objectives stated above, this study addresses the following three research questions:

RQ1	What are the factors that impact on Chinese patients' decisions to use TCM?
RQ2	What are the factors that impact TCMPs decisions to practice TCM?
RQ3	Do the factors differ for Chinese patients and TCMPs in Hong Kong and Guangzhou?

The present study is a mixed-method study, and this type of methodological approach enables quantitative data to be used in combination with narrative data, such as data obtained during interviews with patients and TCMPs. In Hong Kong and Guangzhou. The study is also designed as a sequential mixed-methods study, where the quantitative and qualitative data are collected and analysed sequentially. The aim of mixing both quantitative and qualitative components of this study is to enable a deeper understanding to be obtained about Chinese patients and TCMPs perceptions and beliefs about the way TCM is utilised and practised.

1.6 Research design and context

Data for this study were collected in Hong Kong and Guangzhou. A random sample of patients attending TCM outpatient clinics in Hong Kong and Guangzhou were sampled, and a random sample of TCMPs working in Hong Kong and Guangzhou were also sampled. In Hong Kong, the register of TCMPs was used to identify the names and addresses of all registered TCMPs working in Hong Kong. In Guangzhou, a random sample of TCM doctors working at the 1st Affiliated Hospital of Guangzhou University of Chinese Medicine was sampled.

1.7 Significance of the study

This study is significant for several reasons. Firstly, the results will further our understanding of how Chinese people utilise and practice TCM. Secondly, as the training and practice of TCM in Hong Kong and China are different, this study could be useful to governments and healthcare providers in other countries, as it provides useful information about the different ways TCM is regulated in Hong Kong and China. Thirdly, the results from this study will provide useful information about various TCM treatment modalities that are commonly used by TCMPs in Hong Kong and China, which could be of interest to WM doctors who need to be aware what complementary and alternative medicine (CAM) therapies Chinese and other Asian patients may be using concurrently with WM.

Lastly, the results of this mixed-methods study will demonstrate the paradigmatic differences in the various factors relating to Chinese people's reasons to use TCM and practitioners' reasons to practice TCM. Lastly, a theoretical foundation is also established for future studies, along with the expansion of theoretical knowledge and the development of a formal theory about the differences relating to utilisation and practice of TCM by Chinese people in different regions of China.

1.8 Organisation of the thesis

This thesis is organised into eight chapters. The current chapter outlines the background of the study, the motivation for conducting the study, the research questions and methodology as well as the contributions of the study. It concludes with a description of the organisation of the thesis.

Chapter two reviews the current literature in the area pertinent to the practice and utilisation of TCM and critically reviews the existing theory relating to the utilisation and practice of TCM. By reviewing related literature and discussing the existing knowledge, the motivation and purposes of the thesis will be explained in more detail. It also provides the theoretical background under which this study is conducted and includes an overview of TCM in Hong Kong and China, as well as the governance and training of medical personnel who practice TCM.

Chapter three outlines the theoretical framework, design and methods underpinning the study, using pragmatism as a theoretical underpinning of the study a mixed-method sequential explanatory design was used to explore attitudes and beliefs of Chinese patients and TCMPs. The chapter also provides the

justification and rationale for using a mixed-methods approach in this study. It also discusses the two phases of research that are used in the research design, namely phase 1 (quantitative phase) and phase 2 (qualitative phase) data.

Chapter four presents the results obtained by collecting and analysing quantitative data from Chinese patients during Phase 1 of the study. A description of the participant's demographics as well as the results of a survey of patients attending Chinese medicine outpatient clinics in Hong Kong and Guangzhou are also presented.

Chapter five presents the results obtained by collecting and analysing quantitative data from TCMPs during Phase 1 of the study. A description of the practitioners' demographics as well as the results of a survey of practitioners in Hong Kong and Guangzhou are also presented.

Chapter six contains qualitative results and analysis of interview data from Chinese patients in Hong Kong and Guangzhou. In the qualitative aspect of this study, semi-structured interviews were conducted with volunteer patients in Hong Kong and Guangzhou and framework analysis was employed to analyse the interview data.

Chapter seven contains qualitative results and analysis of interview data from TCMPs' patients in Hong Kong and Guangzhou. In the qualitative aspect of this study, semi-structured interviews were conducted with volunteer TCMPs in Hong Kong and Guangzhou and framework analysis were employed to analyse the interview data.

Chapter eight contains a discussion of the main findings for each research questions defined in Chapter 2

Chapter nine, the concluding chapter outlines the main conclusions of the study and the various limitations of the study. Lastly, some recommendations are provided, and some suggestions for possible future research are also included.

1.9 Summary of Chapter

The first chapter introduces the topic of the research study. It outlines the regulation, education, training and practice of TCM in China, and is followed by a discussion of the development and regulation of TCM in Hong Kong. Also, an outline of the Chinese medicine workforce in both Hong Kong and China was

described and also a description of the regulation of TCM in Hong Kong and China. Lastly, the chapter concludes with a brief discussion of my motivations for conducting the research and an outline of the research questions and methodological approach used to undertake the study.

Chapter 2: Literature Review

Try not to become a person of success, but rather, try to become a person of value.
Albert Einstein

2.1 Introduction

Traditional Chinese medicine (TCM) is a significant form of ancient medicine in Asia, and its use is prevalent in almost all ethnic Chinese societies. TCM includes Chinese herbal medicines (CHM), proprietary Chinese medicines (PCM), as well as various modalities commonly used by TCM practitioners. Despite the existence of evidence-based Western medicine, many Chinese people continue to utilise TCM, even though WM is the predominant form of medicine. Furthermore, it is not unusual for Chinese people to consult a TCM practitioner (TCMP) and a Western medicine doctor (WMD), or both. Such study questions are frequently asked is, what factors determine whether a Chinese person chooses to use TCM, WM, or both forms of medicine? This chapter situates the study in the context of what is known about Chinese people's utilisation of TCM and its practice, from academic literature published from 1993 to the present. Before writing the literature review, the chapter outlines the research questions were first defined and also describes the search strategy and databases that were searched. The criteria used to determine what papers would be included and excluded from the systematic review are also included. The data extraction process is described, and an outline of the methods used to extract data from the papers that were included in the review selected are also described.

2.2 Research Questions

The following are the research questions that were formulated for this literature review:

1. What are the factors that impact on Chinese patients' decisions to use TCM?
2. What are the factors that impact TCMPs 'decisions to practice TCM?
3. Do the factors differ for Chinese patients and TCMPs in Hong Kong and Guangzhou?

2.3 Search Strategy

A systematic review aims to find as many primary studies relating to the research questions as possible. In order to fulfil this aim, the search strategy shown in Table 2.1 was developed and applied to the electronic databases described in Section 2.4 below. The search results are heavily influenced by the database and the

keywords used in the searches. In addition to a search of electronic databases, the reference section of each article retrieved was also searched to find additional articles.

Three international electronic databases AMED CINAHL and PUBMED were searched from their respective inception dates to June 2018, for quantitative and qualitative studies that investigated the utilisation and practice of TCM. Restrictions were applied on language and lists of all the articles included were screened for additional references. The titles and abstracts of each article were then screened for eligibility. The full texts of potential citations were then retrieved for a more detailed examination.

Table 2.1 Search terms used for the literature review

Search #	
#1	traditional Chinese medicine
#2	util*
#3	use
#4	practice
#5	attitude*
#6	#2 OR #3 OR #4 OR #5
#7	#1 AND #6

2.3.1 Databases searched

AMED

This database covers three separate subject areas: professions allied to medicine, including physiotherapy, occupational therapy, rehabilitation, speech and language therapy, and podiatry; complementary medicine; and palliative care. All records have necessary bibliographic information; many articles published from 1995 onwards have abstracts. Current policy is to include the authors' abstracts where available. Each record includes controlled indexing terms using the AMED Thesaurus based on MeSH (Medline indexing terms).

CINAHL

CINAHL stands for the Cumulative Index of Nursing and Allied Health Literature and is the most extensive and most in-depth nursing research database. The CINAHL Plus with full-text database provides full text for 768 journals and indexing for 5,000 journals from the fields of nursing and allied health. It is a leading full-text scientific database, providing access to journal articles and book chapters from more than 2,500 peers reviewed journals and more than 11,00 books, plus additional content associated with authors research including audio files, datasets and other supplemental content.

PUBMED

This database offers references to articles from biomedical journals. It covers the same content as Medline, plus some additional life science journals and articles that have not yet been included in Medline, books and documents. References may contain links to the full-text articles in PUBMED Central, which is open access, where available.

In addition to the above databases, Google Scholar was accessed on the Internet and was used to identify unknown Internet website addresses. Middlesex University Library provided access to the above databases. The databases were last searched on 23rd January 2017.

2.3.2 Inclusion criteria

Inclusion criteria:

1. Full publications.
2. Studies published in English.
3. No date restrictions.
4. Studies involving Chinese patients and TCMPs in Hong Kong, China, Taiwan, Macau and Singapore.
5. Studies that employed qualitative, quantitative or mixed-method approaches.
6. The research was aimed at Chinese people's use or utilisation, perception, attitudes and beliefs towards TCM.
7. Research that focuses on the training and practice of TCM.

2.3.3 Exclusion criteria

Exclusion criteria included:

1. Studies aimed at quantifying TCM.
2. Papers that focused on issues unrelated to Chinese peoples' views about the utilisation or use of TCM, or its practice.
3. Review articles and meta-analyses.
4. Studies where TCM practitioners (TCMPs) prescribed TCM treatment to patients for the treatment of a medical condition.

5. Papers about TCM clinical trials of TCM treatments.

2.3.4 Search results

Figure 2.1 below shows the flowchart of the search performed for papers to include in this literature review. After searching three databases (AMED, CINAHL) & PUBMED), 75 non-duplicate citations were found. After screening the titles and abstracts of the 75 non-duplicate citations, the inclusion and exclusion criteria were applied to the papers.

In total, 34 papers were excluded, from the list of 75 non-duplicate citations. Five papers were excluded because they violated exclusion criteria five above, as they were clinical trials of TCM herbs tested for the treatment of specific medical conditions. Seventeen papers were excluded as they violated exclusion criteria two above because the papers focused on issues that were unrelated to Chinese people's views about the utilisation or use of TCM, or its practice. Two papers were found to violate exclusion criteria three as they were meta-analyses about TCM. Meta-analyses were excluded from the literature review because of the risk of including the same studies more than once. Five papers were excluded as they violated inclusion criteria one above because they were not full publications. Lastly, five papers were excluded as they violated inclusion criteria four above because they did not involve Chinese patients.

In Total, 41 papers were identified as being suitable for inclusion in this literature review. The papers included 32 quantitative studies, five qualitative studies and five mixed-method studies. The thirty-two quantitative studies include 17 studies that were conducted in Hong Kong; 10 studies conducted in Taiwan; 1 study conducted in China; and one study conducted in Singapore. The five qualitative papers include five studies that were conducted in Hong Kong; and the five mixed methods studies included two studies conducted in Hong Kong; 2 studies and two studies conducted in China; and one study conducted in Taiwan.

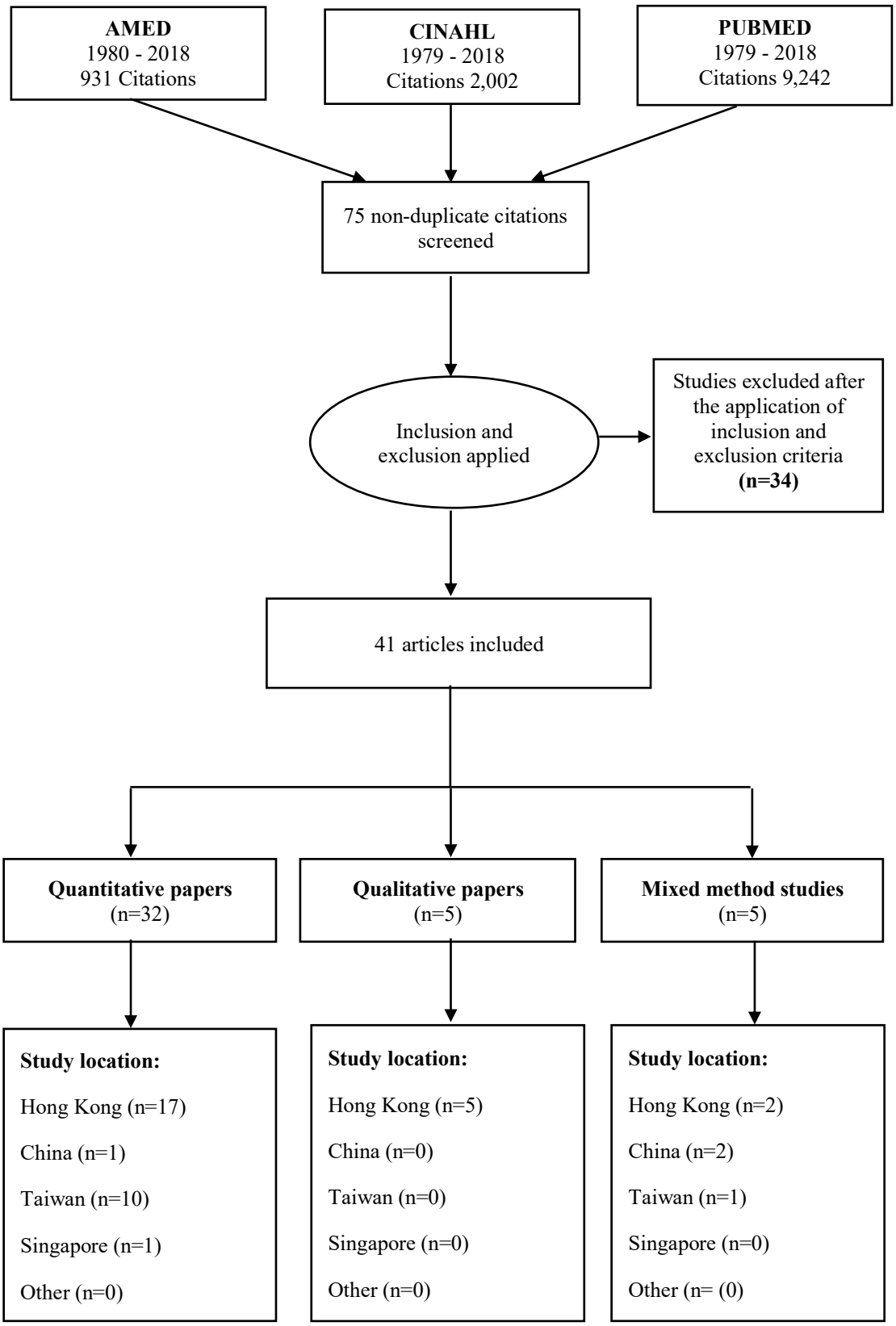

Figure 2.1 Flowchart of the systematic search of papers

2.3.5 Data extraction

During data extraction, the papers were reviewed, and the information relevant to the review were extracted. In addition to extracting relevant information from each paper, the citation details of the included studies, as well as descriptive details such as study methodology, participant characteristics (such as age, gender, and location) were also extracted. A data-extraction table was used to ensure the reliability of the data extraction process, and this is included in Appendix B of this thesis. Ideally, this would be achieved by using two or more reviewers and by using a standardised data-extraction form that has been pilot tested beforehand. However, for this systematic review of the literature, the data extraction and synthesis were only conducted by the researcher of this study.

Table 2.2 Summary of papers included in the literature review

Paper No.	Author(s)	Year Published	Location	Paper Title	Subjects	Methodology	Sample Size
1	Wong, T.W., Wong, S.L. & Donnsn, S.P.B	1993	Hong Kong	A Study of Traditional Chinese Medicine Practitioners in Hong Kong.	TCM Practitioners	Mixed Methods	196
2	Wong, T.W., Wong, S. L. & Donnan, S.P.B.	1995	Hong Kong	Prevalence and Determinants of the Use of Traditional Chinese Medicine in Hong Kong.	Patients	Telephone survey	2,822
3	Chi, C., Lee, et al.	1996	Taiwan	The practise of Chinese medicine in Taiwan.	TCM Practitioners	Questionnaire	1,701
4	Wong, T.W. et al.	1997	Hong Kong	Factors associated with the utilization of traditional Chinese medicine in a small town in Hong Kong.	Patients	Telephone survey	847
5	Lau, J.T. & Yu, A.	2000	Hong Kong	The choice between Chinese medicine and Western medicine practitioners by Hong Kong adolescents.	TCM Practitioners	Survey	3,355
6	Lau, B.W., Leung, E.M. & Tsui, H.Y.	2001	Hong Kong	Predicting traditional Chinese medicine's use and the marginalization of medical care in Hong Kong.	Patients	Interviews	4,339
7	Lam, T.P.	2001	Hong Kong	Strengths and weaknesses of traditional Chinese medicine and Western medicine in the eyes of some Hong Kong Chinese.	Patients	Interviews	29
8	Luk, Y.K.	2001	Hong Kong	Traditional Chinese Medicine in Hong Kong: Prevalence, Costs and Patterns of Use.	Patients	Structured Questionnaire	7,913
9	Harmsworth, K. & Lewith, G.T.	2001	China	Attitudes to traditional Chinese medicine amongst Western-trained doctors in the People's Republic of China.	Western doctors	Structured Questionnaire	177

Table 2.2 Cont'd.

Paper No.	Author(s)	Year Published	Location	Paper Title	Subjects	Methodology	Sample Size
10	Chan, M.F. et al.	2003	Hong Kong	Attitudes of Hong Kong Chinese to traditional Chinese medicine and Western medicine: survey and cluster analysis.	Patients	Questionnaire	503
11	Hon, E.K. et al.	2004	Hong Kong	A survey of attitudes to Traditional Chinese Medicine in Hong Kong pharmacy students.	Pharmacy Students	Questionnaire	91
12	Chen, Q.	2004	Hong Kong	The use of traditional Chinese medicine in Hong Kong: A Chinese patients questionnaire survey.	Patients	Questionnaire	683
13	Wong, V.W. et al.	2005	Hong Kong	A hospital clinic-based survey on traditional Chinese medicine usage among chronic hepatitis B patients.	Patients	Questionnaire	362
14	Hon, K.L. Hon et al.	2006	Hong Kong	Chinese nursing students' attitudes toward traditional Chinese medicine. The Journal of Nursing Education.	Nursing Students	Questionnaire	439
15	Wong, C.W. et al.	2006	Hong Kong	Strengths, Weaknesses, and Development of Traditional Chinese Medicine in the Health System of Hong Kong: Through the Eyes of Future Western Doctors.	TCM Practitioners	Focus groups	28
16	Lai	2007	Hong Kong	Factors Affecting the Usage of Chinese Medicine Treatments in Hong Kong.	Hong Kong Residents	Telephone Survey	544
17	Chen, F. P. et al.	2007	Taiwan	Use frequency of traditional Chinese medicine in Taiwan.	Patients	Dataset	6,142,829
18	Chung, V. et al.	2007	Hong Kong	Use of Traditional Chinese Medicine in Hong Kong Special Administrative Region, China.	Patients	Interviews	31,762

Table 2.2 Cont'd.

Paper No.	Author(s)	Year Published	Location	Paper Title	Subjects	Methodology	Sample Size
19	Wang, W., Keh, H.T. & Bolton, L.E.	2007	Beijing	Health Remedies: From Perceptions to Preference to a Healthy Lifestyle	Beijing Residents	Mixed-Method	123
20	Chang, L.C. et al.	2008	Taiwan	Utilization patterns of Chinese medicine and Western medicine under the National Health Insurance Program in Taiwan, a population-based study from 1997 to 2003.	Patients	Dataset	136,720
21	Chung, V.C. et al.	2009	Hong Kong	Postgraduate education for Chinese medicine practitioners: a Hong Kong perspective.	TCM Practitioners	Focus groups	19
22	Chung, V. et al.	2009	Hong Kong	Age, chronic non-communicable disease and choice of traditional Chinese and western medicine outpatient services in a Chinese population.	Patients	Interviews	33,263
23	Huang, N. et al.	2009	Taiwan	Utilization of Western Medicine and Traditional Chinese Medicine Services by Physicians and Their Relatives: The Role of Training Background.	TCM Practitioners	Dataset	13 652 794
24	Shih, Chun-Chuan, et al.	2009	Taiwan	The utilization of traditional Chinese medicine and associated factors in Taiwan in 2002.	Patients	Questionnaire	26,755
25	Am, Y. C., Cheng, C.W., Peng, H., Law, C. K., Huang, X. Z. & Bian, Z. X.	2009	Hong Kong	Cancer patients' attitudes towards Chinese medicine: a Hong Kong survey.	Patients	Survey	786
26	Lin, Yi-Hsien. & Chiu, Jen-Hwey.	2011	Taiwan	Use of Chinese medicine by women with breast cancer: a nationwide cross-sectional study in Taiwan.	Patients	Dataset	70,012
27	Liao, Y. H. et al.	2012	Taiwan	Utilization pattern of traditional Chinese medicine for liver cancer patients in Taiwan.	Patients	Dataset	6358

Table 2.2 Cont'd.

Paper No.	Author(s)	Year Published	Location	Paper Title	Subjects	Methodology	Sample Size
28	McQuade, J. L. et al.	2012	China	Utilization of and Attitudes towards Traditional Chinese Medicine Therapies in a Chinese Cancer Hospital: A Survey of Patients and Physicians.	Patients & Physicians	Questionnaire	245 patients 72 physicians
29	Shih, C.C. et al.	2012	Taiwan	The association between socioeconomic status and traditional Chinese medicine use among children in Taiwan.	Children	Survey	5,971
30	Griffiths, S et al.	2012	Hong Kong	Attitude toward traditional Chinese medicine among allopathic physicians in Hong Kong.	Western doctors	Questionnaire	3320
31	Rochelle, T.L. & Yim, K. H.	2013	Hong Kong	Factors associated with the utilisation of traditional Chinese medicine among Hong Kong Chinese.	Patients	Questionnaire	300
32	Thorburn, J., Cheng, M., Bell, C., Yan, E.	2013	Hong Kong & Guangzhou	Patients' attitudes towards traditional Chinese medicine and Western medicine in Mainland China and Hong Kong: A mixed-methods study.	Patients	Questionnaire	600
33	Yan, Y.Y.	2013	Hong Kong	Traditional Chinese Medicine use In Children in Hong Kong: A Pilot Study.	Caregivers	Survey	70
34	Huang, T.P et al.	2014	Taiwan	A nationwide population-based study of traditional Chinese medicine usage in children in Taiwan.	Children	Dataset	22 million
35	Wong, K.Y. et al.	2014	Singapore	The use of traditional Chinese medicine among breast cancer patients: implications for the clinician.	Patients	Structured Questionnaire	300
36	Cai, Y. et al.	2015	China	Factors associated with traditional Chinese medicine utilization among urban community health centres in Hubei Province of China.	Health Centres	Survey	234

Table 2.2 Cont'd.

Paper No.	Author(s)	Year Published	Location	Paper Title	Subjects	Methodology	Sample Size
37	Chen, H. Q et al.	2015	China	A survey and analysis of using traditional Chinese medicine during pregnancy.	Pregnant women	Questionnaire	1,010
38	Chan, K., Tsang, L. & Fung, T.K. F.	2015	Hong Kong	Attitudes toward acupuncture in Hong Kong.	Adults	Online Survey	879
39	Yeh, Y.H. et al.	2016	Taiwan	The trends of utilization in traditional Chinese medicine in Taiwan from 2000 to 2010: A population-based study.	Patients	Dataset	1 million
40	Liu, C.Y. et al.	2016	Taiwan	Utilization and prescription patterns of traditional Chinese medicine for patients with hepatitis C in Taiwan: a population-based study.	Patients	Dataset	1 million
41	Sun, K.S. et al	2017	Hong Kong	Choices between Chinese and Western medicine in Hong Kong - interactions of institutional environment, health beliefs and treatment outcomes.	Patients	Interviews	52

2.4 Literature Review

TCM has co-existed alongside WM for many years. It is estimated that approximately 8.6% of the population in Hong Kong utilise TCM (Lau and Yu, 2000). In China, it was reported, that in 1997, TCM represented about 40% of all healthcare delivered in China (Hesketh and Zhu, 1997). To date, numerous studies have been published that explore the utilisation of TCM by Chinese people in Hong Kong, Taiwan and China (Cai et al., 2015, Rochelle and Yim, 2014, Yeh et al., 2016). However, only two studies have been published to date that has examined the practice of Chinese medicine. One study by (Wong et al., 1993a) entitles a study of TCMPs in Hong Kong. The other, by (Chi et al., 1996) entitled the practice of TCM in Taiwan. Although these two studies provide valuable information about the practice of TCM in Hong Kong and Taiwan both of the studies were published almost two decades ago. Therefore, the information is outdated. Notably, with regards to the practice of TCM in Hong Kong. The Government of Hong Kong implemented new laws to provide for the regulation of activities, or matters relating to Chinese medicines. Including the registration of practitioners of Chinese medicine, the licensing of traders in Chinese medicines, the registration of PCMs and the manufacture, possession and sale of Chinese medicines, in September 1999, since the two studies by (Wong et al., 1993a, Chi et al., 1996) were published.

2.5 Part I - Utilisation of TCM

Although the utilisation and practice of TCM in China are more prevalent than it is in Hong Kong, to date no studies have been conducted that compare the utilisation and practise of TCM in two separate regions of China, namely Hong Kong and Guangzhou. Two different regions of China that are both culturally, politically, and legally distinct from one another. In China, TCM is officially state-supported, institutionalised and is integrated with WM. The integration of TCM and WM in the early days of the Peoples' Republic of China preceded the Western model of integrative medicine (IM) by almost 50 years (Dobos and Tao, 2011). However, some elements that make up the critical components of IM as practised in the West today were already present in the Chinese version of IM and TCM has played and continues to play an essential role in advancing IM. (Dobos and Tao, 2011). One of the significant differences between the Chinese and the Western models of IM is that Western integrative medicine (WIM) strictly requires complementary and alternative medicine (CAM) methods to be supported by scientific evidence (Dobos and Tao, 2011). Whereas, in Hong Kong, which has a multi-faceted health system in which WM and TCM

exist in parallel TCM) is a popular kind of complementary and alternative medicine (CAM). In Hong Kong, TCM was officially recognised in the healthcare system after the handover in 1997, and regulations on the practice of TCM were then implemented in 1999 (Chung et al., 2007, Griffiths, 2006). Currently, WM and TCM co-exist in both public and private sectors of the healthcare system. This first part of the literature review focuses on a review of the literature relating to the utilisation of TCM by Chinese people. First, the prevalence of use of TCM by Chinese people are examined and Chinese patient consultation patterns with TCMPs. Following this, Chinese people's perceived strengths and weaknesses of TCM and WM and Chinese people's knowledge of TCM; socio-demographic differences among Chinese users of TCM and the section finishes with an examination of the location for TCM consultations with TCMPs.

Prevalence of TCM use by Chinese people

A number researchers have reported the prevalence of use of TCM by Chinese people in Hong Kong and Taiwan over the years (Chung et al., 2007, Chung et al., 2009a, Lau and Yu, 2000, Shih et al., 2009, Wong et al., 1993b). Table 2.5 below shows the papers that reported the prevalence of TCM use by Chinese people in this literature review.

Table 2.3 Papers that reported the prevalence of use of TCM by Chinese people

Study Title	Year	Location	Sample Size	Proportion who consulted a TCMP (%)	Study Authors
Traditional Chinese medicine and Western medicine in Hong Kong: a comparison of the consultation processes and side effects	1993	Hong Kong	2,822	10	Wong et al
The choice between Chinese medicine and Western medicine practitioners by Hong Kong adolescents	2000	Hong Kong	3,355	8.6	Lau & Yu
Use of Traditional Chinese Medicine in Hong Kong Special Administrative Region, China.	2007	Hong Kong	31,762	8.8%.	Chung et al.
Age, chronic non-communicable disease and choice of traditional Chinese and western medicine outpatient services in a Chinese population	2009	Hong Kong	18,087	15-20	Chung, Lau, Yeoh, & Griffiths
The utilisation of traditional Chinese medicine and associated factors in Taiwan in 2002	2009	Taiwan	26,755	10.4	Chun Chuan Shih et al.

Wong et al. (1993b) who examined the consultation process and side-effects of TCM, found the prevalence of use of TCM among Chinese people to be 10%. Although their sample size was relatively small (n=2,822),

their study was the earliest studies to identify the prevalence of use of TCM by Chinese people in Hong Kong. Seven years later, in 2000, (Lau and Yu, 2000) examined the choice of TCMPs and WMDs in Hong Kong adolescents, in Hong Kong. Their sample size was similar to the study conducted by Wong et al. in 1993 (n=3,355) and found they found that the proportion of patients who consulted a TCMP to be 8.6%. Subsequently, in 2007 (Chung et al., 2007) using a much larger sample size (n=31,762) of patients determined the prevalence of use of TCM among Chinese people in their study about the use of TCM in Hong Kong by Chinese people to be 8.8%.

Interestingly though, two years later in 2009 (Chung et al., 2009a) undertook a study of around 18,000 subjects in Hong Kong and quoted, that about 15- 20% of the general public in Hong Kong consulted a TCMP, which is entirely different from the figures quoted in the previous studies conducted in Hong Kong. In addition to the data about the prevalence of use of TCM by Chinese people in Hong Kong. A study involving a sample size 26,755 found that the proportion of Chinese people in Taiwan who consulted a TCMP to be around 10.4% (Shih et al., 2009), which is in keeping with the data from the earlier studies by Wong, Lau and Chung. In China, no studies have been published to date that has determined the prevalence of use of TCM by Chinese people in China. However, it is estimated that approximately one-third of the public in China choose services from TCM practitioners, which accounts for 1.3 billion out-patient visits per year (Xu and Yang, 2009).

Consultation patterns of Chinese patients with TCMPs

Hong Kong has a health system in which both WM and TCM exist in parallel. However, as Hong Kong has no primary healthcare network, many Chinese people tend to consult different WMDs or TCMPs, sometimes simultaneously. This phenomenon, which has been well-documented in the literature, is highly prevalent among Asian people throughout Asia and is referred to as “doctor shopping.” (Chi, 1994, Sato et al., 1995, Hariman et al., 2013, Siu and Lam, 2014). The six themes that are believed to influence “doctor shopping” behaviour include lack of perceived need, convenience, the existence of work-provided medical insurance, unpleasant experiences with doctors, searching for a doctor that “matches” the patient, and switching between WM and TCM Siu and Lam (2014). As Hong Kong has both TCM and WM health services, many Chinese people in Hong Kong have adopted a pluralistic approach regarding the use of TCM and WM. Sometimes Chinese people will consult WMD or TCMPs simultaneously, or even concurrently for the same illness or ailment (Chung et al., 2009a).

Some Chinese people will attempt to treat themselves by buying over-the-counter CHMs or PCMs. This phenomenon was described by (Hon et al., 2006) who found that around 37% of patients said that they would use over the counter TCM without consulting a TCMP, if their symptoms persisted or if their illness got worse and did not resolve.

As to the type of healthcare professional Chinese people consult when unwell some studies have reported that the majority of Chinese patients in Hong Kong tend to consult WMDs (Chung et al., 2009a). A study by Rochelle and Yim in 2013 found that although the vast majority of respondents in their study in Hong Kong reported that they would consult a WMD when unwell, more than one-third of the respondents in their survey said they had consulted a TCMP instead of a WMD (Rochelle and Yim, 2014). Furthermore, a study by (Wong et al., 2006) which examined the development of TCM in the health system of a group of medical students studying to become WMDs, found that many of the medical students had either tried TCM or consulted a TCM doctor. However, another study that examined the frequency of use of TCM in Taiwan, Chen et al. (2007) also found that Chinese patients when unwell tend to visit WM clinics more commonly than TCM clinics.

One reason why some Chinese patients consult a TCMP instead of a WMD was explained by a study conducted by (Chan et al., 2003) who examined Chinese patients trust scores for TCMPs and WMDs using a validated instrument known as the Chinese-Western belief (CWMBS) Scale. This 22 item, general-purpose, medical system beliefs scale can be used to understand beliefs concerning complementary and alternative medicine and to predict medical use behaviours (Liang, 1999). Their study found that trust scores for some Hong Kong Chinese people who consulted TCMPs and WMD ranged from moderate to high, while trust scores for patients who consulted the only WMD were average. These results might help to explain why some Chinese people choose to consult a TCMP or WMD for specific types of illness. However, it has also been found that some Chinese people who initially consulted a TCMP and who later found the TCM treatment to be ineffective, would then consult a WMD. This mode of the consultation was found to exist even among healthcare professionals, as a study by Hon et al. (2006) found that 22% of the Chinese nursing students reported that they would consult a TCMP first and would use the recommended treatment. While 31% of the Chinese nursing students claimed that they would initially consult a WMD, they would also resort to a TCMP, if they perceived that the treatment prescribed to them by the WMD was ineffective.

Chinese people's perceived strengths and weaknesses of TCM and WM

TCM and WM are used concurrently by many Chinese people in Hong Kong and Guangzhou. However, Chinese people make their own decision about which type of healthcare practitioner they want to consult. Some Chinese people may decide to consult a TCMP for some specific illnesses that they are suffering from, as TCM is considered to be suitable for milder illnesses, such as coughs and colds and as some Chinese people perceive, it is also considered better for curing the root cause of a disease (Lam, 2001). It is also common for TCM to be used concurrently with TCM treatments and also as a supplement to WM prescribed drugs, particularly after consulting a WMD. Sometimes, however, TCM is used as an alternative to WM, or when WM fails (Lam, 2001). TCM is also perceived by some Chinese people to be useful for dealing with the side-effects of some WM drugs, as TCM is considered to be safe and does not have strong side-effects like WM drugs have. However, some Chinese people perceive that TCM also has some specific weaknesses. (Lam, 2001) First, it is less convenient than WM, because it is necessary to boil the herbs to make the medicine. Second, because herbal medicine takes longer than WM to achieve any effect, many herbs need to be purchased from the TCMP, by the patient. Third, it is often necessary to attend multiple follow-up consultations with the TCMP before the disease is eventually cured. Fourth, most herbal medicines taste very bitter, and this makes them unpopular with many Chinese people. Lastly, when consulting a TCMP, patients are sometimes told by the TCMP that they need to avoid eating certain foods while taking the herbal medicine (Lam, 2001) and this is considered to be inconvenient by some patients.

On the other hand, WM is considered to have some strengths over (Lam, 2001)TCM. First, it is more convenient than taking TCM herbal medicines because there is no need to boil the herbs. Second, WM drugs act faster than TCM, and it is possible in some cases to have an injection rather than take tablets to treat a medical condition. Something that some Chinese people prefer (Lam, 2001). Third, WM is also perceived as better at curing some specific diseases very quickly, for example, flu, as the accumulation of the flu virus in the body is considered by some Chinese patients to hurt one's health.

Fourth, it is sometimes better to use WM to control symptoms and take TCM after completing the course of treatment prescribed by a WMD, to cure the disease completely Lam (2001). Lastly, regarding the

perceived weaknesses of WM. Some Chinese people believe that WM has significant side-effects and is too powerful and that taking too many pills is also not good for the body.

Although many Chinese people consult TCMPs, some prefer to initially use WM and PCMs sold over-the-counter medications in WM pharmacies and Chinese herbal shops in an attempt to treat their medical symptoms or to try to effect a cure. A study by Wong et al. (1993b) entitled *Traditional Chinese medicine and Western medicine in Hong Kong: a comparison of the consultation processes and side effects* found that approximately 17% of Chinese people in Hong Kong self-medicated with either with TCM or WM.

However, the study by (Wong et al., 1993b) had several limitations in that the type of medication purchased over-the-counter by Chinese patients was not mentioned. Another limitation was that the medical problem for which the medicine was purchased was not mentioned. The findings by Wong et al. (1993b) were however later corroborated by the team, in another study which examined the prevalence and determinants of use of TCM in Hong Kong (Wong et al., 1995).

The findings of this later study were again that approximately 17% of the Chinese people claimed that they self-medicated (Wong et al., 1995). The results of an unpublished study conducted by (Luk, 2001) for a Master of Medical Sciences degree found that Chinese people in Hong Kong who self-medicated either with TCM or WM spent less money on self-medicating on over-the-counter WM drugs than over-the-counter TCM medications (Luk, 2001). The study by Luk also found that older Chinese people who perceived their health to be weak and who had consulted a WMD for a non-reported health problem were more likely to self-medicate with TCM (Luk, 2001). However, the study was limited as the data was collected over the telephone and did not make use of qualitative research techniques such as interviews or focus groups. Later, in 2007, a study by Chung et al. (2007) of Chinese subjects in Hong Kong, found that approximately 2.7% of Chinese people reported that they had used TCM over-the-counter medicine. Furthermore, a study by Lin and Chiu (2011) found that female Chinese patients with breast cancer who used TCM, also self-medicated with TCM while taking WM for the treatment of their breast cancer. Also, CHMs were reported to be frequently used by around a third (35%) of Chinese people in Singapore who reported they self-medicated with TCM (Wong et al., 2014).

Pregnant Chinese women were also found to self-medicate Chen et al. (2015) instead of consulting a TCMP or WMD, because they believed that TCM would cause very minimal adverse effects during pregnancy, on

account of it being a “natural” treatment. Other reasons why Chinese people self-medicated with TCM medications, rather than WM medications, was because they lacked proficiency in English to read the ingredients printed on the labels of over-the-counter WM drugs (Sun et al., 2017).

Safety and efficacy of TCM and WM

Although many Chinese people generally believe that TCM treatments are safer than WM treatments, interactions between some TCM treatments and WM drugs have been reported over the years (Fugh-Berman, 2000, Holstege et al., 2005, Izzo and Ernst, 2009, Chan et al., 2010, Zhang et al., 2011, Tsai et al., 2013, Yan et al., 2015). In addition to interactions between TCM treatments and WM drugs, some TCM treatments can alter the way WM drugs work in the body and can make them more, or less effective. Because some Chinese people use TCM treatments concurrently while consulting a WMD, WMDs must be aware of the possible risks associated with the concurrent use of TCM and WM drugs. Many herbs or PCMs prescribed by TCMP or used by Chinese people who buy them as over-the-counter treatment have the potential for side-effects when used with WM pharmaceutical treatments. WMDs, therefore, need to be aware of this, in order to avoid the potential for side-effects, but also to ensure that use of TCM treatments and WM treatments do not cause serious side-effects or even death.

Several studies have found that Chinese people do not inform WMDs that they are taking TCM treatments. One such study by Wong et al. (2005) found that that 81% of patients did not inform WMDs about their use of TCM. Furthermore, another study by Lam et al. (2009), found that nearly two-thirds of Chinese people using TCM treatments also did not inform their WMD about their use of TCM. A more recent study by Wong et al. (2014) involving a survey in Hong Kong examining Cancer patients' attitudes towards Chinese medicine. That when patients in the survey were asked whether or not their physicians were told about the use of Chinese medicine and why it was found that 28% of the patients felt that it was unnecessary to inform a WMD about their use of TCM

TCM plays an essential role in the primary healthcare care system in Hong Kong and China. However, studies examining the efficacy and safety of many TCM treatments are still lacking. Some Chinese people claim they used TCM for the treatment of medical conditions and diseases because they believe that WM does not (Lam, 2001) work. Whereas, others say that they turn to WM for the treatment of their medical

condition because TCM did not work, or because the medical problem that a person is seeking treatment is a chronic disease as it is well-known that TCM appears to show more efficacy for certain chronic medical conditions, rather than acute medical conditions (Lam, 2001).

Hon et al. (2006) studied Chinese student nurses' attitudes toward TCM in Hong Kong they found that one-fifth of nursing students believed that TCM had limited efficacy in treating diseases, Three-fifths thought that WM also had limited effectiveness and half of the respondents thought TCM was more effective in treating minor ailments than WM. However, only a quarter of the respondents (26%) believed that TCM was more effective than WM. Evidence that other factors that may impact on Chinese people's perceptions about the efficacy of TCM and WM come from a study conducted by Wong et al. (1997). Their study of factors associated with the utilisation of TCM in a small town in Hong Kong found that some Chinese people perceive that WM has less efficacy than TCM. Furthermore, the study by (Wong et al., 1997) also found users of TCM may come from families where the head of the household is dissatisfied with the quality of healthcare offered from the treatment they received in the past, from WMDs in the private sector and specialist public healthcare sector (Wong et al., 1997). While, (Rochelle and Yim, 2014) in a similar study of factors associated with the utilisation of TCM among Hong Kong Chinese identified that Chinese people who are high in Confucian thinking might be more likely to favour the effectiveness and superiority of TCM over WM Rochelle and Yim (2014). Also, some Chinese people perceive that TCM is a more holistic form of medicine than WM because it treats the whole person instead of just the disease alone, as WM does. Along with the perception that TCM is more holistic than WM, is the widely held belief that TCM can cure the root cause of a health problem (Lam, 2001). Such a belief may in part be because Chinese people perceive herbs, acupuncture and tuina (massage) as "natural" remedies that can help restore the body's balance of qi Yan (2013).

While, most studies have investigated adult patients' perceptions about the safety and efficacy of TCM and WM, attitudes of parents with children about the effectiveness and safety of TCM and WM has also been examined in two separate studies. The first study by Yan (2013) who conducted a pilot study of the use of TCM in young children in Hong Kong, aged two years and older, found that TCM was used to treat behavioural problems in children. The second study, by Huang et al. (2014) examined the use of TCM in children and adolescents in Taiwan. The results of which found that TCM was predominantly used among adolescents and school-age children for the treatment of menstrual disorders, such as dysmenorrhea and

irregular menstrual cycles. The two studies by (Yan, 2013, Huang et al., 2014) also identified that the parents of children who administered TCM to their children believed that TCM was much safer than WM because it was perceived to have fewer side effects than WM, and also that because TCM is safer than WM, the TCM can be used as a supplement to WM. This attitude was supported by the fact that the parents believed that TCM could be used in situations where WM had previously failed. Furthermore, some Chinese women use TCM when they are pregnant because they perceive that TCM is safe and unlikely likely to have any adverse effects. Acupuncture is also considered to be safe by many Chinese women as it too is also perceived as safe, has few side-effects, and can help prevent illness during pregnancy Chan et al. (2015).

Medical conditions that Chinese people sought treatment from a TCMP

Although WM can often find a permanent cure for many medical conditions, TCM, unlike WM, is also used to maintain good health. Therefore, in TCM, TCMPs emphasise prevention rather than treatment which stems from the belief that treating diseases, or illness, that have already caused damage to the body is much more complicated than preventing them from occurring in the first place.

TCM treats some medical conditions and approaches treating ailments from a holistic perspective. However, a variety of symptoms are treatable such as pain, IBS, colitis, infertility, neuropathy, arthritis, insomnia, stress and depression. TCM can also treat chronic medical and some acute problems as well. A review of the English literature published between 1993 and 2016 found that Chinese people consult TCMPS for a variety of chronic and acute medical conditions. This review identified 18 peer-reviewed papers which provided information about medical conditions that Chinese people sought treatment for from a TCMP,

Table 2.4 below, summarises the information about the different medical conditions identified from the peer-reviewed papers identified in this literature search. From the peer-reviewed papers, six relate to studies conducted in Hong Kong, (Lai, 2007, Lau et al., 2001, Lau and Yu, 2000, Wong et al., 2006, Wong et al., 1993b, Yan, 2013), six relate to studies conducted in China, (Chen et al., 2015, Harmsworth and Lewith, 2001, Liu et al., 2016, McQuade et al., 2012, Wang et al., 2007, Yeh et al., 2016), and six relate to studies conducted in Taiwan (Carey, 1993, Chang et al., 2008, Chen et al., 2007, Huang et al., 2014, Liao et al., 2012, Lin and Chiu, 2011).

Table 2.4 Medical conditions for which Chinese people sought treatment from a TCMP

Study No.	Paper Title	Medical Condition(s) Chinese Patients Sought Treatment for from a TCMP	Location	Author(s)	Year
1.	Traditional Chinese medicine and Western medicine in Hong Kong: a comparison of the consultation processes and side effects	Coughs Colds	Hong Kong	(Wong et al., 1993b)	1993
2.	The choice between Chinese medicine and Western medicine practitioners by Hong Kong adolescents	Bronchitis Asthma	Hong Kong	(Lau and Yu, 2000)	2000
3.	Predicting traditional Chinese medicine's use and the marginalisation of medical care in Hong Kong	Low back pain Deafness Bronchitis Asthma Hypertension Psychiatric Peptic ulcer Rheumatism	Hong Kong	(Lau et al., 2001)	2001
4.	Attitudes to traditional Chinese medicine amongst Western-trained doctors in the People's Republic of China	Chronic illnesses Psychiatric illnesses	China	(Harmsworth and Lewith, 2001)	2001
5.	Strengths, Weaknesses, and Development of Traditional Chinese Medicine in the Health System of Hong Kong: Through the Eyes of Future Western Doctors	Acne Bone-setting	Hong Kong	(Wong et al., 2006)	2006
6.	Factors Affecting the Usage of Chinese Medicine Treatments in Hong Kong	Sprains Bone fractures Colds Coughs Flu	Hong Kong	(Lai, 2007)	2007

Table 2.4 Cont'd.

Study No.	Paper Title	Medical Condition(s) Chinese Patients Sought Treatment for from a TCMP	Location	Author(s)	Year
7.	Use frequency of traditional Chinese medicine in Taiwan	Non-stated	Taiwan	(Chen et al., 2007)	2007
8	Health Remedies: From Perceptions to Preference to a Healthy Lifestyle	Cure underlying illness Alleviate symptoms	China	(Wang et al., 2007)	2007
9.	Utilization patterns of Chinese medicine and Western medicine under the National Health Insurance Program in Taiwan, a population-based study from 1997 to 2003.	Connective tissue problems Digestive problems	Taiwan	(Chang et al., 2008)	2008
10	Use of Chinese medicine by women with breast cancer: a nationwide cross-sectional study in Taiwan.	Breast cancer	Taiwan	(Lin and Chiu, 2011)	2011
11.	Utilization pattern of traditional Chinese medicine for liver cancer patients in Taiwan	Liver cancer Cirrhosis Hepatic bile duct	Taiwan	(Liao et al., 2012)	2012
12.	The utilisation of and Attitudes towards Traditional Chinese Medicine Therapies in a Chinese Cancer Hospital: A Survey of Patients and Physicians	Strengthen the immune system	China	(McQuade et al., 2012)	2012
13.	Traditional Chinese Medicine use In Children in Hong Kong: A Pilot Study	Behavioural problems	Hong Kong	(Yan, 2013)	2013

Table 2.4 Cont'd.

Study No.	Paper Title	Medical Condition(s) Chinese Patients Sought Treatment for from a TCMP	Location	Author(s)	Year
14.	A nationwide population-based study of traditional Chinese medicine usage in children in Taiwan	Menstrual disorders Dysmenorrhea Irregular menstrual cycles	Taiwan	(Huang et al., 2014)	2014
15.	A survey and analysis of using traditional Chinese medicine during pregnancy	Pregnancy Miscarriage URTI	China	(Chen et al., 2015)	2015
16.	The Prevalence and Determinants of Using Traditional Chinese Medicine Among Middle-aged and Older Chinese Adults: Results from the China Health and Retirement Longitudinal Study	Chronic kidney disease Stroke	China	(Liu et al., 2015)	2015
17.	The trends of utilisation in traditional Chinese medicine in Taiwan from 2000 to 2010: A population-based study	Neoplasms	China	(Yeh et al., 2016)	2016
18.	Utilization and prescription patterns of traditional Chinese medicine for patients with hepatitis C in Taiwan: a population-based study	Hepatitis C	Taiwan	(Liu et al., 2016)	2016

Figure 2.2 below shows the types of medical conditions that TCMPs treated when patients consulted them. Information extracted from the list of published peer-review papers shown in Table 2.2 above indicates the kind of medical conditions that TCMPs claimed they treated. From the published data, four main medical conditions that Chinese people consulted a TCMP include, diseases affecting the **respiratory** system, (coughs, colds, asthma, bronchitis, flu and upper respiratory tract infections), conditions affecting the **bones** (low back pain, bone-setting, sprains, and bone fractures) **cancers** (breast cancer and liver cancer), and diseases affecting the **liver** (cirrhosis, and hepatitis C).

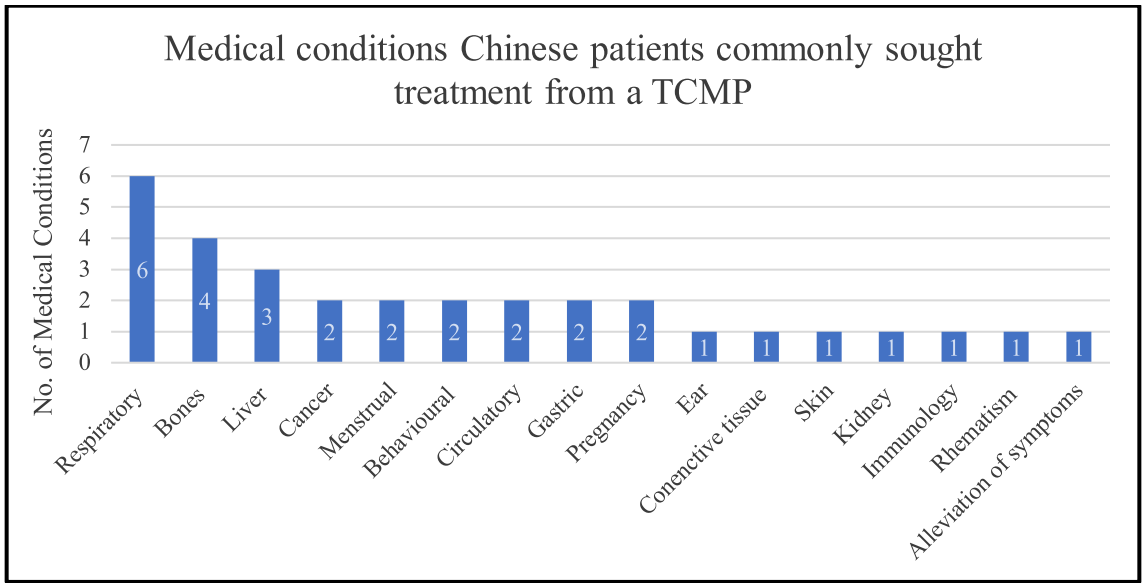

Figure 2.2 Medical conditions for which Chinese people consulted a TCMP

Chinese people's knowledge of TCM

Some published studies over the years have provided information on how Chinese people in Hong Kong learn, or acquire information about TCM. One such study by (Chen, 2004) found that 44 per cent of patients stated that they learnt about TCM from non-professional people such as friends and relatives. Sources of information generally included medical books and journals as reported by 28% of patients. In 2005, a study by **Error! Hyperlink reference not valid.**) found that over half (52%) of patients obtained information about TCM from relatives or friends. While 30% per cent of patients obtained information from herbalists, a small minority of patients reported that they got information from the internet, advertisements, other patients, or their physicians (Wong et al., 2005). A year later, Hon et al. (2006), surveyed Chinese student nurses' attitudes toward TCM in a group of Chinese Student Nurses in Hong Kong. The student nurses,

who were training to become WM nurses, were asked to complete a questionnaire about TCM. The results showed that student nurses' knowledge of TCM was minimal. When asked where they sought information about TCM, 15% of the nurses reported that they obtained information about TCM from a single source. While the remaining 85% from two or more sources.

Conventional sources of TCM information used by the student nurses included family or friends (70%), the newspaper (67%), television (58%), and the Internet (40%). However, textbooks (17%) and journals (14%) were not familiar with information sources (Hon et al., 2006).

Furthermore, a study by (Wong et al., 2006) which involved focus group discussions with a group of 4th-year medical students (n=160) studying to become WMDs in Hong Kong. Wong et al. (2006) found that 14 out of 26 had some knowledge of TCM; for example, the balance between yin and yang, the holistic approach to patient care and treatment, and the importance of treating the "root" of the illnesses beyond patients' presenting symptoms. However, information about how and where the medical students found out about or learnt about TCM was not reported (Saks, 2006). Moreover, a study that examined the utilisation of TCM and associated factors in Taiwan by Shih et al. (2009) that sampled over 26,000 subjects found that younger people in Taiwan had more knowledge of TCM.

In December 2017, the State Administration of Traditional Chinese Medicine (SATCM) in China surveyed the Country of 87,000 Chinese people aged 15 to 69, to test Chinese their knowledge about TCM. The survey was conducted using a questionnaire which contained 140 questions about TCM. According to the SATCM, the results found that Chinese people in the age group 60-69 years had less knowledge of TCM. While those in the age group 25-34 years had higher test scores, the SATCM believes that one reason why the majority of older Chinese people did not achieve a high score in the survey, was because they had not received much education, or that they are unable to quickly obtain and understand the medical knowledge when browsing information about TCM on the internet. According to the SATCM, one reason why the younger generation had more knowledge about TCM, is that they can absorb medical knowledge a lot easier than older people. Compared with a similar study conducted by the SATCM in 2014, the results obtained from this study also found that overall, more people in China also know more about TCM than they did in 2014 (State Administration for Traditional Chinese Medicine of the People's Republic of China, 2017a). The SATCM believes the reason why is because mass media plays a significant role in disseminating information about TCM. Furthermore, the results of the survey also found that 86% of the people who took

part obtained knowledge about TCM using mass media such as, newspapers, books and TV. However, according to the SATCM, the research results also identified a gap in Chinese people's TCM knowledge among those who live in urban and rural areas of China (State Administration for Traditional Chinese Medicine of the People's Republic of China, 2017a).

Socio-demographic differences among Chinese users of TCM

Many studies have reported that high socioeconomic status (SES) is associated with the use of medical health services (Chang et al., 2008). Higher-income levels and the presence of private insurance were associated with more TCM or WM consultations among Chinese people (Wong et al. (1997); Lau and Yu (2000); Yan (2013); (Huang et al., 2009); Yeh et al. (2016). A comprehensive study of the influence of SES on TCM utilisation among children was undertaken by (Shih et al., 2012b). The results of their large-scale study of data from the National Institute of Health database in Taiwan found that, among children in Taiwan, a higher prevalence of TCM visits was associated with higher SES. Furthermore, high-SES adolescent girls were more likely to visit TCM practitioners than low-SES girls. A significant trend was found between SES and TCM utilisation, even after controlling for many of the relevant associated factors. The main strength of the study by (Shih et al., 2012b) is the relatively large, nationally representative survey of a non-institutionalised paediatric population in Taiwan of over 5,000 children. However, the study has several limitations. First, the responses to questions about children's TCM use are dependent on the parents' willingness to report such use accurately. Second, the results will also be biased if respondents' misreport their SES. Finally, because this is a cross-sectional study, it is not possible to determine with some degree of certainty whether SES has any effect on a parent's decision to use TCM use in their children.

Studies in Taiwan's (Chang et al., 2008); Yeh et al. (2016) also showed differences in SES among Chinese people in Taiwan that are associated with the utilisation of TCM.

It has also been reported that TCM use was higher among people who received a high regular salary income than in individuals within the low-income group consisting of farmers and fishermen. Also, SES differences have been identified among TCM users with higher education and Chinese people in the middle to the upper SES (Chang et al., 2008); McQuade et al. (2012); Liu et al. (2015). There is consistent evidence that women are more likely to use TCM than men (Chang et al., 2008, Chen et al., 2007, Chung et al., 2007, Shih et al., 2009).

A population-based nationwide survey of Chinese people who use TCM in Taiwan found that the prevalence of TCM use among women and men was 31.8% and 22.4% respectively, Shih et al. (2012a), which suggests, that compared with men, women had a higher average frequency of TCM use (1.55 visits per years vs 1.04 visits per year. This significant difference was present across all age groups and remained evident after excluding the gender-specific diseases (1.43 visits per year vs 1.03 visits per year.

The frequency of TCM use among women and men increased with age in most of the age groups and decreased sharply in the 60–69-year-old group. This ascending trend was even more noticeable after excluding gender-specific diseases, as sex and gender variables are acknowledged to be useful parameters in research because biological differences between the sexes determine male-specific and female-specific behavioural differences between the genders. The peak number of TCM visits was in the 50– 59-year-old group for both genders, and the lowest number of TCM visits was observed in the 20–29-year-old group, followed by the 60–69-year-old group after excluding gender-specific diseases. The study by (Shih et al.) is believed to be the first to exclude gender-specific diseases in a comparison of TCM use between women and men. Using data obtained from the National Institute of Health (NHI) database in Taiwan, Chang et al. (2008) found that women had higher TCM use than men. However, the results of the study by (Chang et al.) were not adjusted for socio-demographic factors, and they did not exclude gender-specific diseases. (Shih et al., 2012a) Also found that gender was shown to be an essential factor associated with the utilisation of TCM services and that women are more likely to use TCM services than men. However, they concluded that the results from their study might have been affected by recall bias. This systematic error occurs when participants who used TCM in their study did not remember previous events, or remember their experiences accurately, or even omit information.

In Hong Kong, TCM tends to be used more by women than men (Chung et al., 2007). Gender-related differences were also identified in a study by (Thorburn et al., 2013) who found that female patients in Hong Kong and Guangzhou appeared to respond more positively to TCM than male patients.

Age has also been shown to be an essential determinant in Chinese people's healthcare choice Wong et al. (1995) and, as in other populations, Chinese users of TCM tended to be more educated McQuade et al. (2012). One of the earliest studies that reported on age differences among Chinese users of TCM was a study conducted in Taiwan by Chen et al. (2007). Their study found that the age of TCM users fell into two main clusters; in one cluster, the patients were aged 35 - 49 years and the other aged 50 - 64 years. The

finding from a study by Chung et al. (2007) which was undertaken in Hong Kong found conflicting results. Chung et al. (2007) found that TCM use was highly popular among local Chinese residents in the middle-age group who used TCM for health maintenance Chung et al. (2007) and that older patients with chronic diseases were less likely to consult TCMPs. They did not express a preference for TCM or WM treatment when they were sick. Liao et al. (2012) found in their study that Chinese people in Taiwan >70 years old, and who lived Taipei, as well as farmers and fishermen, were less likely to use TCM.

Furthermore, a study conducted in Hong Kong found, among other differences, that older people utilised TCM more than younger people Rochelle and Yim (2014) and another study found that younger patients and those of Chinese ethnicity were more likely to use TCM Wong et al. (2014). Also, a study in Taiwan by Liu et al. (2016) that examined the utilisation of TCM and prescription patterns of TCM users with hepatitis C also found a different age group distribution, with utilisation rates of TCM increasing with age and peaking in people aged 40 - 64 years Liu et al. (2016).

Several studies published over the years have found significant differences among a person's educational level and their use of TCM. An unpublished study of the prevalence, costs and patterns of use TCM in Hong Kong by Luk (2001) found that respondents with a primary school level of education or below, are more likely to self-medicate with TCM. However, those with a higher level of education, or learning to tertiary level or above who perceive their health status to be weak, have, on average the highest level of spending on TCM self-medication on average Luk (2001). However, in a study entitled *Predicting Traditional Chinese Medicine's use and the Marginalization of Medical Care in Hong* Lau et al. (2001) showed that after adjusting for a person's age and sex, education level was not associated with a patients choice of a TCM doctor Lau et al. (2001). Respondents who had a higher education level and also chronic disease patients were more likely to have insurance coverage for TCM. While older patients and patients with chronic diseases and also single people were least likely to have such insurance coverage Chung et al. (2007).

Regional differences of patients' consultations with TCMPs

Several studies have been published to date that has identified regional differences in the utilisation of TCM among Chinese people. Two such studies in Taiwan (Chang et al., 2008) and (Yeh et al., 2016) identified some geographical differences in the utilisation of TCM services by Chinese patients in Taiwan. The study

by (Chang et al., 2008) entitled, *utilization patterns of Chinese medicine and Western medicine under the National Health Insurance Program in Taiwan, a population-based study from 1997 to 2003* identified some regional differences in the use of TCM by Chinese people in Taiwan. In their study, Chang et al. (2008) found that TCM usage among Chinese people in Taiwan was more prevalent in the central and southern parts of Taiwan, and they also found that TCM was used less frequently by people living in the mountainous areas and offshore islands of Taiwan. One possible explanation for this phenomenon was thought to be due to the unequal distribution of TCMPs in Taiwan (Chang et al., 2008).

Moreover, evidence of regional differences in the use of TCM among Chinese people was also found by (Yeh et al., 2016) who in their study entitled, *the trends of utilization in traditional Chinese medicine in Taiwan from 2000 to 2010,* identified that mean TCM visits increased from 2000 to 2010 and that the percentage change in mean TCM visits among women was more than that among men. Yeh et al. (2016) believed that that one reason for this difference was because there is TCM physician training school (the China Medical University) in the central region of Taiwan and that this resulted in a higher number of TCM physicians, and thus, more TCM clinics and TCM departments in hospitals within the central region of Taiwan. Although the two studies above by Chang et al. (2008) and Yeh et al. (2016) have been the only studies to report regional differences in the use of TCM by Chinese people, both of the studies originated from Taiwan, there also no studies reporting regional differences in the use of TCM by Chinese people in Hong Kong. This may be due to the geographical size of Hong Kong and because most studies published to date about the use of TCM by Chinese people are related to factors such as gender, age, education, and health belief, rather than on geographical differences. Moreover, in addition to the studies by Chang et al. and Yeh et al. in Taiwan in China, a study by Cai et al. (2015) also identified that the number of TCM outpatient visits made by patients in Hubei province in China differed according to the type of district where the TCM clinics were located. In their study entitled factors associated with traditional Chinese medicine utilization among urban community health centres in Hubei Province of China., (Cai et al., 2015) found that regions with greater use of TCM by Chinese people had better economic development conditions than those that had worse economic development conditions. Therefore, these differences may impact Chinese people's ability to pay for TCM services within a particular province in China. As TCMP consultation fees, and patients' incomes are just some of the factors they may impact on Chinese people's use of TCM in different regions of China (Cai et al., 2015).

2.6 Part II - Practice of TCM by TCMPs

In WM, a doctor looks for specific causes of diseases and focuses on particular body components to treat. However, TCM is not practised in this way, although there are some similarities between TCM and WM regarding their principles and methods. In TCM, there are fundamental differences in the principles, diagnosis and treatment approaches between WM and TCM. The aims of TCM and WM are, however, the same. They utilise different professional methods to reduce pain and recuperating patients. In addition to achieving a cure, they both have promoted health advice to patients, such as the promotion of a healthy lifestyle, to help patients recover and also to prevent the occurrence of certain diseases. WM involves treatment of an affected area in isolation. In contrast, TCM views the body as a whole and not just the affected area, to determine an overall picture of imbalance and to prescribe appropriate treatment. Given the pivotal role that TCMPs play in the provision of medical services to Chinese people. It is appropriate that a study about the practice of TCM by TCMPs in Hong Kong and China is undertaken because few such studies have been published to date, that provides up-to-date information about the practice of TCM in Hong Kong. Other than the by (Wong et al., 1993a), there are no studies that have been published in English to date about the practice of TCM by Traditional Chinese medicine doctors in China.

Differences in the practice of TCM between Hong Kong and China

Although there are several differences in the practice of TCM between Hong Kong and China, an essential difference in the degree of integration between the practice of TCM and WM. Other differences are that TCMPs in Hong Kong work independently in small private practices, or in larger medical practices that offer TCM as a complementary form of treatment, and also in TCM clinics run under a tripartite collaboration model involving the Hospital Authority (HA) in Hong Kong, a non-governmental organisation (NGO) and a local university (see Section 1.2.3). TCM practices in China, on the other hand, is integrated to enable a TCM doctor to treat certain medical conditions. Thus, TCM doctors in China practice both TCM and WM and work in hospitals where both TCM and WM is practised side by side.

In contrast, in Hong Kong, CMPS are only permitted to practice TCM and are not permitted to prescribe WM treatments or drugs. Furthermore, the majority (60%) of TCMPs practice as 'generalists', and 17% practice 'internal medicine', 3% practised bone setting, and 1 % acupuncture exclusively and 12% practise in more than one speciality (Wong et al., 1993a). Most TCMPs in Hong Kong (88.9%) do not declare a

practice speciality and only a small proportion practice in a speciality area, such as internal medicine and. It is believed that this is partly as a result of the tradition of their practice, and partly because it reflects the area in Hong Kong where their practice is located Chi et al. (1996).

The term “practice setting" refers to the types of TCM practice a TCMP works at, e.g., private practice, hospital) as well as the geographical locations where TCMPs practice. The characteristics that define each type of practice and the geographic location vary and consequently also affect any care provided. In essence, a study of TCMPs in Hong Kong by Wong et al. (1993a), found that approximately 61% had previously practised outside Hong Kong, and 38% had worked in a hospital setting (Wong et al., 1993a). However, in Hong Kong, the majority of TCMPs who work in private practice worked from Chinese medicine herbal shops (Wong et al., 1993a). In Taiwan, most (82.5%) of TCMPs are clinic-based while 15.5 per cent is hospital-based. In this study. In recent years, some researched-based TCM clinics have been established in hospitals and universities. However, in Hong, the most popular venue for TCM consultations still mostly tends to be herbal shops (Chung et al., 2007). In Taiwan, since most TCMPs with medical degrees practice only WM, this may explain the low rate of licensed TCMPs who remain inactive practice, as it is believed that many other licensed TCMPs in Taiwan practice TCM on a part-time basis and do not work in clinics or hospitals, and are therefore are not considered professionally active (Chi et al., 1996).

The regulatory status of TCM in Hong Kong and China

The regulatory status relating to the practice of Chinese medicine in Hong Kong is entirely different from that of China. In Hong Kong, the regulation of Chinese medicine practitioners requires new entrants to the profession to apply for formal registration to practice with the Chinese medicine Council of Hong Kong (CMCHK) before they can officially practise TCM, as such, this requires applicants to pass a two-part licensing examination consisting of written and clinical components. Currently, only holders of a recognised TCM degree(s) are eligible to sit the exam.

In contrast, laws applicable to the licensing of doctors in the People’s Republic of China, particularly those regarding the registration, practice, conditions and legal obligations of TCM doctors in China, require that candidates obtain a satisfactory score in a qualifying examination, which was introduced in 1999, to practice as a TCMP (Central People’s Government of the People's Republic of China, 1999).

This law regulates the licensing, registration, practice conditions, education requirements and legal obligations of physicians in China. It stipulates that a satisfactory score in the qualifying examination is the pre-requisite of physicians' registration and medical practice. The law does not recognise any difference between WMDs and TCMPs relating to requirements and obligations. According to this law, China uses a "physicians' registry system". Registered physicians can practice medicine according to the geographical location and field of work designated upon registering. Medical practice without registration is illegal. The pre-requisite of registration and thus obtaining a license is a satisfactorily completed national physicians' qualification examination.

The goal of the physicians' qualification exam is to ascertain whether the examinee has the necessary knowledge and skill to practice medicine or not. Qualification exams are divided into two levels: "practicing physician" and "practicing assistant-physician". A practising assistant-physician may only practice medicine under the supervision of a practicing physician. Assistant-physicians practising in rural administrative regions and villages are exempt from this rule and can practice medicine independently without supervision. Qualification exams are divided according to areas of specialisation. There are three kinds of TCMP qualification exams: TCMP, integrated modern-traditional doctor, and doctor of minority medicines, which includes Mongolian, Tibetan, Uyghur and Dai medicines, all who are wholly different from Chinese medicine.

Education and training of TCMPs in Hong Kong and China

In 1998, Hong Kong established undergraduate degree programs in Chinese medicine at three public universities in Hong Kong, the University of Hong Kong (The University of Hong Kong, 2018), the Chinese University of Hong Kong (The Chinese University of Hong Kong, 2018) and Hong Kong Baptist University (Hong Kong Baptist University, 2018). Although the curriculums of the courses offered by the three universities in Hong Kong are similar, there are some differences in structure and emphasis. The content of the courses mostly originates from TCM universities in China and includes the teaching of fundamental WM and TCM subjects (Chung et al., 2009b). A study of CMPs in Hong Kong by (Wong et al., 1993a) found that approximately 21 % of TCMPs in Hong Kong had attended a part-time course in TCM, of which 59% undertook the course in Hong Kong and 39% took a course in China. Most of the TCM students attended had a duration of between two to three years.

However, a survey published in 2005, showed that a high proportion (72.3%) of CMP graduates in Hong Kong failed to obtain a full-time clinical job one year after graduation (Li and Liang, 2005). Because of the lack of employment opportunities and career pathways for TCMPs in Hong Kong, after they graduated from a university which continued to be a significant issue. A system of continuing medical education (CME) in TCM was launched by the Chinese medicine Council of Hong Kong (CMCHK), which eventually became an integral component of the registration system for TCMPs in Hong Kong (Chung et al., 2009b).

In China, it generally takes around five years to complete a TCM undergraduate degree program, and according to information obtained from the State Administration of Traditional Chinese Medicine (SATCM) the People's Republic of China in 2013, 45 tertiary institutions provide undergraduate degree programs in TCM. Also, a further 215 tertiary institutions provided TCM programmes (Xue et al., 2015). In 2011, Beijing University of Chinese Medicine started a nine-year Chinese medicine programme (a combined undergraduate and doctoral programme) where, in the first five years, students are trained according to an undergraduate teaching plan. In the fourth year, an entrance examination is held to enrol eligible students directly into the following doctoral program (Xue et al., 2015). In 2012, a new model of Chinese medicine was implemented. The new model includes the following programmes: Doctor of Chinese medicine, Doctor of integrative medicine, Doctor of Chinese medicine with Jinghua master-apprentice training, and Acupuncturist and Tuina Practitioner. These programmes all use an integral training model called "five plus three," which comprises of 5 years of undergraduate training with pre-clinical courses, and three years of internship training. Graduates from these programs can obtain a Bachelor of Medicine degree as well as a Master of Clinical Medicine degree (Xue et al., 2015).

Medical conditions treated and TCM modalities used by TCMPs

TCM is a range of medicine practices sharing familiar concepts which have been originated and developed in China, including various forms of acupuncture, dietary therapy, herbal medicine, moxibustion, and physical exercise, which collectively predate to the birth of Chinese civilisation (Wan, 2016). However, treatment effectiveness depends upon individual factors including, for example, the type of illness, its severity, and whether it is chronic or an acute medical condition. TCM does not generally use WM "labels" to describe the medical conditions or ailments that it treats, as TCM treatments follow the principles and philosophy of TCM to explain medical conditions.

To date, only two studies have examined the practice of TCM by TCMPs. One of the studies by (Wong et al., 1993a) entitled, *a study of traditional Chinese medicine practitioners in Hong Kong* examined the practice of TCM in Hong Kong, and the other by (Chi et al., 1996) entitled, *the practice of Chinese medicine in Taiwan*, examined the practice of TCM in Taiwan. However, both of the studies were published over ten years ago, therefore and to date, a search of the literature for this literature review did not find any recently published studies about the practice of TCM in China, Hong Kong or Taiwan.

According to studies by (Wong et al., 1993a) and Chi et al. (1996), some of the most common medical conditions treated by TCMPs in Hong Kong were diseases of the respiratory system. While, the most common type of medical conditions that TCMPs in Taiwan that treated were diseases of the musculoskeletal system, digestive system and also connective tissue diseases.

A study of TCMPs in Hong Kong by Wong et al. (1993a) found that the majority of TCMPs in Hong Kong (97%) used processed herbal medicines and raw herbs and PCMs. Also, just under half of TCMPs (48%) reported that they used external applications, and a small proportion (5%) used injectable Chinese medications. TCM modalities reportedly used by TCMPs in Hong Kong included acupuncture (34%) and spinal manipulation (22%). However, some TCMPs admitted that they also used WM treatments.

Integration of TCM and WM

The WHO considers the health system of China as one of the four in the world that has achieved the highest degree of integration between WM and TCM (World Health Organization, 2013). However, the practice of TCM in China is substantially different from the practice of TCM in Hong Kong. One of the main differences between the way TCM is practised in Hong Kong and China is the degree of integration with WM. Unlike their counterparts in China, who are permitted to prescribe WM drug treatments and request WM diagnostic tests, in Hong Kong, CMPs only practice TCM, as TCM and WM are practised separately. However, Wong et al. (1993a) conducted a study of TCMPs in Hong Kong and found that although most TCMPs claimed they practices TCM, around 5% of TCMPs in their survey of TCMPs admitted using WM drugs in their practice, and a more substantial proportion of TCMPs claimed that they also used "Western" diagnostic methods

Furthermore, (Wong et al., 1993a) also found that around 60% of TCMPs in Hong Kong reported that they use sphygmomanometers to check their patients' blood pressure and 54% used the instruments regularly in

their practices. In addition to the use of sphygmomanometers, (Wong et al., 1993a) found that 58% of TCMPs in Hong Kong used stethoscopes, and 50% admitted using them regularly, in addition to making use of blood examination, urine examination, X-ray, electrocardiography and ultrasonography results. Moreover, approximately 35% of TCMPs in Hong Kong also reported that they had received training in blood examination, and 12% reported they had requested diagnostic tests for blood examinations (37%) and urine examination (15%). Furthermore, the proportion of TCMPs in Hong Kong who claimed that they had requested X-rays, electrocardiography and ultrasonography tests was 31%, 28% and 24%, and the number of TCMPs requesting or making use of the results of such tests was found to be 13%, 11% and 11% respectively.

The demarcation between TCM and WM practices was not addressed at the time that (Wong et al., 1993a) conducted their study of TCMPs in Hong Kong, and it was not until 1993 that laws governing the regulation and standards of practice of TCMPs were implemented in Hong Kong and the CMCHK was established. The CMCHK, the regulatory body that oversees the training and practice of TCM by TCMPs in Hong Kong, prohibits TCMPs from ordering and using WM diagnostics tests and also prescribing WM drugs (Chung et al., 2009b). Furthermore, the practise of integrated medicine in Hong Kong involving the use of TCM and WM in-patients in any hospital in Hong Kong requires that a WMD involved in the patient's care also be involved.

The World Health Organization (WHO) advocated in 2008 that communication between conventional and traditional medicine providers should be strengthened. At the same time, the WHO Member States were encouraged to take steps to integrate complementary and alternative medicine (CAM) into their healthcare systems (World Health Organisation, 2008)

A study by Chung et al. (2009b) of TCMPs postgraduate education in Hong Kong found that they wanted a better understanding of how they could work with WMDs so that when patients consult them, their treatment could be more integrated with their WM treatment as it is practised for example in Taiwan (Chi et al., 1996).

Lam and Sun (2013) The TCM practitioners were adapted to act in a supportive role to Western doctors, although they recognised their strengths. They highlighted the prejudice from the WMDs about their diagnostic approach. The TCM practitioners felt that they were more open-minded than the Western

doctors, who often discouraged the patients from seeing them. Regarding integration with Western medicine, they considered it as a complicated issue due to the different concepts and forms of integration, as well as the balance between the two types of medicine. While there was a concern that learning Western medicine might overshadow their TCM mindset, they thought that TCM had always welcomed new elements to be added into it over the centuries, WM was no exception.

According to (Tsang et al., 2013) adequately designed clinical trials which demonstrate that TCM is effective must be the first step in a transition to integrated medicine. In developing clinical trials, it is essential to incorporate the concepts of both WM disease identification and pathogenesis and TCM syndrome identification and management of the syndrome into research protocols, bit, this will require collaboration between WMDs and TCMPs to share in the development of the protocol, treatment, and exchange information as well as strengthening of interprofessional connections (Tsang et al., 2013). Furthermore, once evidence is established, TCMPs and WMDs will have the confidence to refer cases to each other and work together for the care of the patients. Therefore, each discipline must work within its expertise (unlike the present situation which is often a WM physician with little training in TCM, or a TCMP with little or no training in WM (Tsang et al., 2013). TCM would then be recognised as a specialised branch of medicine.

To date, there has been very little integration of TCM and WM services in Hong Kong, other than the establishment of HA sub-vented clinics government in Hong Kong (see Chapter 1, Section 1.2.1). However, since the return of sovereignty to China, the Government of Hong Kong has been committed to promoting the development of Chinese medicine in Hong Kong. In 2014, they announced that they would establish a Chinese medicine hospital in Hong Kong, and later in the same year, the Hong Kong Government launched a pilot programme to explore the feasibility of establishing in-patient services in a dedicated Chinese medicine hospital in Hong Kong.

2.7 Summary of Chapter

Besides modern medical treatment, TCM is another highly accessible and widely used service by many Chinese people. To date, there has been no prior study specifically examining factors associated with utilisation and practice of TCM among Chinese people and TCMPs, respectively. The focus of this literature review is, therefore on the utilisation and practice of TCM by Chinese people.

The review is divided into two parts. The first part examines studies where researchers have reported on the utilisation of TCM by Chinese people and the second part on studies where researchers have reported on the practice of TCM by practitioners of Chinese medicine.

The current study intended to seek information about Chinese patients use TCM and the practice of TCM in Hong Kong and China. Also, it attempts to identify criteria derived from the literature that might may play a role in the formation of a Chinese people's attitudes towards TCM, such as age, occupation, educational background, power level as well as factors related to TCMPS attitudes toward the practice of TCM.

Some different variables appear to play a part in the formation of Chinese people's attitudes regarding the utilisation of TCM; these include, the prevalence of use of TCM by Chinese people; consultations patterns of Chinese patients. Furthermore, the literature also uncovered some studies where researchers have reported on Chinese peoples perceived strengths and weaknesses of TCM and WM and some studies that researchers also reported on the patient's knowledge of TCM. Also, other variables, such as socio-demographic differences regarding the use of TCM among Chinese patients; and regional differences of Chinese patients consulting TCMPs have also been reported on by some researchers notably those in Taiwan and China.

The second part of the literature review examined studies where researchers reported on the practice of TCM in particular differences in the practice of TCM between Hong Kong and China; the regulatory status, education and training of CMPs in Hong Kong and TCMPs in China. Furthermore, studies where researchers have reported on medical conditions treated by TCMPs; the type of TCM modalities used to treat patients and also the integration of TCM in Hong Kong and China were also uncovered.

Gaps in the literature review are the focus of this study. These gaps pertain to factors that impact on Chinese patients' decisions to use TCM, as well as the factors that impact TCMPs' to practice TCM and whether such factors differ between Chinese patients and TCMPs in Hong Kong and Guangzhou. Moreover, there is also a lack of up-to-date information in the English literature about the education and training of TCMPs in China. The findings from this study provide an enhanced understanding of the Chinese patient's use of TCM and add a further dimension to the practice of TCM by TCMPs to enable them to provide holistic and evidence-based care. Based on the literature review, contributes to the existing body of literature of the

utilisation and practise of TCM in Hong Kong and China. The next Chapter describes the methodological framework and study design of the study.

Chapter 3: Methodological Framework and Study Design

People rarely succeed unless they have fun in what they are doing.
Dale Carnegie.

3.1 Introduction

When conducting research, researchers are usually required to approach their study with some form of personal philosophical positioning, which affects the way they see the world and the way they choose to conduct their research. Some researchers may decide that they would prefer to use a mixed-methods approach to investigate a phenomenon. However, in order to undertake academic research that is both cohesive and sound, a researcher needs to provide support for the use of the method with some form of methodological paradigm, as well as ontological and epistemological justifications. This chapter examines the methodological framework used for this study and provides a rationale for adopting the mixed-methods approach. Also, it describes the advantages and disadvantages of the use of the method, explains why a sequential explanatory study design was used and explores ethical issues relating to the research. Lastly, in the final section of this chapter, the researcher discusses his role in the study.

3.2 Research Paradigm

Before commencing any research, a researcher must consider the philosophical assumptions of each research paradigm they will use for their study, as this can influence the choice of research method(s) a researcher will use. Particular paradigms may be associated with specific methodologies. For example, a positivistic paradigm typically assumes a quantitative methodology, while a constructivist or interpretative paradigm typically utilises a qualitative methodology. However, no one paradigmatic or theoretical framework is “correct”, and it is, therefore, necessary that a researcher determine their paradigmatic view and also how the view informs their research design to best answer the question in the study. This research falls within the two broad worldviews of the positivist and constructivist, and these two worldviews have opposing assumptions about reality and the view of the world. Andrew et al. (2011) show the main differences between constructivism, positivism, and pragmatism Table 3.1 below.

Table 3.1 Main differences between positivism, constructivism and pragmatism

	Positivism	**Constructivism**	**Pragmatism**
Type of research	**Quantitative**	**Qualitative**	**Mixed**
Methods	Closed-ended questions, pre-determined approaches, numeric data	Open-ended questions, emerging approaches, text or image data	Both, open and closed-ended questions, both, emerging and predetermined approaches, and both, qualitative and quantitative data analysis
	Tests or verifies theories or explanations Identifies variables of interest Relates variables in questions or hypotheses Uses standards of reliability and validity Observes and then measures information numerically Uses unbiased approaches Employs statistical procedures	Position researcher within the context Collects participant-generate meanings Focuses on a single concept or phenomenon Brings personal values into the study Studies the context or setting of participants Validates the accuracy of findings Interprets the data Creates an agenda for change or reform Involves a researcher is collaborating with participant	Collects both qualitative and quantitative data Develops a rationale for mixing methods Integrates the data at various stages of inquiry Presents visual pictures of the procedures in the study Employs practices of both qualitative and quantitative research

The main difference between constructivism philosophy and positivism relates to the fact that while positivism argues that knowledge is generated in a scientific method, constructivism maintains that scientists construct knowledge. It opposes the idea that there is a single methodology to generate knowledge.

In this study, two different perspectives, namely the “WM paradigm” vs the “TCM paradigm” both look at health from a different perspective. For example, from a WM perspective, the main focus of a positivist’s worldview is the scientific characteristics of the study. Whereas, for the TCM perspective, the focus is on Chinese cultural beliefs. As this study makes uses of a mixed method approach, it is essential to explore the assumptions of the quantitative and qualitative research paradigms. These assumptions act as a code for researchers in the field.

Traditionally, research is a dichotomous split between positivist (quantitative) and naturalistic (qualitative) paradigms. The quantitative paradigm that Sale et al. (2002) suggests, is characterised by empirical research, which reduces phenomena to empirical indicators which represent the truth. In this objective world, a researcher's independence is immune to the influence of subjects, or even their values. Whereas, the qualitative paradigm, is based on constructivism, whereby research stresses the socially constructed nature of reality.

(Creswell, 2013, Denzin and Lincoln, 2011) suggest that qualitative research is a "means of exploring and understanding the meaning that individuals, or groups, ascribe to a social or human problem." Qualitative researchers do not begin research with a hypothesis that needs to be disproved. Instead, they seek to provide understanding through the interpretation and explanation of human experience. The emphasis is not on quantifying experience but on constructing meaning from complex human interactions.

To clarify these differences further, Bryman (2012) describe the differences as a "clash reflecting a division between an emphasis on the explanation of human behaviour (quantitative) and the understanding of human behaviour (qualitative). Sale et al. (2002) on the other hand, suggest that these different assumptions about truth and knowledge have resulted in an entrenchment of views characterised by each paradigm having its' academic journals, sources of funding, different expertise and different methods.

This entrenchment is reminiscent of what Gage (1989) referred to as "the paradigm war" which debates the main differences about qualitative and quantitative research that contributed to an entrenchment of views about the most effective way of conducting research. A concern with these assumptions is that it may accentuate the differences, or incompatibility, of combining both research traditions.

Howe (1988) disputed the incompatibility as well as the assumption that qualitative and quantitative methods were not compatible as they can be mixed. He instead suggested that there were no reasons that researchers should not use pragmatic approaches when conducting research. However, this tension between these contrasting research philosophies is often considered to be a constraining force in research. Guba and Lincoln (1988) suggest that the different paradigm assumptions, outlined above may have led to the dichotomy between quantitative and qualitative methods, this, in turn, leads to a conflict in determining which approach constitutes the best path to knowledge or truth.

Howe and Eisenhart (1990) suggest that because of this paradigm split, basic approaches to research may end up as various dichotomies. i.e. facts versus values, objectivity versus subjectivity, fixed categories versus new categories, an outsider's perspective versus an insider's perspective. Significant research findings battle over methods, or innovative approaches may end-up spurned because and ultimately perish on the altar of epistemology.

While these positions appear to be irreconcilable, mixed methods research offers the chance to combine methods in parallel as has been done in this research. However, the 'paradigms' remain separate and are used in parallel, rather than seeing them as dichotomous. Burke and Onwuegbuzie (2004) visualise them on a continuum, with qualitative research anchored at one pole and quantitative research anchored at the other, with mixed methods research covering the broad set of points in between, which means that the definition of mixed methods can be extended to include the mixing of paradigms. This characterisation is quite appealing as it is within the spirit of mixing methods, rather than compartmentalising them. Some researchers, therefore, believe that this is why this paradigm is referred to as the third research paradigm (Gunasekare, 2015).

However, Johnson et al. (2010) suggest that using a mixed-methods approach in a study allows qualitative data to elicit rich stories from the quantitative data relating to the participants' experiences. For this study, the mixed-methods design was used, to gain insight into the utilisation of (TCM) by Chinese people as well as the practice of TCM by traditional Chinese medicine practitioners (TCMPs).

The quantitative method permits a generalised examination or macro view of the utilisation and practice of TCM by Chinese people. While the latter, qualitative approach, allows for a micro view of the utilisation and practice of TCM by Chinese people, and sought to interpret the meaning of Chinese people's experiences, and thus provides a deeper understanding of the quantitative data. In addition to this, researchers from both paradigms usually disseminate their research findings following a formula that includes a literature review, a description of methods employed, explanation of data analysis, a presentation of results, and a discussion that usually examines the methodological weaknesses and a conclusion and usually has results or outcomes that are based on the research. It would, therefore not be considered "too strange" to suggest that both methods can be merged because both paradigms incorporate safeguards that serve to minimise bias and increase validity and reliability (Sandelowski, 1986). Having a philosophical

framework to guide the research is also one of the principles of ensuring rigour, and situating research in a philosophical paradigm will contribute to a study's overall coherence.

3.3 Study Philosophical Framework: Pragmatism

3.3.1 What is Pragmatism?

Pragmatism is an American methodological approach that originated from the work of William James (1842-1910), John Dewey (1859-1952), Charles Sanders Peirce (1839-1914) and Herbert Mead (1863-1931). The word "Pragma" is derived from Greek literature and means action, from which the words "practice" and "practical" are derived from James (2000). In English, the term "pragmatic" has the connotation of searching for feasible, workable solutions to complex human problems Fishman (1991).

In academic literature, "pragmatism" is defined as to "relieve and benefit the condition of man -to make mankind happier by enabling them to cope more successfully with the physical environment and with each other" Bacon (2012). Thus the concern for a pragmatist is to find out "what works" and what enables solutions to problems (Creswell, 2003, Patton, 2002). Pragmatists believe one should stop asking questions about the laws of nature and reality (ontology) and the theory of knowledge (epistemology).

For pragmatists, the research question or problem is the 'central' focus Creswell (2003), and the central concern is "what works" Patton (2002). To a pragmatist, the mandate of science is not to find truth or reality, the existence of which is perpetually in dispute but to facilitate human problem-solving. According to the pragmatist and philosopher John Dewey, "science should overthrow the notion that has ruled philosophy since the time of the Greeks, and that the office of knowledge must uncover what is real, rather than, as is the case with our practical judgments, to gain a kind of understanding which is necessary to deal with problems as they arise."

Pragmatists also believe that at times mono-methods may not always be best suited to research and that combining methods is acceptable to arrive at workable solutions. Brannen (2009) suggests that mixed methods research has been associated closely with pragmatism which Creswell (2003) suggests is a pluralistic philosophy that rejects the traditionally enforced choice between quantitative and qualitative methods.

Pragmatism, therefore, rejects various dichotomies and allows researchers to combine different ways, in order to best answer their specific research questions. Carey (1993) suggests that quantitative and qualitative methods are tools and that by integrating them, it allows us to answer questions of substantial importance.

Carey's background was in public health. Therefore, this led him to believe that there was not enough methodological linkage between both paradigms. Consequently, he suggested,

> "to bridge the gap between the two approaches; researchers should maintain a flexible and pragmatic perspective regarding the selection and use of methods."

In this regard, Niglas (2009) suggests that pragmatists, while accepting significant differences between quantitative and qualitative research, advocate the integrated use of different methodologies, as this could advance our understanding about the phenomenon under investigation. The characteristics fit exceptionally well with this study where Chinese patients and TCMPs attitudes and perception can give also add content about the utilisation and practice of TCM by Chinese people.

3.3.2 What is Mixed Methods Research?

Mixed methods research is a methodology for conducting research that involves collecting, analysing quantitative (e.g., experiments, surveys) and qualitative (e.g., focus groups, interviews) data in parallel. This approach to research is used when this integration provides a better understanding of the research problem rather than using each alone. Quantitative data includes close-ended information, such as that found when measuring attitudes (e.g., rating scales), behaviours (e.g., observation checklists), and performance instruments.

The analysis of this type of data consists of statistically analysing scores collected using instruments (e.g., questionnaires) or checklists to answer research questions or to test hypotheses. Qualitative data comprises open-ended information that a researcher usually gathers through interviews, focus groups and observations. The analysis of the qualitative data (e.g., words, text or behaviours) typically follows the path of aggregating it into categories of information and presenting the diversity of ideas gathered during data collection. By mixing both quantitative and qualitative research and data, a researcher gains in-breadth and

in-depth understanding and corroboration, while offsetting the weaknesses inherent to using each approach by itself.

One of the most advantageous characteristics of conducting mixed methods research is triangulation, of the study data using several means to examine the same phenomenon. Thus, triangulation allows an event to be more accurately identified by approaching it from different vantage points using different methods and techniques.

Definitions of Mixed Methods Research

Johnson and Onwuegbuzie (2007) argue that mixed methods research is one of the three dominant "research paradigms," i.e. quantitative research, qualitative research, and mixed methods research.

To search for the criteria of demarcation relating to the three dominant research paradigms, they asked many leading researchers in the field of mixed methods research how mixed methods could be defined.

Tashakkori and Teddlie (2003) defined mixed methods research as a method that includes, data analysis, interpretation,

> "research in which the investigator collects, and analyses data integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study."

Burke and Onwuegbuzie (2004) defined mixed methods research as,

> "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study."

Lastly, Creswell and Plano Clark (2011) defined the core characteristics of mixed-methods research. He suggested that their core characteristics provided a broader definition of mixed-methods research since they combine methods, philosophies, and a research design orientation. The six core characteristics they focus on include, (1) collecting and analysing persuasively and rigorously both qualitative and quantitative data, based on research questions. (2) mixing - or integrating or linking - the two forms of data either concurrently by combining or merging them, sequentially by having one build on the other, or embedding one within the other. (3) Giving priority to one or both forms of data, (4) using these procedures in a single research study or multiple phases of a program of research, (5) framing the procedures within philosophical worldviews

and theoretical lenses and (6) combining the procedures into specific research designs that direct the plan for conducting the study.

3.4 The rationale for Selecting Mixed Methods Design for this Study

Although there is controversy surrounding the use of mixed methods, it was determined by the researcher of this study that it would be the best method, because the utilisation and practice of (TCM) involve two parties, namely, patients, and TCMPs, both of whom share different perspectives about the research questions. However, Sarantakos (2005) suggests that a critical weakness of qualitative research is that it generally has small sample sizes, that generate findings that are representative of a whole population. He also suggests that qualitative results are subjective and cannot guarantee to be free of interpretation bias.

Conversely, Burns (2000) also suggests that quantitative research has several weaknesses. One weakness is that it cannot recognise the complexity of human activities and experiences, even when controlling different variables. Quantitative research, he believes also lacks objectivity, as the researcher is subjectively involved in the choice of a problem when conducting data analysis and interpreting the results. As such, the use of only one methodology alone cannot adequately investigate such a complicated issue.

Using a mixed-methods design for this study enables Chinese patients and TCMPs experiences regarding the use of TCM to be contrasted. The mixed-methods approach also allows a fuller exploration of Chinese patients and TCMPs perceptions, attitudes, and beliefs towards TCM and WM. The qualitative part of the study would facilitate a broader context and depth of the quantitative part. When using a mixed-methods design, it was also felt that the method would be beneficial in determining whether Chinese patients in Hong Kong and Guangzhou shared similar, or different views about TCM and whether TCMPs in Hong Kong and Guangzhou also shared identical, or different opinions about the way TCM is practised in the two regions.

3.5 Reasons for Selecting an Explanatory Design

Creswell and Plano Clark (2007) state that although mixed methods research uses mostly fixed quantitative and qualitative methodologies at the start of the research process, new issues often arise, or develop during the process of conducting the study. They, therefore, propose that mixed methods research may consist of

different designs, namely, triangulation, embedded, exploratory and explanatory designs Creswell and Plano Clark (2007). For this study, a model, which utilised both quantitative and qualitative designs at the same time, without any sequencing was not considered an appropriate method to use, mainly because it involves two different stakeholder groups, both of whom have different worldviews. A sequential explanatory design was therefore used for this study, as it was felt that the qualitative data would help to explain the results obtained from quantitative data.

It will also confirm the data, through the enhancement of validity as well as the confidence of the findings and understanding of the concept(s) under investigation Halcomb EJ (2005). Furthermore, merging of the two methods when using a sequential explanatory design also provides a better indication of what is included in the content, as well as where it has been derived. The sequential explanatory design whole process is outlined in Figure 3.1 below.

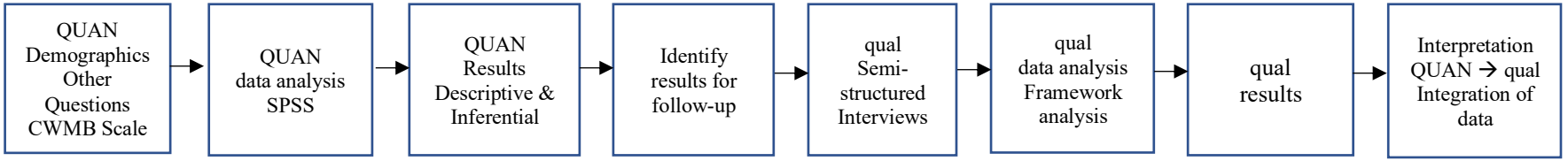

Figure 3.1 Mixed method sequential explanatory study of the utilisation and practise of TCM in Hong Kong and Guangzhou

3.6 Study Integrity

This section will discuss the steps taken, and processes followed in increasing project rigour. Creswell and Plano Clark (2007) suggest that currently, there are no accepted criteria for assessing the quality of mixed methods research. They go on to suggest that issues of rigour and validity in mixed methods research should be "reported and discussed within the context of both quantitative and qualitative research methods." Creswell and Plano Clark (2007) suggest that

> "quality assessment of the qualitative and quantitative components of a study is essential as each contributes to the study as a whole."

3.7 Study Rigour

Tobin and Begley (2004) suggest that rigour is how we show integrity and competence; it is about ethics and politics, regardless of the paradigm. Rigour is a contentious term in research because of its perceived quantitative leaning. However, all research needs to have some quality assurance process to differentiate it from assumption or minimise researcher subjectivity. Using trustworthiness in place of rigour is common in qualitative research. However, this study adopts the concepts of rigour and trustworthiness, as outlined by Lincoln and Guaba (1985).

Table 3.2 Quality Assurance Measures derived from Lincoln and Guba (1985)

Quality Assurance Measures	
Quantitative Research	**Qualitative Research**
Validity	Credibility
Generalisability	Transferability
Reliability	Dependability
Objectivity	Confirmability

3.8 Quantitative Quality Assurance

Content validity the degree to which an instrument has an appropriate sample of items for the construct to be measured. Kumar (2010) suggests that face validity can be established by each question having a logical link to the objective.

3.8.1 Validity

Validity in research refers to how accurately a study answers the study question or the strength of the study conclusions. For outcome measures such as surveys or tests, validity refers to the *accuracy* of the measurement. Here validity refers to how well the assessment tool measures the underlying outcome of interest. Validity is not a property of the tool itself, but instead of the interpretation or specific purpose of the assessment tool with particular settings and learners Sullivan (2011). Face validity is another component of content validity. Face validity is established when a researcher who is considered an expert on the research subject reviews the questionnaire and concludes that it measures the characteristic or trait of interest. Face validity involves having an expert looking at the items in a questionnaire and agreeing that the test is a valid measure of the concept which is being measured just on the face of it. Which means that they are evaluating whether each of the measuring items matches any given conceptual domain of the concept.

Having questionnaires used in a study reviewed by other people can contribute to increased content and face validity (Kimberlin and Winterstein, 2008). Therefore, to enhance face validity of the questionnaires used in this study, a review of the questions in the patient and TCMP questionnaires was undertaken by Celia Bell (CB), Ming Cheng (MC) and Linda Bell (LB) at Middlesex University, London. CB is Head of the Department of Natural Sciences at the Middlesex University; LB is a Principal Lecturer in Research Methods at Middlesex University and MC, an Associate Professor of Chinese Medicine at Middlesex University. The questionnaires used in this study were also pilot-tested and examined for content, accuracy and language. Minor revisions were undertaken after the pilot-testing (see Pre-testing of the Questionnaires in Section 3.11.2.

However, construct validity a concept that usually applies to questions contained in a questionnaire than interview questions. Therefore, development of the interview questions that were used during the semi-structured interviews with patients and TCMPs were reviewed by CB, MC and LB.

The comments they all provided enabled the cross-relation of some of the interviews for the semi-structured interviews with some of the questions contained within the patients and TCMPS questionnaires. As the questionnaires were to be sent to participants to patients and TCMPs, a series of edits after was conducted using the readability function of Microsoft Word. Also, the Flesch Reading Ease (FRE) score was determined and found to of 79.8 The FRE score defines the reading difficulty of a piece of text. The higher

the score, the more people will be able to read the text; The score 79.8 represents an easy to read the text. While the concept of the FRE score is American, the test demonstrated the general readability and understandability of questionnaires and interview questions.

3.8.2 Generalisability

Researchers apply generalisability, which can be defined as the extension of research findings and conclusions from a study conducted on a sample population to the population at large. While the dependability of this extension is not absolute, it is statistically probable. Because sound generalisability requires data from large populations. Quantitative experimental research provides the best foundation for producing broad generalisability. Thus, the more substantial the sample population, the more one can generalise the results.

3.8.3 Reliability

Reliability is the degree of consistency, or accuracy with which a questionnaire measures an attribute that it is designed to measure (Sullivan, 2011). Broadly speaking, if a study and its results are reliable, it means that the same results are likely to be obtained if the study were to be replicated by other researchers using the same methods. There are several ways to estimate reliability. The technique used will depend upon the type of assessment instrument. Sometimes reliability is referred to as internal validity or internal structure of the assessment tool. Cronbach alpha is a test of internal consistency and frequently used to calculate the correlation values among the answers on the assessment tool. Cronbach alpha calculates correlation among all the variables, in every combination; a high-reliability estimate should be as close to 1 as possible. (For information about the calculation of Cronbach's alpha for the questionnaires used in this research, see Chapter 4). In this study, a small sample of patients and TCMPs who were not included in the research, but who had similar characteristics to the population of patients and TCMPs who would take part in the study were given the research instruments to complete, to determine if the clarity of the items in the questionnaires and the consistency of the responses they provided.

3.8.4 Objectivity

Objectivity is the idea that scientists, in an attempt to uncover truths about the natural world aspire to eliminate personal biases, a priori commitments, emotional involvement. When people talk about objectivity, they equate it with neutrality, a total lack of bias, lack of prejudice, the underlying assumption

being that there is one single truth that can be revealed or measured. Quantitative methods may be considered more objective than qualitative methods; However, while the terms "objective" is frequently with quantitative and qualitative studies, it is now well recognised that such distinctions are inadequate and inappropriate. Quantitative or even statistically sound quantitative data is not per se “objective”. Numbers do not protect against bias; they merely disguise it. All statistical data are based on someone's definition of what to measure and how to measure it. There are subjective choices regarding how to disaggregate statistical data (age, gender, region, socio-economic class). When conducting research, it is essential to recognise concerns about objectivity, mainly when collecting data, and this must be addressed along with other issues such as researcher credibility and trustworthiness. The balance of perspectives through research techniques, analytical frameworks and the research/evaluation process: a researcher’s awareness and transparency about the attitude they have to fieldwork and more importantly, careful documentation of all procedures, so that others can review methods for bias.

3.9 Qualitative Integrity

3.9.1 Trustworthiness

Some positivists often question the trustworthiness of qualitative research. In positivist/scientific research, the researcher aims at gaining knowledge in a world which is objective using scientific methods of inquiry. Methods associated with this paradigm include experiments and surveys where quantitative data is the norm. However, several writers on research methods, notably (Silverman, 2001) have demonstrated how qualitative researchers can incorporate measures that deal with these issues. In addressing the issue of trustworthiness in this study, Lincoln and Guaba (1985) suggest four assessment criteria. These are credibility, dependability, confirmability, and transferability.

3.9.2 Credibility

In addressing issues of reliability, various techniques are employed to show that if the study was repeated with the same methods, and with the same participants that similar results can be obtained. In this study, credibility was enhanced by the engagement with the patients and the interviewer, albeit limited. In this study, although prolonged engagement with the patients and TCMPs who took part in the semi-structured interviews was limited. However, the research assistant who interviewed the patients is a qualified TCMP.

The credibility of the findings, however, increased using a process of continuous reflection concerning the use and practice of TCM. Therefore, this enabled the researcher to approach this study from multiple perspectives, thus developing a thorough analysis.

3.9.3 Dependability

Dependability is vital to trustworthiness because it establishes the research study's findings as consistent and repeatable. Researchers aim to verify that their findings are consistent with the raw data they collected. They want to make sure that if some other researchers were to look over the data, they would arrive at similar findings, interpretations, and conclusions about the data. In this study, the process of documenting the research and the analysis of the findings from the patient interview transcripts permitted the researcher to demonstrate how objectivity helps to show, as far as possible, that the findings of the study are the result of the experiences and ideas of the participants, rather than those of the researcher.

3.9.4 Confirmability

Ratner (2002) suggest that qualitative data may be vulnerable to subjective interpretation, to minimise this, the qualitative data analysis process was subject to a confirmability audit. A confirmability relates to the degree of neutrality of the research process or the extent to which the respondents shape the findings of a study and not researcher bias, motivation, or interest Lincoln and Guaba (1985).

3.9.5 Transferability

Transferability in qualitative research is synonymous with generalisability, or external validity, in quantitative research. Transferability is established by providing others with the evidence that the research study's findings could apply to other contexts, situations, times, and populations. It is essential, therefore, to note that a researcher cannot prove that a research study's findings will be applicable. Instead, it is the job of the researcher to provide evidence that it could be applicable. Transferability, therefore, relates to the use of conceptual transference of study findings to other settings Lincoln and Guaba (1985). Thus, comparing the findings of this study with other studies enabled the enhancement of the transferability to be determined. Also, the sample selection process and study sites used in this research permitted uniqueness versus commonality to be determined.

3.10 Ethical Aspects of the Study

Researchers often face ethical dilemmas when conducting research involving people. They, therefore, need to exercise care that the rights of the individuals taking part in the study are accurately and thoroughly protected. Therefore, this section examines the ethical aspect of the study. The researcher of this study is an experienced researcher, he is fully aware of the importance of concepts such as autonomy, confidentiality, and consent in clinical practice, and knows that these must transfer into the research. Therefore, ethical practices in research are principally concerned with protecting subjects or participants who take part in research and ensures that they do not come to any harm. Research, honesty, and integrity, therefore, epitomises this. Orb et al. (2000) put it simply by saying, "ethics pertains to doing good and avoiding harm."

Safeguards that protect populations under investigation need to be an integral part of the whole research project, from data collection to dissemination. These should be explicit so that potential participants can decide whether they want to participate. As this is a mixed-methods study utilising two different samples, the principles of research ethics applied equally to the patients and TCMPs who take part in the study. As research ethics govern the standards of conduct for scientific researchers, it is essential to adhere to ethical principles to protect the dignity, rights, and welfare of research participants. As such, all research involving human beings must be reviewed by an Ethics Committee (EC) or Institutional Review Board to ensure the maintenance of ethical standards. Ethical principles of beneficence, justice, and autonomy are central to any ethical review. This section, therefore, outlines the ethical aspects of the study to illustrate how moral principles and practices apply to the study. Because there are many ethical considerations that a researcher must keep in mind when conducting research, for this study, issues of informed consent, confidentiality and interview ethics were especially significant.

Informed Consent

Participants who are asked to take part in research must freely provide their consent after having been fully informed about the study. It is up to the researcher to determine whether a subject sincerely wishes to take part. Although this may place the interests of potential study participants in opposition to those of the researcher, the informed consent process helps the researcher to understand any potential concerns participants may have about participation in a study. Researchers seeking consent must provide a clear

explanation of the scope of consent sought and what the research entails and honest answers to all the participants' questions. Oliver (2010) observed that some participants who agree to take part in a study might be impressed by the status of the researcher, or by the word "research," and decide to participate without a real understanding of what their involvement or the study entails.

There are several different methods and strategies that a researcher can use to obtain informed consent from research participants. Nijhawan et al. (2013). For this study, the method chosen was to provide an information sheet to potential study participants before they were permitted to complete a questionnaire. See Appendix G for the English version of the information sheet for patients and Appendix L for the English version of the information sheet for TCMPs.

Consent was obtained from all participants who answered a questionnaire and also those who agreed to take part in an interview, as there was a time-gap in between a participant completing a questionnaire and taking part in an interview. Therefore, in addition to providing the initial information sheet about the study, a separate information sheet and consent form were used to provide participant information about their participation in an interview. See Appendix O for the English version of the information sheet and consent form for patients and Appendix S for the English version of the information sheet and consent form for TCMPs.

The information sheets and consent form, which are usually collectively referred to as the informed consent documentation, were translated and "localised" from English to traditional Chinese characters, for use in Hong Kong and translated into Simplified and "localised" for use in Guangzhou. The information documentation describes the study and what participation in the research study will involve in lay terms. One of the main reasons for choosing this method for this study was that it ensured that both the patients and TCMPs who agreed to participate in the study were provided with the same information and in the same manner. In this study, patients and TCMPs who decided not to participate in the study were not pressured to change their minds, nor were they asked to provide any reasons for their refusal to take part. Those who took take part in the study were also informed, using the information sheet that they could choose to cease their involvement in the research at any time and without having to provide any reason.

All the participants gave their informed consent before participating in each phase of the search study, and each patient and TCMP who agreed to take part in the research study were given their copy of the information sheet.

Confidentiality

The creation of mechanisms to protect the identity of participants who take part in research is also central to the design and practice of ethical study. Privacy of participants' research data is also a legal requirement of data protection laws in the United Kingdom, Hong Kong, and the People's Republic of China. According to Barnes (1979), a general but essential rule of thumb regarding confidentiality is that all data collected in a study must be anonymised Grbich (1998). Also, participants must be told explicitly about the steps to maintain the confidentiality of their data in the informed consent document that is given to them before they participate in the study.

For this study, when a patient or TCMP agreed to take part in a semi-structured interview, they were required to provide a name and contact telephone number, to enable a research assistant to contact them and arrange a suitable time, date and location to meet for the interview.

The patients and TCMPs that took part in this study were provided with a study information sheet to enable them to decide if they would complete a study questionnaire. However, a separate information and consent form was issued to patients and TCMPs before taking part in the interview. The patients and TCMPs were also informed that their interview would be conducted in an area of their choice and that it would also be recorded. Patients and TCMPs were also given the option of choosing to stop the recording of the interview at any time without having to provide a reason. Patient and TCMPs who participated in this study were also informed and assured that the record of their interview would be kept private and in a secure place and that access to the file would be limited and later would be destroyed, after the publication of the research results. All the interviewees were identified among the participants using their initials and gender.

Compliance with the Law

Data protection legislation governed the collection, retention, and dissemination of data. Recorded data was saved and backed up as a password protected MP_3 file on a computer with a firewall, antivirus software, and alphanumeric password protection. The hard disc backup also contained these security features, and

the passwords were only known to the researcher. An outside agency that specialised in transcription and translating activities, which uses native Chinese speakers translated the recorded data.

Right to Withdraw Anytime

The consent form and information sheet issued to a patient or a TCMP stated that their participation in the study was voluntary and that they had the right to withdraw from the study anytime without penalty.

Potential Benefits and Potential Harm of the Research

Although this research did not involve human testing or any type of intervention and the subject under investigation was benign, the risk of harm was considered negligible.

Avoids Deception and Operates with Scientific Integrity

A research proposal was developed and submitted to the Ethics Committee for review. However, the researcher for this study is experienced and has been involved in research while working in the National Health Service in the UK and also in the pharmaceutical industry and academia. Furthermore, the researcher conducting this research has complied with the strict ethical requirements of the Middlesex University, London and the Joint Chinese University of Hong Kong - New Territories East Cluster Clinical Research Ethics Committee in Hong Kong.

3.11 Ethics Committee Approval for the Study

This research study underwent review by two Ethics Committees (ECs). The first EC to approve the study was the Middlesex University's School of Health and Social Science's Ethics Committee, Middlesex University, UK. A copy of the EC approval letter from Middlesex University, London UK. is shown in Appendix E. The second EC that reviewed this study was the Joint Chinese University of Hong Kong New Territories East Cluster Clinical Research Ethics Committee in Hong Kong. A copy of the approval letter from the Chinese University of Hong Kong is shown in Appendix D. As the data collection in Hong Kong was prolonged, an extension of the Ethics approval was requested from the Ethics Committee. A copy of the Extension of Ethics Approval is shown in Appendix F.

In China, after reviewing the EC approval letters issued by the Middlesex University Ethics Committees and the Joint Chinese University of Hong Kong New Territories East Cluster Clinical Research Ethics Committee, Professor Shao Xian Xian gave verbal permission to collect data from patients and TCMPs at the 1st Affiliated Hospital of Guangzhou, without the need to submit a separate application ethics committee application to the ethics committee of Guangzhou University.

Professor Shao Xian Xian is Head of the Chinese Department of the 1st Affiliated Hospital of Guangzhou University, Guangzhou of the People's Republic of China. Because it took some considerable time to collect data from patients and TCMPs in Hong Kong, a renewal of the EC approval by the Joint Chinese University of Hong Kong New Territories East Cluster Clinical Research Ethics Committee Research EC was submitted. A copy of the EC renewal letter from the Chinese University is shown in Appendix D.

Ethical Aspects of using a Survey Questionnaire

Survey research is defined as "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012). This type of research allows for a variety of methods to recruit participants, collect data, and utilise various methods of instrumentation. Survey research can use quantitative research strategies (e.g., using questionnaires with numerically rated items), qualitative research strategies (e.g., using open-ended questions), or both approaches (i.e., mixed methods). As it is often used to describe and explore human behaviour, surveys are, without a doubt, one of the most widely used data collection methods in the social sciences Ponto (2015). Ethical aspects regarding the use of survey questionnaires in research are essential, as they help to determine the difference between what is acceptable and unacceptable behaviour on the part of the researcher when using this method of data collection. Also, integrity, reliability, and validity of the research findings rely heavily on adherence to specific ethical principles. As is the case in all other kinds of research, survey research, the aim of the ethical principles is to ensure that research participants who agree to take part in a survey are protected.

3.12 Quantitative Data Collection Methods

Data collection instruments are tools for data collection. They include questionnaires, interviews, observations, and readings. Before collecting data, the instrument chosen must be valid and reliable; it must be critically examined to check the extent to which it is likely to give the expected results.

In this research study, questionnaires were used to collect quantitative and qualitative data from Chinese patients and TCMPs in Hong Kong and Guangzhou.

The questionnaire is the favoured tool of many of those engaged in research, and it can often provide a cheap and effective way of collecting data in a structured and manageable form. (Wilkinson and Birmingham, 2003). Questionnaires can be challenging to design and analyse. Moreover, questionnaires can also be misleading or ambiguous. When targeting specific or challenging groups or individuals, more detailed questionnaires are developed. However, this can create hours, days or weeks of work in analysis. (Wilkinson and Birmingham, 2003). Despite this, questionnaires do have several advantages over some other types of surveys in that they are cheap, do not require as much effort from the questionnaire as verbal or telephone surveys, and often have standardised answers that make it simple to compile data. However, there are also disadvantages to using questionnaires, such as a questionnaire that utilises graded responses, and these graded answers may frustrate respondents who are asked to complete the questionnaire. Also, questionnaires are sharply limited by the fact that respondents must be able to read the questions and then respond to them.

Thus, for some demographic groups, conducting a survey using a questionnaire may not be appropriate. The questionnaire in this study was designed to gather information about Chinese patients and TCMPs knowledge, attitudes and beliefs regarding TCM.

Development of Questionnaires

Stage 1- Background Research

In this initial step, identification of the purpose, objectives, research questions, and rationale of the questionnaire also need identifying. The background, education and reading ability of the questionnaire participants also need to be considered, as well as the method for selecting them.

Stage 2 - Data Selection

After developing a thorough understanding of the background of the research, determine the type of data to be collected. For example, demographics, attitudes and perceptions, and the scale of measurements needed. In order to assist with the formulation of relevant questions, content from an existing questionnaire an appropriately transformed into items for use in a newly formulated questionnaire.

Stage 3 - Layout

During this stage of the development, the questionnaires the layout, format, and order of questions were determined, as well as the various scales that would be used to quantify participants' responses to a variable.

Structure of Questionnaires

This study involved the use of two separate questionnaires, a patient questionnaire and a TCMP questionnaire. A description of the structure and content of the two types of questionnaires are in the next section.

3.12.1 Patient Questionnaire

Section 1

This section of the questionnaire contains ten questions. Some of the questions ask patients about their previous consultation with a TCMP; and whether the treatment for the most recent medical condition with a TCMP was helpful. The location of their TCM consultation, how patient chose a particular TCMP, and whether a patient considers a TCMP's qualifications before a consultation. Lastly, some of the questions ask patients' if they had consulted a WM doctor before a TCMP, and about their knowledge of TCM, the severity of their current medical condition, and whether they had ever experienced any negative experiences with TCM.

Section 2

This section of the questionnaire contained a validated Chinese-Western Medical Beliefs (CWMB) scale as developed by (Liang, 1999). The CWMB scale is a general-purpose, medical system beliefs scale for the use of understanding beliefs concerning complementary and alternative medicine and to predict medical use behaviours. The CWMB scale contains 22 questions that are designed to measure patients' attitudes towards Western and Chinese medicine using a 5-point Likert scale (1=strongly disagree, 5 = strongly agree).

The CWMB scale contains four sub-questions relating to TCM about the "restorative effects" of TCM, side effects, therapeutic effects and priority over WM. These questions are designed to detect whether patients had an overall belief in the superiority of TCM. Two sub-scales in the questionnaire contain ten items relating to the efficiency of treatment and therapeutic effects, and if TCM or WM has better-quality facilities. These questions are designed to detect whether participants had an overall belief in the superiority of WM. Also included in the questionnaire, are two additional 5-point Likert scale questions that measure patients' trust in TCM and WM physicians (1 = not at all, 5 = very much). The second measured patient's preference patterns (1=lowest, 5=highest), consultation fees, the attitude of the healthcare professional, the efficacy of the treatment, and waiting time during the consultation. This tool is both valid and reliable, as well as being quite quick to administer.

Section 3

This section of the patient questionnaire contains questions that allowed for the collection of socio-demographic data from participants, including gender, age, place of birth, highest educational level of education and employment status. These variables are not only worth exploring on their own but were believed to collectively provide useful information about the patients as a group, also included in section 3 is a statement that thanked the patients for participating in the research study, but more importantly sought their permission to take part in a semi-structured interview to be conducted later.

3.12.2 TCMP Questionnaire

The TCMPS questionnaire used in this study is a questionnaire designed initially by (Bensoussan and Myers, 1996), for the collection of information on the characteristics of the TCM workforce in Australia. The questionnaire used in this study contains approximately 65 - 70 per cent of the questions from the original questionnaire initially designed by Bensoussan and Myers.

Section 1

This section of the questionnaire contains ten questions asking TCM about any previous experience with a TCMP. It also asks the participants whether the treatment for their most recent condition was helpful, where they usually go when they consult a TCMP. How they select a TCMP. Whether they took a TCMP's qualifications into account and if they consulted a WM doctor also, and if so whether that consultation had

occurred before seeing a TCMP; their knowledge of TCM; the severity of their current medical condition; and whether they had ever experienced any negative experiences with TCM.

Section 2

This section of the questionnaire contained a validated Chinese-Western Medical Beliefs (CWMB) scale as developed by (Liang, 1999). The CWMB scale is a general-purpose, medical system beliefs scale for the use of understanding beliefs concerning complementary and alternative medicine and to predict medical use behaviours.

The CWMB scale contains 22 questions that are designed to measure patients' attitudes towards Western and Chinese medicine using a 5-point Likert scale (1=strongly disagree, 5 = strongly agree). The CWMB scale contains four sub-questions relating to TCM are also included in the questionnaire (12 items); Restorative effects (3 items), side effects (3 items), therapeutic effects (3 items) and priority (3 items).

These questions were designed to detect whether participants had an overall belief in the superiority of TCM. Two sub-scales are included in the questionnaire (10 items) relating to the efficiency of treatment and therapeutic effects (3 items), and better-quality facilities (7 items). These questions were designed to detect whether participants had an overall belief in the superiority of WM. Two additional 5-point Likert scale questions are used. One item measured patients' trust in TCMPs and WM physicians (1 = not at all, 5 = very much). The second measured their preference pattern (1=lowest, 5=highest) regarding consultation fees, the attitude of the healthcare professional, the efficacy of the treatment, and waiting time during a consultation. This tool is both valid and reliable, as well as being quite quick to administer.

Section 3

This section of the patient questionnaire contains questions that allowed for the collection of socio-demographic data from participants, including gender, age, place of birth, highest educational level of education and employment status. These variables are not only worth exploring on their own but were believed to collectively provide useful information about the patients as a group, also included in section 3 is a statement that thanked the patients for participating in the research study, but more importantly sought their permission to take part in a semi-structured interview to be conducted later.

Testing the Reliability of the Questionnaires

Reliability refers to the degree of consistency or accuracy with which a questionnaire measures the attribute that it is designed to measure (Sullivan, 2011). Therefore, it would be possible to obtain similar results if the study were replicated by other researchers using the same methods. A small sample of patients and TCMPs who were excluded from the research but who had similar characteristics to the population of patients and TCMPs who would eventually take part in the study were given the survey instruments to complete, in order to determine the clarity of the items in the questionnaires and the consistency of the responses they provided.

Pre-testing of the Questionnaires

Ming Cheng (MC) a qualified TCMPs and senior lecturer in TCM at Middlesex University, London arranged for a small group of TCMPs (n=6) and students (n=6) at the Asante Chinese Academy, London, UK, for their help in pre-testing the English versions of the patient and TCMP instrument for this study. Some important, but minor anomalies in several of the questions were also found in the patient questionnaire, and the names of some of the TCM modalities and grammatical syntax were also found in the TCMP questionnaire. These anomalies were corrected, and both questionnaires were then translated into Chinese (traditional and simplified) before they were pre-tested in a small group of TCMPs and patients in Hong Kong. Jerry Wing Fai Yeung (WFA), a qualified and registered TCMP at the Baptist University, Hong Kong, arranged for a small group of qualified TCMPs (n=6) and a small sample of patients (n=6) to pilot test the Chinese versions of the survey questionnaires. WFA circulated the questionnaires to TCMPs at the TCM clinic, which in turn distributed the questionnaires to patients attending the clinics. Some significant anomalies that were detected from the pre-test of the research instruments were that some respondents were unfamiliar with some of the language relating to some of the questions in the patient questionnaire and some of the treatment modalities in the TCMPs questionnaire. In order to enhance the reliability of the instrument, appropriate English terms were added to the patient questionnaire. Also, the treatment modalities in the TCMP questionnaire were clarified, and more specific English words were used to facilitate the respondents' comprehension of the words.

Validity of the Research Questionnaires

Validity refers to the degree to which an instrument measures what it is supposed to be measuring (Sullivan, 2011). Validity can be sub-categorised as external and internal validity.

External Validity

Sullivan (2011) define external validity as the validity of generalised (causal) inferences in scientific research, usually based on experiments. In other words, it is the extent to which the results of a study can be generalised to different situations and other people (Sullivan, 2011). However, this mainly depends on the degree to which the sample represents the population. In this research study, the results of the study not only apply to the sample of Chinese patients and TCMPs at the TCM clinic in Hong Kong but also the TCM clinic in Guangzhou. Furthermore, the results also apply to TCMPs from the register of TCMPs maintained by the CMCHK, and also the TCMPs who took part in the study from the 1st Affiliated Hospital in Guangzhou

Internal Validity

Internal validity is the extent to which factors influencing Chinese patients and TCMPs attitudes and beliefs towards TCM are an accurate reflection of reality, rather than the result of the effects of extraneous or chance variables.

Translation of Questionnaires

Translation of both questionnaires into Chinese undertaken for both questionnaires. In Hong Kong. Traditional Chinese characters are primarily used in Hong Kong, while in mainland China Simplified Chinese characters are used. When translating questionnaires from one language to another, there a few issues to consider. Sousa and Rojjanasrirat (2011) state that translation, adaptation, and validation of instruments or scales for cross-cultural research is very time-consuming and requires careful planning and the adoption of rigorous methodological approaches to derive a reliable and valid measure of the concept of interest in the target population. Therefore, to study people from diverse cultural backgrounds, research instruments must be accurate and dependable in each culture studied. The quality of the translation and the validation of translated questionnaires is also crucial for ensuring that errors in translation do not

compromise the results obtained in cross-cultural research and that any perceived differences or similarities between cultures for the phenomena measured are genuinely significant.

Section two of both questionnaires used in this study made use of a validated instrument known as the CWMB scale (Liang, 1999). Specifically, translation of the English versions of both questionnaires, from English to Chinese, was followed by a standard and highly recommended procedure known as "back translation." The process of back translation for the questionnaires used in this study first involves translating the original English text of the questionnaire into Chinese (Traditional or Simplified). After this, the Chinese version is then translated back into English, but using a different translator. Any items within the questionnaire that have apparent discrepancies between the two translations are modified are discussion and comparisons of the meanings. Thus, the use of back-translation allows for the detection of errors that can arise from divergent interpretations of ambiguous items in the original measurement instrument.

3.13 Qualitative Data Collection Methods

3.13.1 Construction of the Interview Questions

The development and construction of research questions in qualitative research is an essential process because the questions have an impact on the research objective and research purpose and to specific questions that a researcher is attempting to address in their study Creswell (2003). Qualitative research questions are more critical in mixed methods research because researchers make use of pragmatic approaches and use a pragmatic system of philosophy. As such, in mixed methods studies, research questions drive the methods used (Newman and Benz, 1998, Tashakkori and Teddlie, 1998).

In mixed-method studies, the formulation of research questions is critical, because the question may have an impact on the research design, the sample size and the sampling scheme adopted for a study, as well as the type of questionnaire used, and the kind of data analysis techniques performed. (i.e., statistical or qualitative). Qualitative research questions are mainly "open-ended, evolving, and non-directional" Creswell (1998). These types of questions tend to seek, to discover, to explore a process, or describe experiences, but they also attempt to obtain insight into social processes and experiences that exist. For this research study, English versions of the interview questions for patients and TCMPs were constructed by reviewing and isolating questions from the relevant questionnaire. Where questions in a questionnaire required a better explanation, open-ended questions were compiled. Through a series of further evaluations

and adjustments to the original wording of each interview question was made. To ensure that the meaning and structure of the semi-structured interview questions were appropriate and to determine whether any of the questions required further modifications, or re-wording, because of a lack of clarity, the questions for patients and TCMPs were pilot tested by CB, MC, and LB who provided feedback on each question. A list of the interview questions (in English) for semi-structured interviews with patients is shown in Appendix E. The final translated questionnaire in Chinese is shown in Appendix G. In addition, a list of interview questions (in English) constructed for the semi-structured interviews with TCMPs, is shown in Appendix G and the final translated questionnaire in Chinese is shown in Appendix H.

3.14 Sampling

The goal of sampling strategies in survey research is to obtain a sample that is representative of the population of interest. It is often not feasible to collect data from an entire population of interest. Therefore, a subset of the population or sample is used to estimate the population responses. A large random sample increases the likelihood that the responses from the sample will accurately reflect the entire population. To accurately conclude the population, the sample must include individuals with characteristics that are like the population. Therefore, it is necessary to identify the population of interest correctly. The sample will ideally include individuals who reflect the intended population regarding all characteristics of the population and contain a similar distribution of individuals with those characteristics. Participant recruitment strategies can affect the adequacy and representativeness of the sample obtained. Using diverse recruitment strategies can help improve the size of the sample and help ensure adequate coverage of the intended population. In research, there are two main types of sampling. (1) Probability sampling, which involves the random selection of subjects, and (2) non-probability sampling, which does not rely on random selection. Denscombe (2010) suggest that using non-probability samples are used when researchers find it difficult or undesirable to choose their sample by chance. Lobiondo-Wood and Haber (1990) suggest that purposive sampling is appropriate in the collection of exploratory data or data from a highly specific population. This study employed purposive sampling in both the quantitative and qualitative stages because both samples contained participants who knew about the utilisation and practice of TCM. Having data from both groups was also a rationale for using mixed methods, and purposive sampling is also a reflection of the pragmatism, i.e. using what will work best to answer the questions.

3.15 Accessing the Samples

3.15.1 Patients

In Hong Kong, patients attending the Pok Oi TCM outpatient clinic, Hong Kong between September 2009 and November 2009 were approached in person by Ellie Yan (EY) a research assistant and a fluent speaker of Cantonese and Mandarin. EY approached patients directly in the clinic and briefly explained the purpose of the research study to the patients and sought their permission to take part in the study.

After a patient had verbally agreed to participate in the study, a Chinese version of the patient information sheet (Appendix G) was given to the patient by EY. After reading the patient information sheet, if a patient then agreed to take part in the study, EY gave the patient a patient questionnaire (Appendix H). After the patient had finished completing their questionnaire, the completed questionnaire was given back to (EY) by the patient. EY reviewed the completed questionnaire to check that the patient had answered all the questions in the questionnaire.

If any questions were left unanswered, EY returned the questionnaire to the patient and asked the patient to provide answers to with the questions that had not been answered.

In Guangzhou, patients who attended the TCM outpatient clinics at the 1st Affiliated Hospital of Guangzhou University of Chinese Medicine, the People's Republic of China between April 2011 and Aug 2011 were approached in person either by XH or YMY who are research students of Professor Shao Xian Xian, and Head of the Chinese Department at the 1st Affiliated Hospital of Guangzhou University, Guangzhou, People's Republic of China, and fluent speakers of Mandarin and Cantonese.

Either XH or YMY approached patients directly in the clinic and briefly explained the purpose of the research study to the patients and sought their permission to take part in the study. After a patient had verbally agreed to participate in the study, a patient information sheet (Appendix G) was given to the patient by either XH or YMY. After reading the patient information sheet, if a patient then agreed to take part in the study, either XH or YMY gave the patient a patient questionnaire (Appendix H). After the patient had finished completing their questionnaire, the completed questionnaire was given back to (XH or YMY) by the patient. The research assistant reviewed the completed questionnaire to check that the patient had answered all the questions in the questionnaire. If any questions were unanswered, the research assistant

gave the questionnaire back to the patient and asked the patient to provide answers to the questions that had not been unanswered.

3.15.2 TCMPs

In Hong Kong, TCMPs were sent a study information sheet (Appendix K) and a TCMP questionnaire (Appendix L) to their clinic by post. An envelope containing a postage-paid envelope allowed the TCMPs to return the questionnaire to a post office box. Questionnaires were given to TCMPs in Hong Kong over three months from January 2010 to April 2010.

In Guangzhou - TCMPs working in different departments of the 1st Affiliated Hospital of Guangzhou University of Chinese Medicine, Guangzhou, People's Republic of China were given an information sheet (Appendix K) by XH or YMY who explained the study. If a TCMP agreed to take part in the study, a TCMP questionnaire was given to them by XH or YMY. Instructions were given to the TCMP to return the completed questionnaires directly to XH or YMY who are research students based at the institution, using the institution's internal post system. TCMPs in Guangzhou were recruited to the study over a four-month from December 2011 to April 2012.

3.16 Data Collection

3.16.1 Phase One - Collection of Quantitative Study Data

In the first phase of the study, a survey questionnaire was used to collect quantitative data from Chinese patients and TCMPs, as outlined in Figure 3.2 below:

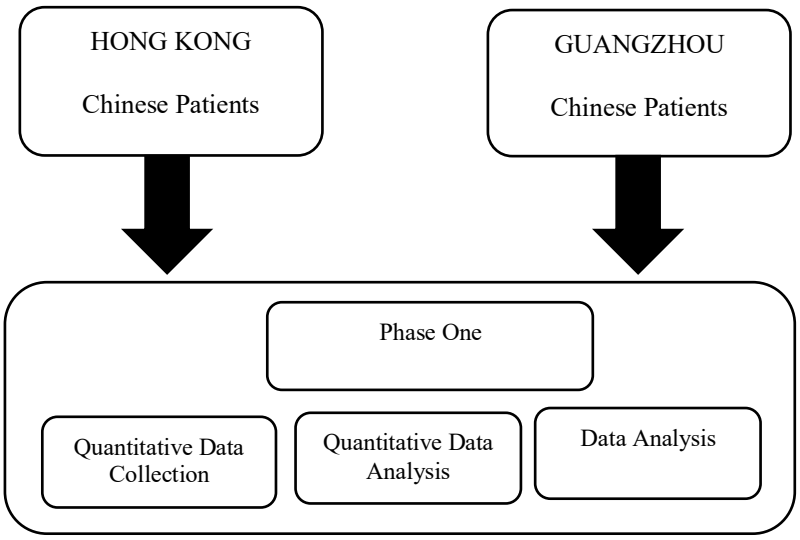

Figure 3.2 Summary of data collected in phase one of the study

3.16.2 Phase Two - Collection of Qualitative Study Data

In the second phase of the study, semi-structured interviews were conducted with Chinese patients and TCMPs to obtain qualitative data, as outlined in Figure 3.2 below:

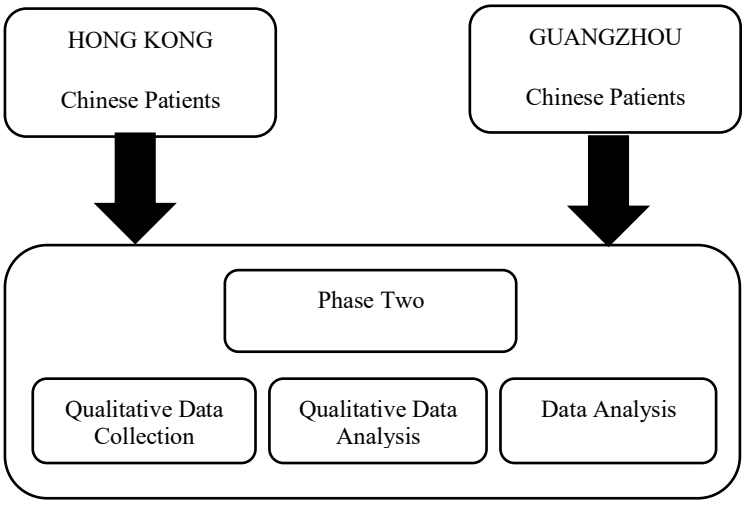

Figure 3.3 Summary of data collected in phase two of the study

Inclusion Criteria

Patients

1. Chinese, i.e., those who perceived themselves to be of Chinese origin.
2. Aged 18 years and over.
2. Receiving TCM treatment on an outpatient basis at a TCM clinic.
3. Agree to participate.
4. Fluent in spoken Chinese (Cantonese or Mandarin).
5. Able to read and write Chinese.

TCMPs

1. Chinese, i.e., those who perceived themselves to be of Chinese origin.
2. Practising TCMP
3. Agreed to participate.
4. Fluent in spoken Chinese (Cantonese or Mandarin).
5. Able to read and write Chinese.

3.17 Data Analysis

3.17.1 Quantitative

Descriptive and inferential statistics were used to analyse the quantitative data collected from the patients' and TCMP questionnaires. Descriptive analysis forms the basis of the approach to the overall quantitative data, and the inferential statistics are used to determine the probability of whether an observed difference between groups is significant. Inferential statistics were used to identify any differences between the data from Hong Kong and Guangzhou, the Chi-square test and t-test. Factor analysis is a statistical tool that is used to summarise data so that relationships and patterns can be more easily identified and understood, usually by grouping variables into a limited set of clusters based on shared variance. The two main factor analysis techniques are Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). CFA attempts to confirm hypotheses and uses path analysis diagrams to represent variables and factors; EFA, by contrast, tries to uncover intricate patterns by exploring the dataset and testing predictions (Child, 2006).

In this study, the analysis of patients' and TCMPs' attitudes towards TCM was analysed using factor analysis, and variables associated with TCMPs training and practice were analysed using multiple regression and logistic regression analysis. A positivist research paradigm is associated with quantitative research. This approach is widely applied in scientific research because it can be objective and statistically valid information based on quantified measures. Furthermore, the methods used in quantitative research enables the researcher to investigate many variables. Generally, studies that use this approach usually use samples that represent the population to being analysed. The results, therefore, can be generalised to the broader population. However, criticism of quantitative research has emerged over the last two decades. For example, (Silverman, 2005) argued that quantitative research is concerned more with the measurement and analysis of causal relationships than processes. (Bryman and Bell, 2011) Also summarised several criticisms quantitative research methods are used to generate numerical data or data that can be transformed into useful statistics and are used to assess attitudes, opinions, behaviours, and other defined variables, often to draw general conclusions from a large sample population and to uncover patterns in research. Quantitative data collection methods are more structured than qualitative methods, relying as they do on collection methods that may involve the development of paper-based questionnaires or the use of electronic means of data collection using computers or the Internet.

3.17.2 Qualitative

Analysis of the semi-structured interviews which form the qualitative data for this study was performed using a qualitative technique or method Framework analysis is part of a broad family of qualitative analysis methods often termed thematic analysis or qualitative content analysis. These approaches rely on identifying commonalities or differences in qualitative data, before focusing on relationships between different parts of the data, thereby seeking to draw clear and explanatory conclusions clustered around themes. Framework analysis is like grounded theory; however, framework analysis differs from grounded theory as it is better adapted to research that has specific questions, a limited time-frame, a pre-designed sample. Although framework analysis may generate theories, the prime concern is to describe and interpret what is happening in a setting (Ritchie and Lewis, 2003).

Framework analysis was developed by researchers, Jane Ritchie and Liz Spencer, from the Qualitative Research Unit at the National Centre for Social Research in the United Kingdom in the late 1980s for use in large-scale policy research (Ritchie and Lewis, 2003). However, it is also now used widely in other areas, including health research. Framework analysis is a highly systematic method of categorising and organising qualitative data. One of the main features of the process is that it can be performed quickly in a step by step manner as highly structured outputs of summarised data can be produced and synthesised in a matrix output, which consists of rows (cases), columns (codes) and 'cells' of summarised data (Ritchie and Lewis, 2003).

However, framework analysis is not a suitable method for analysing all types of qualitative data, or for answering all qualitative research questions. A standard feature of qualitative data analysis is the development of themes that involves a systematic search for patterns of data to generate full descriptions capable of shedding light on the phenomenon under investigation. Unlike a grounded theory, framework analysis is not necessarily concerned with creating social theory. However, it dramatically facilitates using constant comparative techniques, a review of the review of data across a matrix. The framework Method can, is adapted for use with deductive, inductive, or combined types of qualitative analysis. Analysis of the semi-structured interviews for this study involved using framework analysis involved seven stages.

Stage 1 Transcription of Recordings

Using the digital audio recording made at each interview, a qualified Chinese transcriber, listened to each interview recording and transcribed each sound recording, word for word, as the patients spoke and TCMPs

spoke it. Wide margins and adequate spacing between each line of the transcribed texts permitted the researcher to make notes during the coding process that was performed later.

As the researcher does not speak or write Chinese fluently, all transcription work was performed by a professional Chinese translator who translated the individual word for word from Chinese into English.

Stage 2: Familiarisation with the Interviews

At this stage, it is essential to become familiar with all the text from the interviews that have been transcribed into Chinese and then translated into English. The transcripts had to be read through from end to end many times, and analytical notes, thoughts or impressions were written on the right-hand margin of each page of the interview transcript.

Stage 3: Coding the Data

After familiarisation, each line of text in the translated transcript is read line by line, and a paraphrase or label (a 'code') which describes the passage is written in the margin of the interview transcript page. The codes inform or underpin certain statements, such as a belief in TCM or WM in a patient's choice. Coding also aims to classify all the data so that it can be compared systematically with other parts of the data set.

Stage 4: Developing a Working Analytical Framework

After coding the first few transcripts, a set of codes was formulated to apply to all subsequent transcripts. Categories or codes were defined and were all grouped. These form an analytical framework. Several repetitions are undertaken before any additional codes emerged.

Stage 5: Applying the Analytical Framework

The practical analytical framework was applied by indexing the transcripts using the existing categories and codes. Each code was assigned a number or abbreviation for easy identification so that the full names of the codes do not have to be written out each time and were written directly onto the transcripts.

Stage 6: Entering the Data into the Framework Matrix

One aspect of qualitative research is that the data produces copious amounts of textual data in the form of transcripts and observational field notes. Being able to manage and summarise (reduce) data is, therefore, a vital aspect of the analysis process. An Excel spreadsheet was used to generate a matrix, and the data from the spreadsheet entered in the array, this involves summarising the data by category from each transcript and includes references illustrative quotations.

Stage 7: Interpretation of the study Data

During this stage of the analysis of the interview transcripts, various characteristics some differences are identified from the text, and by mapping the different typologies and interrogating the theoretical concepts of the data, relationships and causalities are also determined.

3.18 Data Integration

Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Patton, 2002) (Patton, 2002). Triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources. Denzin (1970) and Patton (2002) identified four types of triangulation: (a) method triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) data source triangulation. The current article will present the four types of triangulation followed by a discussion of the use of focus groups (FGs) and in-depth individual (IDI) interviews as an example of data source triangulation in qualitative inquiry. Triangulation is the use of two data sources to increase validity or enhance understanding of the phenomenon under investigation Denzin (1970). The mixed-methods approach to data integration is procedurally the same as data triangulation, with the critical differentiation at the epistemological level. Therefore, triangulation - using one method to support another is a tacit acknowledgement that there are indeed two distinct research traditions. However, the pragmatic epistemology would see “triangulation” as a natural way of approaching data analysis. Therefore, as the method is mixed, the analysis is termed data integration, rather than triangulation. The qualitative data is used to give a richer context to the quantitative data in the analysis and using the qualitative information gives an additional meaning to the quantitative data that is not apparent from just using a single method. These are discussed later in the text.

3.19 Reflexivity

In qualitative research, reflexivity is a process where researchers engage in explicit self-awareness Finlay (2002) defines reflexivity as "thoughtful, conscious self-awareness encompassing the continual evaluation of subjective responses, inter-subjective dynamics, and the research process itself," and Pyett (2003) adds that it includes an examination of our role in the construction of meaning. The researchers own reflections on this research study enabled him to recognise biases that impacted on the research process and his philosophical position, especially when performing analysis of the study data. Such reflections enabled the researcher to develop self-awareness of the data, particularly during the integration phase.

During the conduct of interviews with the participants who took part in this study, notes were not maintained, as interviews were conducted in Chinese (Cantonese and Mandarin) by a native speaking Chinese by a research assistant in Hong Kong and Guangzhou respectively, as the researcher for this study is not a fluent speaker of Chinese.

Useful information about the interviews that took place included information about the dates, times and durations of the interviews as well as information about the dates of the recordings of the interviews and the dates when underwent transcription. Although there were no field notes were recorded during any of the interviews, the researcher believes that it enabled him to maintain a neutral approach when analysing the interview transcripts.

3.20 Critical commentary about the researcher's role in the research

3.21 Insider-Outsider Research

An 'insider' is a researcher who personally belongs to the group to which their participants also belong (based on characteristics such as ethnicity, sexual identity, and gender). At the same time, an "outsider" is not a member of that group Gair (2012). The need to reflect on insider-outsider researcher positions is essential Corbin-Dwyer and Buckle (2009). To date, there has been much discussion about the value and significance of both insider and outsider researcher positions; they are described and discussed here to

provide a background to the researcher's reflections. Since the 1990s, it has been argued that insiders hold a privileged research position when conducting qualitative research, particularly when they disclose this to their participants Raheim et al. (2016).

It is argued that the familiarity of insider status is advantageous when developing research questions, designing interviews accessing and recruiting participants, during data collection, analysis, and dissemination of the results. It is suggested that insiders are more aware of the lives of their participants than outsiders and are therefore in a strong position to conduct ethical research which keeps participants at the top of the research agenda Kerstetter (2012). However, some of the challenges that an insider researcher may face have are also identified. Participants may have high expectations of insider researchers due to their shared positions, which places responsibility on the researcher to treat their data and the knowledge that it generates in particular ways Kanuha (2000).

Furthermore, the breaking down of the researcher/researched boundaries may cause ethical difficulties if participants are the researcher as a friend or counsellor, and therefore disclose more than they are comfortable with Dickson-Swift et al. (2006). While data may be more abundant and more profound due to the shared context of researcher/researched, assumptions of shared understandings can be problematic when collecting data Kanuha (2000). Additionally, during data analysis, there is potentially a risk of the insider overlooking parts of the information they taken-for-granted in its content Corbin-Dwyer and Buckle (2009).

Furthermore, a degree of commonality does not guarantee that an insider will understand participants' perspectives any more than an outsider, especially if their lives are as different, as they are similar through other personal, social, and situational characteristics Bridges (2001). Some authors have also suggested that the position of outsider researcher may hold some advantages. Outsiders may be able to make observations and draw conclusions that insiders could not, to explore topics in-depth, gaining valuable insight precisely because of their outsider perspective, and noticing features of the data that an insider may overlook Hellawell (2006). However, arguments have also presented against outsider research, with the most commonly cited being that outsiders will be unable to understand or accurately represent the experiences of their participants. Therefore, an outsider must address the psychological and social distance between themselves and their participants in an ethical way to ensure that their research is culturally sensitive and that it enhances the lives of participants, and the understanding of communities and the public Bridges

(2001). Below are some considerations about the researcher's position as an insider-outsider about this research.

3.21.1 Insider/Outsider perspectives at different stages of the research

In the following section, the researcher discusses his own experiences about the study and how an insider-outsider perspective can shape the decisions that researchers make at different stages of the research process. The purpose is to share the researcher's experiences of the different phases of this research. A previously mentioned above, some authors have argued that insider researchers hold an advantaged position particularly when they disclose their status as an insider Suwankhong and Liamputtong (2015), while others have argued that an outsider perspective brings benefits Bridges (2001) The issue of disclosure of insider/outsider status; was apparent (for example in this research study the researcher's ethnicity).

3.21.2 Research Design

During the research design stage, a researcher's interest in a particular topic and their specific reasons for wanting to research the subject are often related to personal experiences Luse et al. (2012). The researcher who conducted this study had, for some time, had an interest in researching TCM. In part, the researcher's interests stemmed from the considerable amount of time he had spent in Hong Kong both during his childhood and later while working at the University of Hong Kong where he was involved in clinical research involving Western pharmaceutical drugs.

Regarding designing research questions and research materials, all researchers should refer to previous literature for guidance. However, many researchers believe that insiders hold an advantage over outsiders regarding the development of meaningful research questions. The researcher conducting this study believes that his knowledge and experience of TCM allowed him to develop the interview questions quickly. However, this did not mean that the researcher did not engage in an iterative process, drawing upon previous research, asking others' opinions, reflecting upon the questions we asked, and revising the interview questions. Although a researcher who is an insider may have some advantages when it comes to formulating research questions, the researcher must follow relevant guidelines when designing qualitative research questions and materials Braun and Clarke (2013).

3.21.3 Communicating Insider/Outsider Status to Study Participants

When conducting qualitative research, researchers need to consider how they present themselves to their study to participants; providing specific information about the research can influence a participants' willingness to participate and affect how they feel about and behave toward the researcher Richards and Emslie (2000). If the researcher does not provide this type of information to the participants of a study, they are likely to wonder about it. As an outsider, the researcher conducting this study became aware that it would be necessary to consider what potential information participants might want to know about the researcher if they asked the research assistant before taking part in an interview. For this reason, the research assistants conducting the interviews informed the participants about the researcher's motivations to study Chinese peoples' attitudes and beliefs towards TCM and its practice, this then meant that participants could make a fully informed choice about whether they wanted to participate in the research study, or not. As described earlier, some authors have suggested that being open about an insider position brings benefits. Bridges (2001) argued that an insider is more likely to be able to understand or represent the participants' experiences. This curiosity might merely reflect assumptions that the researcher conducting the research is Chinese themselves, or it may reflect that the researcher understands TCM and that the researchers are concerned about Chinese people's experiences about using TCM.

3.21.4 Participant Recruitment

A principal argument made in the literature is that insiders will find the recruitment process reasonably straightforward because a person's identity often affects whom they socialise. Therefore, insiders may know where to recruit and have access to participants. Some people may consider researchers to be an intrusion unless that researcher is a member of their community, or shares their identity, and is, therefore, more likely to be considered trustworthy in their motives. As an outsider, the researcher was aware of how it would be possible to recruit Chinese patients in Hong Kong; this was different for China. Being an outsider has distinct disadvantages regarding accessing potentially hard-to-reach populations. At the same time, insider benefits from the additional knowledge and implied credibility, mainly because their understanding may enable them to be more aware of ethical matters.

3.21.5Data Collection and Analysis

Insider/outsider status is also relevant to data collection (Corbin-Dwyer and Buckle, 2009, Labaree, 2002). Participants may believe that an insider researcher wants to improve perceptions and understandings and may, therefore, be more willing to share their experiences. Although the researcher is an outsider regarding his ethnicity, some research researchers have discussed the idea that there are often unequal power relations between 'researcher' and 'researched,' with participants answering questions, being analysed and presented in ways usually primarily determined by the researcher.

The more 'likes' the participants you are, the more opportunity there is for empathy, implicit understanding, and shared experience Hellawell (2006), this can make it easier to gain participants' trust and build rapport; therefore they may become more fully engaged with the research resulting in rich and authentic accounts Glesne (1989). However, some researchers argue that just as an insider researcher can generate rich data with their participants, they are also in a strong position to understand and make sense of participants' worlds (Bridges, 2001, Labaree, 2002). An insider uses Their existing experiential knowledge, deeper understanding, and culturally specific interpretations during the data collection and analysis stages of the research to produce deep and factual findings Glesne (1989). Despite such advantages, there is the risk that participants may respond to a researcher who is 'on the inside' by assuming that shared knowledge is intrinsically understood. This assumption can be problematic because the participant's narrative may be misconstrued or misunderstood by the researcher. Assumptions of shared understandings may mean that participants leave unfinished sentences, which do not contribute to the data In addition to assumed beliefs, it is also possible that insiders overlook exciting aspects of the data, as they may unintentionally neglect topics which fall outside of their own experiences Corbin-Dwyer and Buckle (2009).

In light of these criticisms, some authors have argued that outsiders may be in a better position to be able to see what an insider may take for granted Corbin-Dwyer and Buckle (2009). However, Bridges (2001) argued that culturally sensitive outsider research could enhance the understanding of the researcher, the community researched, and the wider public. The Chinese research assistants who conducted the semi-structured qualitative interviews with the participants in Hong Kong and Guangzhou were insiders for this study, as both were qualified TCMPs. However, during the interview training, they were given before they interviewed any of the study participants (patients and TCMPs) they were informed not to disclose to any of the participants that they were qualified TCMPs as their insider position may negatively impact on her

interaction with her participants or create difficulties understanding or empathising with them. While the interviews aimed to gain the perspectives of the participants, the research assistants who conducted the interviews found the participants very willing to explain things in detail.

3.21.6 Ethical Research

There may be challenges associated with being an insider for both participant and researcher (Bridges, 2001, Labaree, 2002). The researcher may find that responsibility is inadvertently placed on their shoulders by participants, who expect that the researcher will produce knowledge that improves their lives Kanuha (2000). Furthermore, researchers may need to consider how to respond if participants disclose issues of confidentiality, mainly when there is the possibility of seeing research participants in circumstances where others are present. Given their insider status as a researcher, the research assistants conducting the interviews were keen to ascertain whether participants had felt comfortable talking to her during their interviews.

Informal post-interview discussions indicated that they had enjoyed the fact that the researcher was interested in their views about their health and how they use TCM. Thus, showing that insiders and outsiders can both be appreciated recipients of participants." While evidence suggests that insiders may make more nuanced and empathetic interpretations of participants' experiences, everyone's understandings are unique, and a degree of commonality does not guarantee that an insider's data and analysis will be any more or less meaningful than that of an outsider Bridges (2001). Regardless of these challenges, it is of the utmost importance for both insiders and outsiders to ensure that anyone who takes part in research is kept informed about the analysis and results. The information sheet given to each patient described how the researcher will use the results and that participants would have the opportunity to receive a summary of the findings. The information sheet also informed the participants of the study that the researchers would publish the study results in academic journals. There are many subtle ways in which a researcher can be an outsider or an insider, for example, through the intersections of race, class, health status, and age.

Consequently, a researcher can simultaneously be both an insider and an outsider, and degrees of alienation and empathy can be useful qualities in research. Isolation enables researchers to critically gauge a situation, while understanding with participants enhances rapport and communication between researcher and participant Hellawell (2006). Although the researcher of this study is not Chinese, he is an outsider-outsider. However, the research assistants who conducted the interviews were insiders.

3.21.7 Reflections

Part of the reflexive process is to consider how insider/outsider are not simplistic or mutually exclusive categories that exist in isolation. The intricacies of being both an insider and an outsider mean it is critical that researchers reflect on the multiple positions and identities they hold, and consider their degree of involvement with, as well as detachment from, the research topic Rabe (2002).

Cultural Positioning of the Researcher

This study was led by the researcher (JT), a British national, who was raised and educated in Hong Kong. Despite this, his position and status in this research were primarily that of an outsider. The researcher is not Chinese and has limited Cantonese speaking skills. As an outsider, although the researchers live and work in Hong Kong and have extensive knowledge about the territory, he is not an insider, as he is not ethnically Chinese and has limited ability to communicate fluently in Cantonese, as this was an essential aspect of this research. Interaction with Cantonese or Mandarin Chinese speaking people attending TCM clinics in Hong Kong and Guangzhou, the two locations for the study, meant that a person who was ethnically Chinese would be needed to directly interact with Chinese people while distributing the patient questionnaires for the quantitative part of the research, and later to conduct the face-to-face semi-structured interviews with the patients and TCM practitioners for the qualitative part of the study. Effective communication with Chinese patients and TCM practitioners was, therefore, essential to undertake the collection of a large amount of data for this study. The distribution of questionnaires to the TCM practitioners in Hong Kong was conducted by post and delivery of the survey questionnaires to TCM doctors in Guangzhou, at the University of Traditional Chinese medicine was handled by two Chinese research assistants. After conducting the interviews in Cantonese and Mandarin, the conversation recorded during the interviews were transcribed directly into English. Therefore, this was another significant aspect of the research that as an outsider, it was not possible to be of any use. However, the researcher's status as an outsider, and the analysis of the study data and also the write-up of this thesis, enabled the researcher to obtain a deeper understanding of the various issues that were important to the study, as well as the various participants who assisted with the research with those aspects that required native-level Chinese language skills.

Although TCM is used extensively in China, rigorous scientific evidence of its effectiveness is limited. For this reason, as a researcher that has been extensively involved in clinical trials of Western pharmaceutical drugs and medical devices TCM can sometimes be challenging to study, because its treatments are complex and based on ideas very different from those of modern WM.

Researchers, who have studied the scientific principles of modern medicine often think of TCM as a pseudo-scientific form of medicine, which is based on ideas and ancient principles passed down from one generation of Chinese people to another. TCM lacks the standards of today's modern medicine. Also, its health care system cannot match the standards and principles of Western evidence-based medicine. However, despite this, TCM is being used more alongside WM.

However, as a researcher, involved in the development of medicines using western scientific methods, TCM must develop a modern interpretation that has evidence that can substantiate both its efficacy and safety, before it can be accepted as a mainstream form of alternative medicine. There is also a need for more interaction between modern scientific principles and the ancient texts of Chinese medicine to aid its acceptance by WM doctors.

Although more TCM clinics have opened in the West and some universities in the UK attempted, to offer 5-year degree courses to train TCMPs, they have attracted some criticism. However, one crucial reason why TCM is not widely acknowledged and accepted as a recognised form of complementary medicine in many Western countries is due to its lack of research involving the properties of herbs and Chinese proprietary medicines. In addition, there is little information available about the interactions of Chinese herbs with Western drugs.

TCM uses concepts and unconventional treatment techniques and therapies that are foreign to the Western scientific world, and it is this aspect of TCM that is not consistent with the knowledge that scientists, in particular researchers involving modern science and medicine. That said, TCM has attracted interest from some researchers in the scientific community, such as-as academic researchers and pharmaceutical companies who are trying to develop new drugs and treatments. However, these are required to undergo rigorous testing according to modern evidence-based medicine practices. For example, a drug used to cure malaria, artemisinin, which earned developer Tu Youyou a Nobel Prize for Medicine in 2015, comes from a plant widely used in TCM (reference).

As a researcher involved in clinical research of Western pharmaceutical drugs and medical devices, the above issues are fundamental. Because, if TCM is to be considered medically beneficial, the efficacy and safety of TCM treatments require scientific evidence obtained from conducting good-quality clinical trials. However, some Chinese scientists involved in TCM who are advocates of this complementary form of medicine argue that it is challenging to investigate many aspects of TCM using standard scientific studies, and therein lies a problem.

3.22 Summary of Chapter

This study aims to examine the utilisation and practice of TCM by Chinese people in Hong Kong and Guangzhou and to identify if there are any differences between the Chinese people use and practice TCM in the two regions. The researcher adopted a pragmatic approach to the investigation for this study. The experience of the researcher is that outsider research may be what complex organisations need to challenge the status quo, inject a fresh perspective, promote change or give voice to things already known by the workforce. However, outsiders may often be considered with a degree of suspicion. This chapter has outlined the methodology of the research study and has also provided a rationale for selecting a sequential explanatory mixed-methods approach. It has critically examined the value of using a mixed-methods approach to explore the utilisation and practise of TCM in Hong Kong and China. The chapter has also critically explored the advantages and disadvantages of this research method and provides an account of the role of the researcher in this study. Ethical issues about the research have also been explored and summarised. The next chapter, Chapter 4, reports on the analysis of the quantitative data obtained from patients who took part in this study.

Chapter 4: Quantitative Results and Analysis - Patients

Success is walking from failure to failure with no loss of enthusiasm.
Winston Churchill

4.1 Introduction

This chapter presents in four parts the results of the analysis of data collected from patients attending TCM clinics in Hong Kong and Guangzhou. The first part describes the patients' demographic information and their consultation with a traditional Chinese medicine practitioner (TCMP). The second part describes patients' attitudes towards TCM and Western medicine (WM). The third part describes the factors that were found to influence these attitudes. The final part analyses these attitudes from the perspective of age and gender.

4.2 4.2 Demographic Data of Patients

Table 4.1 summarises the demographic data of the patients who took part in the study. A total of 1055 patients completed the questionnaire. The total sample consists of 505 (47.9%) patients in Hong Kong and 550 (52.1%) in Guangzhou.

Table 4.1 Demographic data of Chinese patients in Hong Kong and Guangzhou

Variables	Total sample 1055 (100%)	Hong Kong 505 (47.9)	Guangzhou 550 (52.1)	Significance Chi-square test
Age range:				
18-39	471 (44.7)	118 (23.4)	354 (64.3)	p<0.001
40-64	424 (40.2)	259 (51.3)	166 (30.1)	
65+	159 (15.1)	128 (25.3)	31 (5.6)	
Gender:				
Male	434 (41.2)	34.1	47.7	p<0.001
Female	620 (58.8)	65.9	52.3	
Place of birth:				
Hong Kong	301 (28.7)	59.8	0.0	p<0.001
Macau	10 (1.0%)	1.4	0.5	
China	724 (69.0)	37.4	98.0	
Taiwan	2 (0.2)	0.2	0.2	
Other	13 (1.2)	1.2	1.3	
Highest education level:				
No full-time education	46 (4.4)	7.9	1.1	p<0.001
Primary	154 (14.6)	24.4	5.6	
Secondary	374 (35.5)	39.6	31.7	
Post-secondary or vocational	232 (22.0)	13.5	29.9	
Graduate or postgraduate	248 (23.5)	14.7	31.7	
Employed:				
Yes	483 (45.9)	41.8	49.7	p<0.005
No	569 (54.1%)	58.2%	50.3%	

The response rate for the completion of the patient questionnaire for Hong Kong was 63% and for Guangzhou 69%. Although the distribution of patients between the two locations is balanced, there are more females (58.8%) than males (41.2%) the total sample.

Figures for the total sample and the percentage of the total sample are shown for age, gender, place of birth, the highest level of education and employment. Differences between the data from Hong Kong and Guangzhou were analysed using a Chi-square test. Most patients in the total sample were born in China (69%), and most of the rest (28.7%) were born in Hong Kong. The remaining patients were born in Taiwan (0.2%) and elsewhere in Asia (1.2%). The youngest patient was 18 at the time of the research, and the oldest over 65.

The number of patients aged 18-39, 40-64, and 65+ years of age account for 44.7%, 40.2%, and 15.1%, respectively. The mean age of all patients is 44.6 years. With regards to the highest level of education achieved. A total of 374 (35.5%) patients claimed some form of secondary education, while 46 (4.4%) reported no full-time education. Just over half of patients (54.1%) were unemployed.

Regionally, most (51.3%), of the patients in Hong Kong are aged 40-64 years of age, and females (65.9%) outnumbered males (34.1). The sample of patients in Guangzhou differed in terms of age, with most (64.3%) being 18-39 years, though as in Hong Kong females (52.3%) outnumbered males (47.7%), respectively. The majority (59.8%) of patients in the Hong Kong cohort were born in Hong Kong, and the majority (98.0%) of patients in Guangzhou were born in China. Among patients in Hong Kong, 39.6% reported having received secondary education, while the number in Guangzhou was 31.7%.

According to their responses, more patients in Hong Kong (7.9%) than in Guangzhou (1.1%) had received no full-time education, but more in Hong Kong (24.4%) than Guangzhou (5.6%) had received only primary education, while fewer in Hong Kong (14.7%) than in Guangzhou (31.7%) had received graduate or postgraduate education. The proportion of unemployed patients from Hong Kong (58.2%) was slightly higher than the proportion of Guangzhou (50.3%).

4.3 Patients Consultations with TCMPs

Table 4.2 shows the data obtained from patients who answered Q1 to Q5 of the patients' questionnaire and, table 4.3 shows the data obtained from patients who answered Q6 to Q10 of the patient questionnaire. The data in the two tables relate to patients' responses to the ten questions concerning their consultation with TCMPs.

Table 4.2 Responses to survey questions by Chinese patients in Hong Kong and Guangzhou

Question No.	Survey Questions		Total (%)	Hong Kong (%)	Guangzhou (%)	Significance level of t-test
Q1	Have you ever visited a Chinese medicine practitioner before?	Yes	938 (89.3)	85.4	92.9	p<0.001
		No	112 (10.7)	14.6	7.1	
Q2	If you have visited a Chinese medicine practitioner before, was the treatment for your most recent condition helpful?	Yes	823 (82.8)	77.1	87.6	
		No	171 (17.2)	22.9	12.4	p<0.001
Q3	Indicate where you usually (i.e. most often) go for a Chinese medicine consultation					
	Herbal shops		194 (20.2)	38.9	4.9	p<0.001
	TCM clinic in a hospital		366 (38.1)	28.5	45.9	
	TCM clinic in universities		227 (23.6)	8.8	35.7	
	TCM clinic in HMO		40 (4.2)	4.2	4.2	
	Private TCM clinic		113 (11.8)	16.4	7.9	
	Others		21 (2.2)	3.2	1.3	
Q4	How did you decide which Chinese medicine practitioner to consult?					
	Word-of-mouth		487 (50.3)	67.7	36.4	p<0.001
	Suitable location		263 (27.2)	17.9	34.6	
	Suitable consultation fee		42 (4.3)	1.2	6.9	
	Paid by an insurance company		90 (9.3)	1.2	15.8	
	Referred by WM doctor		27 (2.8)	3.0	2.6	
	Others		59 (6.1)	9.1	3.7	
Q5	If you intended to consult a Chinese medicine practitioner, do you take the practitioner's qualifications into account before going ahead with the consultation?	Yes	722 (68.4)	52.7	82.9	p<0.001
		No	333 (31.6)	47.3	17.1	

4.4 Analysis of the Total Sample of Patients

The results from the total sample (Hong Kong and Guangzhou) show that most patients (89.3%) had visited a TCM practitioner at some time or other (Q1), and just over eighty per cent (82.8%) of patients believed that the treatment they received from a CMP for their most recent medical condition was helpful (Q2). Furthermore, most patients consulted a CMP at a hospital clinic, (38.1%), or at a university clinic (23.6 %) or a herbal medicine shop (20.2%) (Q3). Just over half of the patients (50.3%) decided to consult a CMP based on recommendations from other people (i.e. word of mouth) and most patient (68.4%) reported that they take the CMP's qualification into account before the consultation (Q5).

Table 4.3 Responses to questions 6 to 10 of the patient questionnaire by Chinese patients

Question No	Survey Questions		Total (%)	Hong Kong (%)	Guangzhou (%)	Significance level of t-test
Q6	When you are sick, do you usually consult a WM doctor before consulting a Chinese medicine practitioner?	Yes	584 (55.6)	67.8	44.3	
		No	467 (44.4)	32.2	55.7	p<0.001
Q7	When you are sick, do you usually consult a WM doctor and a Chinese medicine practitioner at the same time?	Yes	466 (44.4)	24.4	62.9%	p<0.001
		No	584 (55.6)	75.6	37.1	
Q8	How would you rate your own knowledge of Chinese medicine?					
	Very good		30 (2.9)	1.2	4.4	p<0.001
	Good		120 (11.4)	6.2	16.3	
	Fair		623 (59.1)	57.5	61.0	
	Poor		245 (23.2)	31.7	15.6	
	Very poor		32 (3.0)	3.4	2.7	
Q9	For the medical condition that you are currently consulting a TCMP for. How would you classify your condition?					
	Not at all serious		349 (33.2)	32.3	34.0	p<0.01
	Quite serious		107 (10.2)	8.9	11.3	
	Reasonably serious		446 (42.4)	41.7	43.1	
	Serious		130 (12.4)	16.1	9.0	
	Very serious		19 (1.8)	1.0	2.6	
Q10	Have you ever experienced any side-effect from TCM?	Yes	131 (12.5)	9.1	15.5	p<0.01
		No	920 (87.5)	90.9	84.5	

Over half of the patients in the total sample (55.6%) consulted a TCM practitioner before a WM doctor (Q6), and less than half of the total sample of patients (44.4%) consulted a CMP and a WM doctor at the same time (Q7). Over half of the total sample of patients' (59.1%) rated their knowledge of TCM as fair (Q8), and 42.4% of patients in the total sample classified their medical condition as reasonably dangerous. Lastly, the majority of patients in the total sample (87.5%) reported that they had not experienced any side-effect from Chinese medicine.

4.5 Analysis of the Sample by Region

Tables 4.2 (a) and 4.2 (b) show the data for patients in Hong Kong and Guangzhou and their responses 20 questions 1-5 and 6 – 10, respectively. An independent t-test was used to analyse the data from Hong Kong and Guangzhou to determine if there was a significant difference between the data from the two regions.

Slightly more patients in Guangzhou (92.9%) than Hong Kong (85.4%) reported that they had previously visited a TCM practitioner ($p<0.001$). More patient in Guangzhou (87.6%) than in Hong Kong (77.1%) reported that when they previously consulted a TCM practitioner, the treatment was helpful. Although, more patients in Hong Kong (22.9%) than Guangzhou (12.4%) reported that the treatment they received for their last consultation with a TCM practitioner was not helpful (($p<0.001$).

According to the results obtained, most patients' in Hong Kong consult a TCM practitioner at a Chinese herbal medicine shop (38.9%) ($p<0.001$), TCM clinic at a hospital (28.5%) and a private CMP (16.4%), compared with patients' in Guangzhou who mainly see TCMPs at a hospital clinic (45.9%) and (35.7%) respectively.

In Hong Kong, most patients (67.7%) use word of mouth, by asking friends, relatives, or work colleagues, ($p<0.001$). Alternatively, consult a TCMP at a suitable location (17.9%) to determine which Chines medicine practitioner they will consult. Fewer patients in Guangzhou than in Hong Kong (36.4%) use word of mouth to determine which TCMP they will consult and most prefer to find a TCMP in a suitable location (34.6%) or, if the consultation is paid for by a medical insurance company, patient in Guangzhou will go to a TCM doctor nominated, or stipulated by a medical insurance company (15.8%). The majority (82.9%) of patients in Guangzhou reported they took a TCMP's qualifications into account before going ahead with a consultation ($p<0.001$).

In contrast, however, just under half of the patients in Hong Kong (47.3%) indicated that they did not take the CMP's qualification into account. More patients in Hong Kong (67.8%) than in Guangzhou, reported they consulted a WM doctor before consulting a CMP. In contrast, there was a significant difference in the number of patients in Guangzhou who do not consult a TCM practitioner compared with patients in Hong Kong ($p<0.001$).

There were more patients in Guangzhou (55.7%) than in Hong Kong (32.2%) who reported they did not consult a WM doctor before a TCM practitioner. However, more patients in Guangzhou (62.9%) than in Hong Kong (24.4%) reported seeing a WM doctor and TCM practitioner at the same time. A significant difference ($p<0.001$) between the proportion of patients in Hong Kong and Guangzhou who do not consult a WM doctor and a TCM practitioner at the same time. There were significantly more patients in Hong Kong (75.6%) compared with Guangzhou (37.1%) who did not report consulting a WM doctor and TCM practitioner at the same time.

Overall, in the total sample of patients (Hong Kong and Guangzhou), 59.1% of patients reported they had a "fair" knowledge of TCM. Regionally, however, more patients in Guangzhou (61.0%) than in Hong Kong (57.5%) had a "fair" knowledge of TCM. Overall, in the total sample of patients (Hong Kong and Guangzhou), 42.4% of patients reported the medical condition for which they were currently consulting a TCM practitioner for was classified as "reasonably serious." Regionally, there are slightly fewer patients in Hong Kong (41.7%) compared with that in Hong Kong (41.7%) who reported the severity of their current medical condition as "reasonably serious". However, a significant difference was found among the proportion of patients in Hong Kong who classified their current medical problem as "not at all serious" with slightly more patients in Guangzhou (34.0%) than in Hong Kong (32.3%) reporting this degree of severity.

The incidence of side-effect among patients in the total sample of patients (Hong Kong and Guangzhou) was very low. With only 12.5% ($p<0.001$ reporting side effects to TCM. Regionally, 15.5% of patients in Guangzhou reported side-effects, compared with 9.1% of patient in Hong Kong.

4.6 Patients' Attitudes and Beliefs Towards TCM and WM

In this study, patients' attitudes and beliefs towards TCM and WM were evaluated using the Chinese-Western Medical Beliefs Scale (CWMBS) developed by CM Liang (1999). The CWMBS contains 22 questions measured with a 5-point Likert scale, where 1=strongly disagree, and 5 = strongly agree.

Four sub-scales related to TCM are included in the questionnaire (12 items): restorative effects (3 items), side effects (3 items), therapeutic effects (3 items) and priority (3 items).

Relatively high scores reflect an overall belief in the superiority of TCM.

Two sub-scales scores related to WM are also included in the questionnaire (10 items): Efficiency of the treatment and therapeutic effects (3 items), better quality facilities (7 items). Higher scores here reflect an overall belief in the superiority of WM.

Two additional questions with a 5-point Likert scale are also included. One question measures patients' trust of TCM and WM physicians, where 1 = not at all and 5 = very much. The second question measures patients' preference pattern, where 1 = lowest and 5 =highest, for the following four factors:

1. consultation fees
2. the attitude of the healthcare professional
3. efficacy of service
4. waiting time during the consultation

All of the attitude questions described above are contained within Section 2 of the patient questionnaire (Appendix H).

Table 4.4 Patients attitudes and beliefs towards TCM and WM

Question No.	Total samples (n=1055) Mean (SD)	Hong Kong (n=505) Mean (SD)	Guangzhou (n=550) Mean (SD)	t-test significance level
Q11.	2.79 (0.92)	3.10 (0.86)	2.50 (0.88)	NS
Q12.	2.28 (0.84)	2.38 (0.84)	2.18 (0.82)	NS
Q13.	2.85 (0.94)	3.05 (0.88)	2.67 (0.95)	p<0.05
Q14.	2.67 (0.91)	2.77 (0.87)	2.57 (0.93)	NS
Q15.	2.56 (0.89)	2.42 (0.87)	2.68 (0.88)	NS
Q16.	2.65 (0.93)	2.79 (0.95)	2.53 (0.90)	p<0.01
Q17.	2.36 (0.87)	2.26 (0.85)	2.44 (0.89)	p<0.01
Q18.	2.15 (0.74)	2.04 (0.69)	2.24 (0.76)	p<0.001
Q19.	2.73 (0.91)	2.75 (0.92)	2.72 (0.90)	NS
Q20.	2.60 (0.78)	2.63 (0.80)	2.56 (0.76)	p<0.05
Q21.	2.09 (0.69)	2.14 (0.66)	2.05 (0.71)	NS
Q22.	2.01 (0.69)	1.96 (0.61)	2.06 (0.74)	p<0.001
Q23.	2.10 (0.71)	2.12 (0.67)	2.09 (0.74)	p<0.05
Q24.	3.52 (0.89)	3.69 (0.78)	3.36 (0.95)	p<0.001
Q25.	2.63 (0.85)	2.49 (0.87)	2.75 (1.01)	p<0.01
Q26.	2.41 (0.87)	2.51 (0.90)	2.32 (0.84)	p<0.001
Q27.	2.00 (9.54)	1.97 (0.43)	2.02 (0.62)	p<0.001
Q28.	2.00 (0.57)	1.98 (0.45)	2.02 (0.66)	p<0.001
Q29.	2.04 (0.68)	1.94 (0.50)	2.14 (0.80)	p<0.001
Q30.	3.28 (0.95)	3.18 (0.96)	3.36 (0.94)	NS
Q31.	2.42 (0.83)	2.57 (0.90)	2.28 (0.73)	p<0.001
Q32.	2.52 (0.88)	2.73 (0.90)	2.32 (0.81)	p<0.001

NS - not significant.

To detect any significant differences among any of the items an independent-test was also performed. Difference in patients' attitudes and beliefs towards TCM in Hong Kong and Guangzhou are shown in Figure 4.1 The higher the score, the greater the level of disagreement with the declarative statement offered in each item.

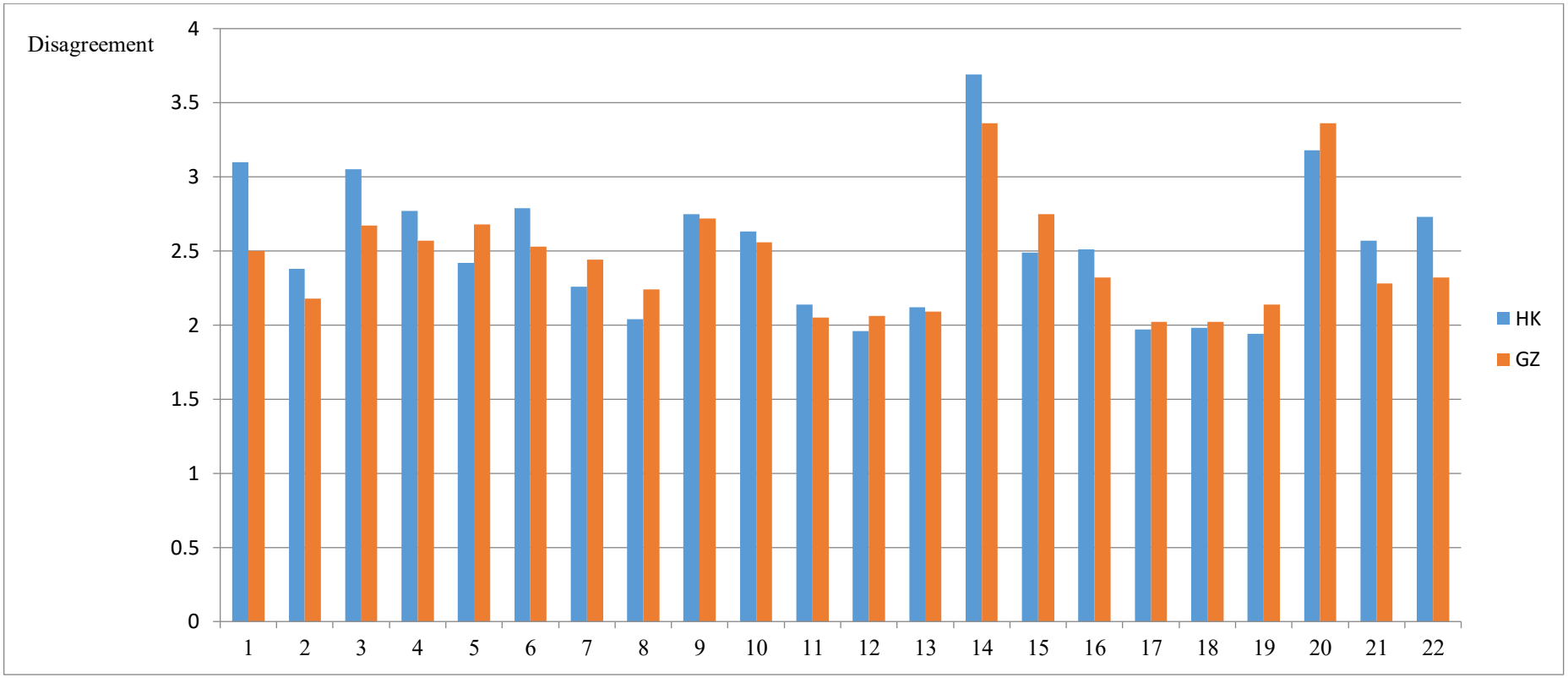

Figure 4.1 Patient attitudes and beliefs towards TCM and WM in Hong Kong and Guangzhou

From Table 4.4, the following patients' attitudes and beliefs towards TCM and WM can be classified as follows:

Hong Kong

More patients in Hong Kong than in Guangzhou agreed on the following:

Q17 Compared with TCM, WM acts more quickly ($p<0.01$)

Q18 The therapeutic effect of WM for acute symptoms is greater ($p<0.001$)

Q22 Compared with WM, TCM has fewer side effects ($p<0.001$)

Q25 TCM treats the causative agent while WM relieves only symptomatic distress ($p<0.01$)

Q28 TCM has a restorative effect, which can promote health over time ($p<0.01$)

Q29 TCM can improve one's constitution ($p<0.001$)

Q30 WM is used only when all other treatments in TCM have failed ($p<0.01$)

Guangzhou

More patients in Guangzhou than patients in Hong Kong agreed on the following:

Q12. Compared with TCM, WM has better facilities available (NS)

Q13. Compared with TCM, the overall quality of WM is better ($p<0.05$)

Q16. WM is specialised towards particular diseases ($p<0.01$)

Q20. The therapeutic effect of TCM for medical diseases is greater than WM ($p<0.05$)

Q23. Compared with WM, TCM causes less gastrointestinal side-effects ($p<0.05$)

Q24. Compared with WM, TCM is slower and less potent in its action ($p<0.01$)

Q26. TCM should be prioritised over WM when it is equally effective ($p<0.01$)

Q31. When relying mainly on TCM, when necessary WM may be used as an adjunct ($p<0.001$)

Q32. The labelling of the contents of WM is more accurate than TCM ($p<0.001$)

Table 4.5 Factor analysis of Chinese patients' attitudes and beliefs towards TCM and WM

Question No.	Variables	Factor 1 Modern quality	Factor 2 Restorative effect	Factor 3 Apparent effect	Factor 4 Side effect	Factor 5 Priority
Q13	WM has better quality	0.715	-.077	0.106	-.121	.138
Q11	WM diagnosis is more accurate	0.701	-.086	0.004	.167	.023
Q14	Education and training for WM is more rigorous	0.701	.009	0.148	-.146	.032
Q12	WM has better facilities	0.587	-.019	0.200	.196	-.173
Q32	WM has more accurate labelling	0.564	.043	-0.001	.124	-.140
Q16	WM is specialised towards particular diseases	0.560	.062	.340	-.094	.087
Q28	TCM has a restorative effect	0.044	.825	-.021	.074	.085
Q27	TCM cures disease and promotes health	0.033	.807	-.037	.161	.050
Q29	TCM improves constitution	-0.105	.765	.030	.069	.036
Q17	WM acts more quickly	0.167	.023	.766	-.004	.081
Q18	WM therapeutic effect for acute symptoms is greater	0.101	.063	.703	.094	-.010
Q15	WM has a more scientific approach	0.442	.026	.483	-.180	.109
Q19	WM therapeutic effect is more apparent	0.354	-.165	.471	.072	.240
Q21	TCM therapeutic effect for chronic disease is greater	0.059	.304	.102	.636	-.052
Q20	TCM therapeutic effect for medical disease is greater	-0.056	-.187	-.084	.613	.322
Q22	TCM has fewer side effects	-0.128	.478	.246	.532	-.049
Q23	TCM causes less gastrointestinal side effects	-0.103	.460	.169	.471	.021
Q31	Rely on TCM mainly and use WM as an adjunct	0.180	.190	-.128	.429	.001
Q30	WM is used only when TCM has failed	-0.065	.044	.077	.008	.658
Q25	TCM treats the causative agent, while WM only relieve	-0.127	.203	.190	.126	.652
Q24	TCM is slower and less potent	0.359	-.112	.030	-.085	.554
Q26	TCM should be prioritised when equally effective	0.037	0.372	-0.264	0.217	0.413

4.7 Factors Relating to Patients' Attitudes About the Use of TCM and WM

Exploratory factor analysis (EFA) was used to reduce the number of variables, or the questions in the patient questionnaire, to a small set of broad concepts called factors. These factors were then used in subsequent analysis. However, before starting the analysis, the reliability of the CWMB scale was first tested, to ensure the instrument can generate consistent measurements. Cronbach's alpha for the attitude and belief scale was 0.734, which indicates appropriate internal consistency. Factor analysis was extracted by principal component analysis and rotated by Varimax with Kaiser Normalisation. Using an Eigenvalue >1, in total, 5 factors were extracted, and the explained variance was 50.67%.

The five factors extracted were:

Factor 1:

Modern quality (WM)

Factor 2:

Restorative effect (TCM)

Factor 3:

Apparent effect (WM)

Factor 4:

Side effects (TCM)

Factor 5

Priority (TCM)

After completing the EFA analysis, the scores were saved for additional analysis (regression analysis and logistic analyses).

Before undertaking the additional analysis, all the attitude and belief Likert scores about the various TCM items had to be reversed, i.e. the scores from 1 to 5 represent that a person either disagrees or agrees, rather than the other way around totally. The additional factor analysis was performed (using SPSS) to analyse for different components of patients' attitudes and beliefs towards TCM. The results obtained from the further analysis are shown in Table 4.5

Table 4.6 Factors relating to Chinese patients' attitudes towards TCM and WM by age and gender

Variables	Factor 1: Modern quality (WM)	Factor 2: Restorative Effect (TCM)	Factor 3: Apparent effect (WM)	Factor 4: Side-effects (TCM)	Factor 5: Priority (TCM)
Constant	-1.050 (0.288) p<0.001	0.306 (0.305)	0.076 (0.297)	0.056 (0.300)	0.653 (0.294) p<0.05
Age 40-64	-0.018 (0.075)	0.101 (0.079)	0.193 (0.077) p<0.05	-0.031 (0.078)	0.073 (0.076)
Age 65+	-0.180 (0.117)	-0.009 (0.124)	0.081 (0.121)	-0.061 (0.122)	0.105 (0.120)
Sex (female)	-0.114 (0.061)	0.139 (0.065) p<0.05	0.173 (0.063) p<0.01	0.048 (0.063)	0.098 (0.062)
Educational level	0.116 (0.034) p<0.01	0.071 (0.037) p<0.05	0.009 (0.036)	0.015 (0.036)	-0.289 (0.035) p<0.001
Employment (yes)	0.081 (0.064)	-0.059 (0.068)	0.097 (0.066)	-0.064 (0.066)	0.407 (0.065) p<0.001
Visited TCMP before	0.047 (0.097)	0.024 (0.103)	0.084 (0.100)	0.169 (0.101)	-0.238 (0.099) p<0.05
Site (Guangzhou)	0.529 (0.067) p<0.001	-0.244 (0.071) p<0.01	-0.489 (0.069) p<0.001	0.265 (0.070) p<0.001	0.225 (0.069) p<0.01
Knowledge of TCM	-0.006 (0.041)	-0.142 (0.044) p<0.01	0.051 (0.043)	-0.218 (0.043) p<0.001	-0.052 (0.042)
R square	0.156	0.033	0.097	0.071	0.116

Reference groups	**Ordinal variables**	**Dependent variables**
Age (age 18-39), Gender (male), Employment (no), Visiting TCM practitioner experience (no) Site (Hong Kong).	Educational level, Knowledge of TCM.	adjusted factor scores)

4.8 Factors Relating to Patients' Attitudes about the Use of TCM and WM by Age and Gender

Factors relating to patients' attitudes associated with the use of TCM and WM by age and gender were determined to employ a multiple regression model. Each model assesses an individual component of patients' attitudes and beliefs regarding TCM.

Factor 1:

patients had a higher education level, were from Guangzhou and agreed about the modern quality of WM (R square = 0.156).

Factor 2:

Patients were female and from Hong Kong, had a higher education level, had less knowledge of TCM, and were more likely to view TCM as an effective way to promote and maintain health (R square = 0.033).

Factor 3:

Patients were older, female, from Hong Kong and more likely to believe in the apparent effect of WM (R square = 0.097).

Factor 4:

Patients were from Guangzhou, had less knowledge of TCM and had a more positive view of reduced side-effects) of TCM (R square = 0.071).

Factor 5:

Patients had a lower level of education, were employed, had no prior experience of TCM, were from Guangzhou prioritised TCM over WM (R square = 0.116).

4.9 Summary of Chapter

This chapter describes the findings obtained from the analysis of the quantitative data derived from a self-completed, structured questionnaire given out to patients attending TCM outpatient clinics in Hong Kong and Guangzhou. The results reveal differences in attitudes towards TCM based on age, sex and location. Age was significant only for patients in the middle-age group, who were likely to put their trust in WM.

Female patients were more confident in the health-promotion effects of TCM and agreed more about the apparent effects of WM. Patients with a higher level of education evinced an appreciation for the modern quality of WM as well as the health-promotion effects of TCM but were less likely to prioritise TCM.

More patients in Guangzhou agreed that the WM was more modern and of better quality than TCM and had a better therapeutic effect than TCM. However, patients in Guangzhou also believed that TCM caused fewer side-effects than WM. They also agreed that TCM should be given priority over WM.

Lastly, patients in Guangzhou were more sceptical about the health-promotion effects of TCM and the apparent effects of WM. The next chapter (Chapter 5), describes the findings obtained from the analysis of the quantitative data derived from a self-completed, structured questionnaire given out to TCMP in Hong Kong and Guangzhou.

Chapter 5: Quantitative Results & Analysis-Practitioners

Don't go around saying the world owes you a living.
The world owes you nothing. It was here first.
Mark Twain

5.1 Introduction

This chapter presents the results of the analysis of data collected from registered TCMPs (TCMPS) in Hong Kong and Guangzhou regarding demographic information of the practitioners, practitioners' attitudes towards TCM and WM and factors influencing those attitudes, with a particular focus on age and gender.

5.2 Demographics Data of TCMPs

Table 5.1 shows the demographic data of TCMPs in Hong Kong and Guangzhou, who took part in the study. The total sample comprises 233 TCMPs, 110 (47.2%) from Hong Kong and 123 (52.8%) from Guangzhou.

The mean age of all TCMPs is 45.4 years, and the age of TCMPs ranged from 24 years to over 65+ years. Almost half (49.8%) of the total number of TCMPs are aged between 40 years and 64 years. Most TCMPs (70.9%) were born in mainland China and just over a quarter (26.1%) were born in Hong Kong.

Table 5.1 Demographic data of TCMPs in Hong Kong and Guangzhou

Variables	Total samples (n=233) Persons (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square level of significance
Age range:				
24-39	90 (39.0%)	22.2	3.7	p<0.001
40-64	115 (49.8%)	54.6	45.5	
65+	26 (11.3%)	23.1	0.8	
Gender:				
Male	152 (66.1%)	66.7	65.6	
Female	78 (33.9%)	33.3	34.4	
Place of birth:				
Hong Kong	60 (26.1%)	55.6	0.0	p<0.001
Singapore	1 (0.4%)	0.9	0.0	
Macau	2 (0.9%)	1.9	0.0	
Mainland China	163 (70.9%)	38.9	99.2	
Taiwan	2 (0.9%)	0.9	0.8	
Other	2 (0.9%)	1.9	0.0	

The response rate for the completion of the TCMPS questionnaire for Hong Kong was 37% and for Guangzhou 41%. Although the distribution of patients between the two locations is quite balanced, there were more male TCMPs (66.1%) compared to females (33.9%).

In the Hong Kong cohort of TCMPs, over half (54.6%) were aged between 40 years and 64 years, and two thirds (66.7%) male. Just over half (55.6%) were born in Hong Kong. The most substantial portion of TCMPs in the Guangzhou cohort was also aged between 40 years and 64 years. Also, the cohort of TCMPs was mainly male (65.6%), and most (99.2%) were born in mainland China.

Differences in the demographic data for TCMPs in Hong Kong and Guangzhou were identified using a chi-square test. Significant differences were found for TCMPs aged 24 to 39 years ($p<0.001$) and for the place of birth for TCMPs who were born in Hong Kong ($p<0.001$).

5.3 TCM Practice Characteristics in Hong Kong and Guangzhou

Table 5.2 shows the number of hours practised per week and the number of consultations per week for TCMPs in Hong Kong and Guangzhou. The minimum Most TCMPs conducted 50 or more consultations per week.

Table 5.2 No. of hours practised per week and consultations performed per week by TCMPs

Variables		Total samples (n=233) (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square significance
Practice hours per week:					
	10 or less	32 (14.0)	8.5	18.7	p<0.001
	11-22	52 (22.7)	19.8	25.2	
	23-34	39 (17.0)	9.4	23.6	
	35-40	32 (14.0)	18.9	9.8	
	41+	74 (32.3)	43.4	22.8	
Consultations per week:					
	<10	17 (7.5)	4.7	98	
	10-25	45 (19.7)	19.8	19.7	
	26-50	41 (18.0)	20.8	15.6	
	50+	124 (54.4)	53.8	54.9	
	NP	1 (0.4)	0.9	0.0	

NP = not provided

Table 5.3 shows TCMPs who use TCM philosophy and a patient's Western medicine diagnosis to guide their diagnosis and treatment. The results showed that the majority (98.7%) of TCMPs in the total sample use TCM philosophy to guide a patient's treatment though about half (52.2%) also used WM to make a diagnosis.

Table 5.3 TCMPS who use TCM philosophy and a Western medicine diagnosis

Variable		Total sample (n=233) (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square significance
Use TCM philosophy to guide treatment	Yes	227 (98.7)	97.2	100.0	
	No	3 (1.3%)	2.8	0.0	
Use WM diagnosis to guide treatment	Yes	115 (52.2)	54.3	50.4	
	No	109 (47.8)	45.7	49.6	

82.9% used WM tests and diagnostic procedures, and 89.1% used WM instruments. Only 72.1% of the practitioners kept records of new patient consultations, and 85.3% reported making notes for subsequent patient consultations. Differences in the practice of TCM in Hong Kong and Guangzhou were identified using a Chi-square test.

The results show that TCMPs in Guangzhou had shorter consultation hours, shorter initial and follow-up consultation times and lower fees for initial and follow-up visits. They were also more likely to use a WM-centred approach to diagnosis, more likely to use WM instruments, and less likely to keep patient records or make notes for each patient consultation than TCMPs in Hong Kong.

Table 5.4 Duration of initial and follow-up consultations performed by TCMPs

Variables		Total samples (n=233) (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square significance
Initial consultation time					
	<5min	13 (5.6)	3.7	7.3	p<0.001
	5-20 min	173 (74.9)	60.2	87.8	
	20-30 min	32 (13.9)	24.1	4.9	
	30 min +	231 (5.6)	12.0	0.0	
Follow-up consultation time:					
	<5min	31 (13.5)	9.3	17.2	p<0.001
	5-20 min	184 (80.0)	78.7	81.1	
	20-30 min	9 (3.9)	6.5	1.6	
	30 min +	6 (2.6)	5.6	0.0	

Table 5.5 Fee for initial and follow-up consultations

Variables	Total samples (n=233) (Mean (SD)	Hong Kong (n=110) (Mean (SD)	Guangzhou (n=123) (Mean (SD)	Chi-square significance
Initial fee	54.33 (89.11)	101.50 (107.85)	14.28 (36.87)	p<0.001
Follow-up fee	52.63 (86.61)	97.31 (104.66)	13.91 (36.38)	p<0.001

Table 5.6 Use of WM diagnosis and WM instruments by TCMPs in Hong Kong and Guangzhou

Variables		Total samples (n=233) (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square significance
WM diagnostic tests*	Yes	189 (82.9)	64.2	99.2	p<0.001
	No	39 (17.1)	35.8	0.8	
WM instruments:	Yes	204 (89.1)	83.0	94.3	p<0.05
	No	25 (10.9)	17.0	5.7	

*and procedures

Table 5.7 Type of patient records maintained by TCMPs for new and follow-up consultations

Type of consultation		Total samples (n=233) (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square significance
New consult	Yes	165 (72.1)	99.1	48.4	p<0.001
	No	64 (27.9)	0.9	51.6	
Follow-up consult	Yes	197 (85.3)	91.7	79.7	
	No	34 (14.7)	8.3	20.3	p<0.05

Table 5.8 Type of patient records maintained by TCMPs in Hong Kong and Guangzhou

Type of Record	Total samples (n=233) (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-square significance
Paper or card	96 (46.6)	62.7	30.8	p<0.001
Computerised record	41 (19.9)	15.7	24.0	
Combination	58 (28.2)	21.6	34.6	
Others	11 (5.3)	0.0	10.6	

Differences between the qualifications and training of practitioners from Hong Kong and Guangzhou were identified using a Chi-square test. The results show that those in Guangzhou, in general, had fewer years of experience, a higher level of education and training and were more likely to belong to a TCM association. These practitioners also reported fewer problems with TCM treatments in their practice.

Table 5.9 No. of years of experience of TCMPs in Hong Kong and Guangzhou

No. of years	Total samples (n=233) Persons (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-Square Level of Significance
0-10 years	73 (31.9%)	29.0	34.4	p<0.001
11-20 years	72 (31.4%)	16.8	44.3	
21-30 years	43 (18.5%)	21.5	16.4	
31-40 years	15 (6.6%)	9.3	4.1	
40 years+	26 (11.4%)	2.34	0.8	

Table 5.10 Educational qualifications of TCMPS in Hong Kong and Guangzhou

Qualification	Total samples (n=233) Persons (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-Square Level of Significance
Certificate	27 (12.6%)	21.8	4.4	p<0.001
Diploma	14 (6.5%)	13.9	0.0	
Bachelor	50 (23.3%)	31.7	15.8	
Master	74 (34.4%)	23.8	43.9	
Doctorate	48 (22.3%)	6.9	36.0	
Others	2 (0.9%)	2.0	0.0	

Table 5.11 TCMPS required to register with a professional body to practice

Qualification		Total samples (n=233) Persons (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-Square Level of Significance
Required to register with a professional body to practice TCM?	Yes	174 (79.1%)	69.7	86.8	p<0.01
	No	46 (20.9%)	30.3	13.2	

Table 5.12 TCMPS in Hong Kong and Guangzhou and continuing education in TCM?

Variable		Total samples (n=233) Persons (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-Square Level of Significance
Required to undertake formal continuing education in TCM?	Yes	149 (65.9%)	70.2	62.3	
	No	77 (34.1%)	29.8	37.7	

Table 5.13 TCMPs in Hong Kong and Guangzhou who are members of a TCM association

Variable		Total samples (n=233) Persons (%)	Hong Kong (n=110) (%)	Guangzhou (n=123) (%)	Chi-Square Level of Significance
Member of any TCM association?	Yes	76 (33.9%)	15.8	48.8	p<0.001
	No	146 (66.1%)	84.2	51.2	

Table 5.14 Number of years of TCM practice, the highest level of qualification, the requirement to register with a professional body to practice TCM, and whether a TCMP is a member of a TCM association, for TCMPs in Hong Kong and Guangzhou

Adverse effects due to acupuncture				
Yes	32 (15.1%)	22.9	8.6	p<0.01
No	180 (84.9%)	77.1	91.4	
Adverse effects due to herbal medicines?				
Yes	44 (19.6%)	16.8	22.0	
No	180 (80.4%)	83.2	78.0	

5.4 Qualification and Training of TCMPs in Hong Kong and Guangzhou

As shown in Table 5.3, about 63% of practitioners had less than 20 years' experience with TCM, and 11.4% had more than 40 years' experience. Some of the practitioners held as their highest degree either a bachelor's (23.3%), master's degree (34.4%) or doctorate (22.3%), while others held a certificate (12.6%), diploma (6.5%) or other qualification (0.9%).

5.5 Professional Training of TCMPs

Almost 80% of practitioners reported being required to register with a professional body: 65.9% were obligated to undertake formal continuing education, and 33.9% belonged to a TCM association. The data relating to training were also assessed using a chi-square test (Table 5.3). It was found that male practitioners were more likely to hold a higher degree, certificate or diploma than female practitioners. In addition, practitioners with a higher education level were more likely to be younger and were more common in Guangzhou than in Hong Kong.

5.6 TCMPs Attitudes towards TCM and WM

Table 5.5 shows the data concerning practitioners' attitudes and beliefs towards TCM and WM. Attitude scores in the questionnaire ranged from 1 to 5, depending on whether a practitioner strongly agreed or strongly disagreed with a given question. Comparisons of practitioners in Hong Kong and Guangzhou were analysed using a t-test. The comparative analysis is presented in Figure 1, and the t-test statistics are presented in Table 5.4

Table 5.15 TCMPs attitudes towards TCM and WM

Items		Total (n=233)	Hong Kong (n=110)	Guangzhou (n=123)	t-test level of significance
Q29	TCM regarded as unscientific	3.93 (1.19)	3.57 (1.39)	4.24 (0.87)	p<0.001
Q30	Tight control the import of Chinese herbal and proprietary medicine	2.14 (1.07)	2.14 (1.04)	2.15 (1.09)	
Q31	Restriction sale of Chinese medicine to TCMPs	2.16 (1.09)	2.50 (1.17)	1.85 (0.92)	p<0.001
Q32	Constituents of TCM specified	1.69 (0.82)	1.64 (0.76)	1.74 (0.88)	
Q33	Public has trust in TCMPs	2.21 (0.71)	2.28 (0.73)	2.15 (0.69)	
Q34	WM diagnose illness more accurately than TCM	2.92 (1.09)	3.22 (1.14)	2.66 (0.97)	p<0.05
Q35	Variation in professional standards in TCMPs	1.72 (0.68)	1.79 (0.73)	1.67 (0.64)	
Q36	WM has better facilities	1.94 (0.84)	1.83 (0.78)	2.04 (0.88)	
Q37	Lack of government recognition for TCM	1.99 (0.97)	1.81 (0.83)	2.14 (1.06)	p<0.05
Q38	WM quality is better	2.77 (1.13)	2.75 (1.17)	2.9 (1.11)	
Q39	TCM & WM practitioners should be given equal status	1.52 (0.79)	1.59 (0.89)	1.46 (0.69)	
Q40	Education and training in WM is more rigorous	2.39 (1.10)	2.55 (1.19)	2.25 (0.99)	p<0.01
Q41	Public perceives TCM as safe	2.25 (0.80)	2.25 (0.76)	2.25 (0.82)	
Q42	WM has more scientific approach	2.97 (1.02)	2.72 (1.12)	3.19 (1.03)	
Q43	WM is specialised towards diseases	2.52 (1.02)	2.81 (1.16)	2.27 (0.79)	p<0.001
Q44	TCM therapeutic effect for medical diseases is greater	2.78 (0.95)	2.72 (0.95)	2.83 (0.95)	
Q45	WM acts more quickly	3.30 (0.98)	3.40 (1.02)	3.21 (0.95)	
Q46	TCM therapeutic effect for chronic diseases is greater	2.01 (0.94)	1.89 (0.85)	2.12 (1.00)	
Q47	WM therapeutic effect for acute disease is greater	3.10 (0.87)	3.10 (0.86)	3.10 (0.88)	
Q48	TCM has fewer side effects	1.99 (0.84)	1.85 (0.75)	2.11 (0.90)	
Q49	WM therapeutic effect is more apparent	3.49 (0.92)	3.53 (0.91)	3.46 (0.93)	
Q50	TCM cause less gastrointestinal side effects	2.16 (0.87)	1.96 (0.71)	2.33 (0.96)	p<0.001
Q51	TCM is slower and less potent	4.00 (0.75)	4.04 (0.68)	3.97 (0.81)	
Q52	TCM treats the cause while WM relieves symptoms only	3.02 (1.13)	2.73 (1.17)	3.28 (1.04)	
Q53	TCM should be prioritised over WM when equally effective	2.00 (0.86)	2.13 (0.89)	1.89 (0.82)	
Q54	WM labelling is more accurate	2.11 (0.80)	2.24 (0.91)	1.99 (0.67)	p<0.001
Q55	TCM cure diseases and promote health	1.51 (0.50)	1.44 (0.50)	1.57 (0.50)	
Q56	TCM improves constitution	1.56 (0.63)	1.49 (0.50)	1.63 (0.72)	
Q57	TCM has restorative effect	1.55 (0.60)	1.50 (0.56)	1.60 (0.64)	
Q58	WM is used only when TCM failed	3.64 (0.94)	3.47 (1.01)	3.79 (0.86)	p<0.01

TCMPs in Guangzhou were in general agreement that:

Only TCMPs should sell TCM.

WM can diagnose an illness more accurately than TCM.

Education and training is more rigorous for WM doctors than it is for TCMPs.

WM is more specialised and focused on particular diseases.

The labelling of WM pharmaceuticals is more accurate than that for TCM medicines.

TCMPS in Hong Kong were in general agreement that:

TCM is regarded as unscientific.

TCM lacks recognition by the government.

TCM causes fewer gastrointestinal side effects.

WM should only be used when TCM fails.

The correlations of the 29 items, analysed using Pearson's correlation, are shown in Table 5.5 Cronbach's alpha of the attitudes and beliefs towards TCM was 0.733, indicating appropriate internal consistency.

Factor analysis was used to extract practitioners' attitudes and beliefs. The results of the factor analysis for the 29-item attitude questions are shown in Table 5.7. Factors for the analysis were extracted using principal component analysis and rotated by Varimax with Kaiser Normalisation. Using an Eigenvalue of >1, nine factors were extracted. The explained variance was 61.32%. The nine factors were designated as follows:

Factor 1: Modern quality of WM

Factor 2: Restorative effect of TCM

Factor 3: Specialty of TCM

Factor 4: Standards

Factor 5: Priority

Factor 6: Control

Factor 7: Safety

Factor 8: Under-recognition

Factor 9: Status

Table 5.16 Factor analysis of attitudes and beliefs towards TCM by TCMPs

Variables	Factor 1 Modern quality of WM	Factor 2 Restorative effect of TCM	Factor 3 Speciality of TCM	Factor 4 Standards	Factor 5 Priority	Factor 6 Control	Factor 7 Safety	Factor 8 Under recognition	Factor 9 Status
Q45. WM acts more quickly	.827	-.033	.145	-.043	-.047	.008	-.137	-.059	-.031
Q49. WM therapeutic effect is more apparent	.765	-.169	.050	.121	-.041	.050	-.109	.071	-.086
Q51. TCM is slower and less potent	.606	-.163	-.231	-.182	.083	.001	.109	.248	.081
Q43. WM is specialised towards diseases	.538	.058	-.188	.352	-.090	-.087	.050	-.395	.225
Q38. WM quality is better	.522	-.079	-.005	.352	-.134	.057	.103	.057	.084
Q42. WM has more scientific approach	.510	-.124	.063	.278	-.117	-.120	.290	.309	-.031
Q57. TCM has restorative effect	-.083	.829	.178	.100	.030	.010	.104	-.057	-.012
Q55. TCM cure diseases and promote health	-.111	.742	.073	.218	.041	.124	-.161	.093	.063
Q56. TCM improves constitution	-.203	.717	.175	-.027	-.016	.059	.014	-.002	-.061
Q46. TCM therapeutic effect for chronic diseases is greater	.159	.276	.693	-.060	.096	.011	-.005	-.129	.048
Q52. TCM treats the cause while WM relieves symptoms only	-.052	.155	.651	-.079	.134	.092	.170	.170	.035
Q44. TCM therapeutic effect for medical diseases is greater	-.166	.058	.561	.114	.518	-.023	.025	-.005	.179
Q50. TCM cause less gastrointestinal side effects	.098	.411	.524	-.084	.190	-.045	.328	-.081	-.018
Q34. WM diagnose illness more accurately than TCM	.468	.075	-.475	.126	.006	.218	.270	.078	.007
Q40. Education and training in WM are more rigorous	.149	.142	-.097	.696	.096	.053	.066	.111	-.031
Q35. Variation in professional standards in TCMPs	-.004	.000	-.025	.581	.010	.339	-.120	-.176	-.169
Q54. WM labelling is more accurate	.191	.213	-.132	.568	.107	.176	-.201	.107	.284
Q36. WM has better facilities	.174	.105	.203	.473	-.418	.255	.249	.180	-.071
Q47. WM therapeutic effect for acute disease is greater	-.132	-.053	.212	.259	.751	-.048	.067	-.064	-.166
Q58. WM is used only when TCM failed	-.013	.104	.219	-.273	.556	.112	.151	.205	.016
Q53. TCM should be prioritized over WM when equally effective	.055	.410	.062	.056	.503	.153	.122	-.101	.360
Q31. Restriction sale of Chinese medicine to TCMPs	.002	-.001	-.143	.122	.135	.716	-.117	-.254	.079

Table 5.16 (continued) Factor analysis of attitudes and beliefs towards TCM by TCMPs

Variables	Factor 1 Modern quality of WM	Factor 2 Restorative effect of TCM	Factor 3 Speciality of TCM	Factor 4 Standards	Factor 5 Priority	Factor 6 Control	Factor 7 Safety	Factor 8 Under-recognition	Factor 9 Status
Q30. Tight control the import of Chinese herbal and proprietary medicine	.152	.153	.061	.083	-.005	.689	.232	-.059	-.111
Q32. Constituents of TCM specified	-.152	.057	.165	.268	-.139	.563	-.069	.288	.164
Q41. Public perceives TCM as safe	-.022	-.069	.068	-.043	.096	.051	.802	.013	.231
Q48. TCM has fewer side effects	.074	.377	.400	-.036	.228	-.031	.495	-.062	-.068
Q29. TCM regarded as unscientific	.154	.020	-.025	.138	-.005	-.128	.002	.749	-.088
Q37. Lack of government recognition for TCM	-.150	.315	.293	.260	-.006	.020	.300	-.321	-.143
Q33. Public has trust in TCMPs	.063	-.060	.017	-.111	.019	-.028	.118	-.018	.840
Q39. TCM & WM practitioners should be given equal status	-.141	.044	.254	.254	-.065	.088	.083	-.329	.458

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. Explain

Table 5.17 Factors related to TCMPs attitudes and beliefs towards TCM

Variables	Factor 1 WM Modern quality	Factor 2 TCM Restorative effect	Factor 3 Speciality of TCM	Factor 4 Standard	Factor 5 Priority	Factor 6 Control	Factor 7 Safety	Factor 8 Under-recognition	Factor 9 Status
Constant	-1.159 (0.472)*	0.729 (0.513)	1.682 (0.467)**	0.578 (0.510)	-0.455 (0.493)	-1.035 (0.492)*	0.529 (0.517)	1.272 (0.472)**	-0.171 (0.500)
Age group: 40-64	0.360 (0.195)	-0.143 (0.212)	0.091 (0193)	0.171 (0.211)	-0.337 (0.204)	0.215 (0.204)	0.155 (0.214)	-0.109 (0.195)	-0.110 (0.207)
Age 65+	0.412 (0.429)	-0.084 (0.466)	-0.151 (0.424)	0.862 (0.463)	-0.027 (0.448)	-0.211 (0.447)	0.534 (0.469)	0.358 (0.429)	0.103 (0.454)
Sex: Female	0.194 (0.149)	-0.102 (0.162)	-0.103 (0.148)	-0.194 (0.161)	0.201 ().156)	0.136 (0.155)	-0.016 (0.163)	-0.007 (0.149)	-0.029 (0.158)
Site: Guangzhou	0.426 (0.172)*	-0.113 (0.187)	-0.885 (0.170) **	-0.029 (0.186)	0.252 (0.179)	0.229 (0.179)	-0.001 (0.188)	-0.797 (0.172)**	0.392 (0.182) *
Practice TCM years	-0.007 (0.049)	-0.008 (0.053)	-0.016 (0.049)	-0.101 (0.053)	-0.046 (0.051)	-0.004 (0.051)	-0.057 (0.054)	-0.06 (0.049)	-0.011 (0.052)
Highest level of training:									
Diploma	0.056 (0.350)	-0.081 (0.380)	-0.075 (0.347)	-0.148 (0.378)	-0.037 (0.366)	0.295 (0.365)	-0.323 (0.383)	0.560 (0.350)	-0.013 (0.371)
Bachelor	-0.017 (0.241)	0.068 (0.261)	0.118 (0.238)	0.293 (0.260)	-0.43 (0.251)	0.419 (0.251)	-0.536 (0.263)*	0.389 (0.241)	-0.315 (0.255)
Master	-0.301 (0.224)	-0.175 (0.243)	0.320 (0.222)	0.314 (0.242)	0.028 (0.234)	0.465 (0.233)	-0.499 (0.245)*	0.167 (0.224)	-0.190 (0.237)
Doctorate	-0.332 (0.248)	-0.282 (0.269)	0.076 (0.245)	0.216 (0.268)	0.000 (0.259)	0.514 (0.258)	-0.574 (0.271)*	0.495 (0.248)*	-0.033 (0.262)
Others	-0.612 (0.743)	0.061 (0.07)	-1.616 (0.735*	0.255 (0.803)	-1.169 (0.776)	-0.236 (0.774)	0.256 (0.813)	-0.973 (0.743)	0.514 (0.787)
Req'd. to register with a prof body	0.286 (0.190)	-0.190 (0.207)	-0.272 (0.188)	0.081 (0.206)	-0.058 (0.199)	-0.006 (0.198)	-0.007 (0.208)	0.016 (0.190)	-0.274 (0.202)
Required to continuing education	0.172 (0.252)	-0.022 (0.162)	-0.017 (0.148)	-0.266 (0.162)	-0.073 (0.156)	-0.150 (0.156)	-0.058 (0.164)	0.042 (0.150)	0.133 (0.158)
Member of a TCM association	-0.197 (0.155)	-0.042 (0.169)	-0.022 (0.154)	-0.212 (0.168)	0.356 (0.162)*	0.199 (0.162)	0.084 (0.170)	-0.099 (0.155)	-0.038 (0.165)
R square	0.101	0.035	0.213	0.085	0.103	0.103	0.052	0.202	0.065

A higher factor score indicates more disagreement. * = $p<0.05$ **= $p<0.001$

The nine-factor scores were saved for further analysis. Next, the variables relating to the nine attitude and belief factors towards TCM were examined. The data were analysed by multiple logistic regression (see Table 5.6). The demographic variables and training and education variables were used to examine their relationship to the attitudes and beliefs of practitioners, but most of the variables were not significant.

It was found that practitioners in Guangzhou were more confident that WM was of high quality than those in Hong Kong (β=0.426). Practitioners in Hong Kong (β=-0.885) were more likely to possess a training certificate over other qualifications (β=-1.616).

In general, practitioners who belonged to a TCM association gave higher priority to TCM over WM (β=0.356). Those with a higher level of training (bachelor, master, or doctoral degree) and were less likely to agree that TCM is safe. Practitioners in Hong Kong (β=-0.797) holding a doctorate (β=0.495) agreed more that TCM was under-recognised.

No variables were significant regarding attitudes towards the restorative effect, standards, control and status of TCM.

Table 5.18 Factors related to the practice of TCM by logistic regression

Variables	Use of WM diagnosis test (n=195)	Use of Western instruments (n=196)
Factor 1 WM modern quality	1.533	1.617
Factor 2 TCM restorative effect	1.220	1.048
Factor 3 Specialty of TCM	1.712	0.694
Factor 4 Standard	0.780	1.472
Factor 5 Priority	0.409 p<0.05	0.844
Factor 6 Control	0.875	1.230
Factor 7 Safety	0.841	0.602
Factor 8 Recognition	1.321	1.182
Factor 9 Status	0.500 p<0.05	1.235
Sex (female)	0.507	1.385
Age 40-64	0.308	0.089 p<0.05
Age 65+	0.419	0.045
Site (Guangzhou)	2.002	1.024
Experience in TCM practice (years)	0.995	1.233
Highest training level		
Diploma	0.989	1.380
Bachelor	0.817	3.394
Master	1.381	2.826
Doctorate	13.089	1.294
Others	1.720	1.159
Constant	2.961	14.752 p<0.05

5.7 Factors Relating to the Practice of TCMPs

Table 5.7 shows the logistic regression analysis of the factors related to the use of WM diagnosis tests and instruments use in TCM practice. As would be expected, practitioners who were less likely to prioritise TCM (OR=0.409) and less concerned about its status (OR=0.500) were more likely to use WM diagnostic instruments or tests in TCM practice. Middle-aged practitioners (OR=0.089) were more likely to use WM instruments in their TCM practice. Factors relating to the fee charged for an initial consultation and a follow-up consultation with TCMPs were also examined. Attitudes and demographic variables were found not to be significant, except for location: TCMPs charged more in Hong Kong than those in Guangzhou.

5.8 Adverse Events Involving the Practice of TCM

Some TCMPs reported that some of their patients had had adverse reactions to acupuncture (15.1%) and specific herbal medicines (19.6%).

5.9 Summary of Chapter

This chapter describes the demographic data, practice characteristics, qualification and training of TCMPs in Hong Kong and Guangzhou. Also, data relating to the type of professional training undertaken by TCMPs after becoming registered is shown. Lastly, data about TCMPs' attitudes towards TCM and WM and the use of WM devices are included, as well the proportion of TCMPs reporting adverse events involving TCM. The next chapter (Chapter 6) describes the qualitative results and data analysis of patients in Hong Kong and Guangzhou.

Chapter 6: Qualitative Results & Analysis - Patients

When someone shares something of value with you, and you benefit from it, you have a moral obligation to share it with others.
Chinese proverb

6.1 Introduction

The findings of Phase Two of the qualitative data are presented in this chapter, namely the semi-structured interviews undertaken with Chinese patients in Hong Kong and Guangzhou to understand their use of traditional Chinese medicine (TCM). The quantitative data collected in Phase One (see Chapter 5) focused on Chinese patients' attitudes and beliefs towards TCM. However, the findings from Phase Two provide more depth and insight into Chinese people's use of TCM through shared stories. The findings which are presented in the following sections encompass patient's knowledge of TCM, how TCM treatments are used concomitantly with WM, patients' perceptions of TCM practitioners (TCMPs), strengths and weaknesses of TCM and WM, the impact of government legislation relating to TCM, and lastly patients' perceptions about the integration of TCM with WM.

6.2 Participants

To explore Chinese people's experience about TCM semi-structured interviews were conducted with 16 Chinese patients (eight in Hong Kong and eight in Guangzhou) who previously participated in Phase One of the study. The age of the eight participants in Hong Kong, which comprised of four males and four females ranged from 34 to 65 years (mean age 45.1 years), and the age of the eight participants in Guangzhou ranged from 23 to 67 years (mean age 42.0 years). At the time of data collection, all the participants were receiving TCM treatment on an outpatient basis.

6.3 Findings

Six main themes were extracted from the analysis of the interview transcripts of patients in Hong Kong and Guangzhou. Patients' knowledge of TCM, patients' attitudes towards TCMPs, concurrent use of TCM and WM, strengths and weaknesses of TCM were common to patients interviewed in Hong Kong and Guangzhou. However, the themes about government legislation of TCM and integration of TCM and WM were additional themes identified form the analysis of interview transcripts only from patients. Themes 1-4 were common to patients in Hong Kong and Guangzhou.

Table 6.1 Themes and sub-themes derived from interviews with Chinese patients

Themes	Sub-themes	Question Items
Knowledge of TCM	Source of TCM knowledge	4. Based on your own knowledge and understanding of Chinese medicine, can you explain how this influences your decision to seek treatment from a Chinese medicine practitioner?
	Type of treatment sought	
	Patient's knowledge of TCM and their decision to consult a TCMP	
Attitudes towards TCMPs	Type of healthcare professional consulted	1. How often do you go to Chinese medicine practitioner? *3.* With respect to your most recent visit, what are your expectations concerning the outcome of the treatment for your condition? 6. Why, and under what circumstances, do you think that you would use Chinese medicine as well as, or instead, of Western medicine
	Consultations with a TCMP or WMD	
	Patient's expectations about treatment outcomes	
	Patient's reasons for consulting a TCMP	
Concomitant use of TCM and WM	Conditions that can be treated using both TCM and WM	2. What medical conditions do you think Chinese medicine is suitable for treating?
Strengths and weaknesses of TCM	Medical conditions suitable for treatment	5. What would you say are the strengths of Chinese medicine compared with Western medicine and can you give some examples?
	Superiority of TCM and WM	
	Safety of TCM and WM	
Integration of TCM and WM	Ways TCM and WM can be integrated	8. How, and to what extent do you think Chinese medicine could be integrated with Western medicine in the future?
Government legislation of TCM	Education and training of TCMPs	2. When consulting a Chinese medicine practitioner, describe how you determine if they are qualified to practice? 3. Has any past or recent legislation relating to Chinese medicine influenced your decision to consult a Chinese medicine practitioner?
	Availability of TCMPs at Government run TCM clinics in Hong Kong	

6.3.1 Patients' Knowledge of TCM

It has been reported previously by (Lam, 2001) that Chinese people sometimes make decisions on which type of doctors they want to see for the specific illnesses that they are suffering. Some patients may, therefore, consult a TCMP before consulting a WM doctor, or vice versa. However, little is known about how Chinese patients make these decisions and whether it is based on or associated with their actual knowledge of TCM and WM, as Chinese patients' knowledge of TCM has not been reported in the peer-reviewed scientific literature to date. In this study, participants who took part in an interview were asked

how their knowledge of TCM and how it influenced, their decision to seek treatment from TCMP and it was found that few Chinese patients admitted that they had very little knowledge about TCM:

> I know little about Chinese medical treatment. I didn't study about Chinese medical treatment but chat with practitioners of Chinese medicine to acquire knowledge. (LTW, 34-year-old Hong Kong male)

Although most of the patients who took part in an interview for this study claimed they did not know much about TCM, those patients who reported they had some knowledge about TCM described how they and acquired their knowledge about TCM. A search of the literature for articles published in peer review journals could not identify any published articles that provide information about Chinese people's knowledge of TCM. However, a study by Wang et al. (2011) conducted recently in Chin that examined the use of the Internet by Chinese people undergoing laparoscopic cholecystectomy, found that Chinese patients use the Internet to search for information about the procedure.

Furthermore, the results of the study conducted by Wang et al. (2011) found that it younger Chinese patients were more likely to use the Internet to search for Western healthcare information than older Chinese patients. The study also identified that the use of the Internet by Chinese people to search for healthcare information varied with employment status, educational level, and average household income. From the interviews conducted with the Chinese patients in Hong Kong and Guangzhou two patients "YZQ" and "LYB" reported they had acquired knowledge about TCM and in the case of "YZQ" learnt about TCM from reading classical Chinese history notes while attending school.

> I mainly acquired Chinese medical knowledge from school. I learnt about it in Chinese history when reading about Hua Tuo and The Yellow Emperor's Internal Classic, but I can't remember many of the concepts. (YZQ, 58-year-old Hong Kong male)

Another patient, "LYB" learnt about TCM mainly because of an illness they were suffering from,

> I began to know about Western and Chinese medicine because of my illness. Before, I didn't need to see a doctor at all because I didn't have any illness. (LYB, 56-year-old Guangzhou male)

The remaining patients that took part in the interviews all reported that they knew hardly anything about TCM. The use of WM is more predominant in China than in Hong Kong. However, as many doctors in

China are trained in both WM and TCM, some Chinese people are more likely to consider TCM to be a complementary form of treatment to WM.

With the introduction and availability of the Internet, it is feasible to assume that more Chinese people will make use of the Internet to search for healthcare information. Today in many developed countries, where Internet services are widely available more and more patients are accessing the ever-increasing pool of healthcare information online to learn about different medical conditions, their causes and treatments.

For many Chinese people born before the introduction of the Internet in Hong Kong and China, many would have probably placed much reliance on the professional knowledge of the TCMP they were consulting, and whom they may have found by "word of mouth" from another patient. As such, they would not dare to question, or doubt, the treatment prescribed to them by the TCMP for the treatment of their medical condition. Much of the information many Chinese patients picked-up about TCM and WM had probably been passed down to them by family members, or gleaned in some cases, from reading articles or information about TCM or WM published in books and magazines. In some cases, some patients may have also obtained information about the treatment of their medical condition by asking the TCMP questions during their consultation, this may, therefore, explain why very few Chinese people have little knowledge of TCM.

6.3.2 Concomitant use of TCM and WM

With the widespread use of various TCM herbal products which are often concomitantly used with WM pharmaceutical drugs, TCM and WM interactions are essential (Izzo and Ernst, 2009). It is well documented that concomitant use of some TCM herbal medicine with conventional WM drug treatments can alter pharmacokinetic profiles of many classes of pharmaceutical drugs, including psychotropic agents, anticoagulants, oral contraceptives, immunosuppressant's, cardiovascular drugs, anti-HIV, anticancer agents and anti-epileptics.

During interviews with patients in Hong Kong and in Guangzhou, patients in Hong Kong were more likely to describe how they used TCM and WM medicine concomitantly, as was reported by the following patient interviewed in Hong Kong,

> I received acupuncture and moxibustion as well as Chinese medicine for my leg, but I also keep taking Western medicine for curing the long-term illness. For leg pain, I consulted a Western medical doctor for painkillers and then a Chinese medical practitioner for recuperation (CSY, 38-year-old Hong Kong female.

Not surprisingly the concomitant use of TCM and WM was not mentioned by any of the Chinese patients interviewed in China, possibly because the integration of TCM and WM exists in China and patients in China receive both Chinese and Western treatment modalities.

The concomitant use of TCM by Chinese patients in Hong Kong and China has previously been reported. Leung et al. (2011) used a guided questionnaire survey and collected data from 309 Chinese patients in Hong Kong who were receiving neurosurgical care at a teaching hospital in Hong Kong. Their results showed that the concomitant use of TCM was reported by just over a quarter (25.9%) of patients who took part in the survey.

Furthermore, it was found that half of the patients who took TCM herbal medicines at the same time they were receiving WM treatments were unaware of the potential risks of adverse interactions between the two forms of medicines.

Surprisingly though, some patients in Hong Kong inform their TCMP when they are receiving WM treatments. As was the case of "YZQ" a Chinese patient in Hong Kong,

> I've tried both Chinese and Western medicine at the same time to effect a permanent cure. Since I'm suffering from asthma, I keep using inhalation spray agents while taking Chinese medicine with consent from the CMP. While I'm taking Chinese medicine, I would not take Western oral medicine, but keep using the inhalation sprays agents to treat my asthma. (YZQ, 58-year-old Hong Kong male)

A similar retrospective, a cross-sectional study by Meng et al. (2011) involving 1,795 patients diagnosed with schizophrenia, were randomly selected from 17 psychiatric hospitals in China and were interviewed face-to-face using a structured questionnaire. The results showed that the prevalence of concomitant TCM and WM (antipsychotic treatment) was 36.4%.

This study also showed that Chinese patients using concomitant TCM and had a significantly higher chance of improved outcomes than patients who did not use TCM use (61.1% vs 34.3%,). However, a small but sizeable number of patients treated concomitantly with CM had a higher risk of developing worse outcomes

(7.2% vs 4.4%) Significant predictors for concomitant TCM treatment associated outcomes were residing in urban areas, paranoid psychosis, and exceeding three months of TCM use.

This study by (Meng et al., 2011) serves to highlight the fact that concomitant use of TCM treatments (herbs) and WM conventional treatments (drugs) could result in beneficial effects. However, there is also a high risk of adverse reactions, and clinical effects could also occur. Potential herb-drug pharmacokinetic interactions need to be further evaluated, and patients need to be advised that they should notify a doctor who practices WM if they are taking or being prescribed TCM treatments by a TCMP.

6.3.3 Patients' Perceptions of TCMPs

Chinese patients in Hong Kong and Guangzhou had similar perceptions about TCMPs. Some of the perceptions held by Chinese patients in Hong Kong and Guangzhou related to the age of the TCMP described during their interviews how they believed older TCMPs had more experience, as opposed to younger TCMPs. Several patients in Hong Kong and Guangzhou cited that the age of TCMP was crucial in determining whether the practitioner was experienced enough.

> It seems an older Chinese medicine practitioner would have much more experience. From my impression, I may doubt the Chinese medicine practitioner if he is young (CSY, 38-year-old Hong Kong female)

They believe that more "senior" TCMP was preferable was also echoed by "LLP" a Chinese patient from Guangzhou,

> I always find a senior (TCM) doctor first. But if their treatment doesn't work, I turn to other (TCM) doctors, until I feel more comfortable. Sometimes, I ask advice from colleagues and friends (LLP, 23-year-old Guangzhou female).

However, in Hong Kong, where all TCMPs are legally required to be registered before being allowed to practice Chinese medicine, the concept of licensed TCMPs was something that "CGQ" a patient in Hong Kong perceived as important.

> I know Chinese medicine practitioners have got licences from the government now, and I treat them as qualified. It's okay if a practitioner has graduated from Hong Kong or China, but if they haven't been approved by the government, or have graduated from another place, it's not okay (CGQ, 65-year-old Hong Kong male)

Although there is little research about Chinese patients' perceptions towards TCMPs two previous areas of research that provide information about Chinese people's perceptions towards TCMPs can be found in a qualitative study by Liao et al. (2010) entitled, "How do Chinese Medicine Practitioners communicate." (Liao et al., 2010) identified the importance of empathy, expectation, satisfaction and trust, as factors that can influence patients' outcome and doctors' confidence in providing treatment.

Another exciting piece of research that helps us understand Chinese patients' perceptions towards TCMPs' the phenomenon is known as "doctor shopping." the practice of visiting multiple physicians or TCMPs' This phenomenon, which is quite common in non-western countries (Sato et al., 1995).

In Hong Kong, where primary medical care is provided by private medical doctors whose fees vary considerably from district to district and from one medical speciality to another. In Hong Kong, just as Chinese people tend to "shop" around for Western-trained medical doctors, they also shop around for TCMPs.

These patients tend to be younger and better informed about different medical specialities (Siu and Lam, 2014). Among the most common reasons cited by Chinese people in Hong Kong to around for TCMPs are because their symptoms persist, even after treatment with WM, distrust about the dispensing of TCM herbal medicines, the age of a TCMP and whether a patient believes they can "trust" a TCMP.

> I know that all Chinese medicine practitioners (in Hong Kong) are approved. But, for private Chinese medicine practitioners, it seems hard to tell, and I may have to have a look at him, to see if he can be trusted or not. I would also find out if the (herbal) shop had a good reputation. I would try the Chinese medicine practitioner by seeing him once and then take the Chinese medicine he prescribes me, to see if he is qualified or not. (YLC, 43-year-old Hong Kong female).

6.3.4 Strengths and Weaknesses of TCM and WM

Even though TCM and WM have evolved over a long time. WM tends to be more dominant in both Eastern and Western countries mainly because it has greater efficacy than TCM and its mode of action is much faster than TCM. However, when talking about TCM and WM Chinese people who use TCM do not necessarily use TCM because of its efficacy and speed of action. Also, it is not possible to explain TCM using Western scientific or medical terms. For many Chinese people who use TCM, is often perceived as

an effective form of treatment for treating specific health problems that have an incompatible biomedical explanation.

Chinese people who utilise TCM may perceive it is an effective means of treating a particular medical condition for two main reasons. Firstly, because they perceive TCM acts as a "tonic" for the body, unlike WM, which is primarily used to treat only symptoms. Secondly, TCM is utilised as a holistic treatment and that needs to be "individualised" for each person when treating a patient's medical condition.

Furthermore, Chinese people may claim that TCM delivers therapeutic effects that 'clear the root of the disease' and has fewer side-effects than WM, which often perceived as being "toxic" or "poisonous" to the human body. Thus, TCM is believed by many Chines people who use TCM to be safer and 'more acceptable to the body. Lastly, Chinese people believe that TCM can help and guide the promotion of good health, for example, by the adoption of a balanced diet and by performing Chinese exercises.

Chinese patients' impressions about the strengths and weaknesses of TCM and WM described above were also frequently mentioned by several of the Chinese patients who took part in this study.

Many Chinese people perceive WM as being "powerful, but quick and but has potential for side-effects" For minor illnesses, it is expected that if a Chinese patient wanted quick control of a disease or medical condition, they would consult a doctor who practices WM. However, TCM would be used as a second or last resort. Chinese people who use WM alone also recognise that using TCM alone would not always be sufficient for treating a serious illness.

Whichever form of medicine a Chinese patient opts for TCM is often used, as some Chinese patient put it to "cut the tail of the illness" after WM has achieved the remission of the acute condition. In their own words, during the conduct of interviews with Chinese patients in Hong Kong and Guangzhou, they describe what they believed are the apparent strengths and weaknesses of TCM compared with WM.

The two main strengths of TCM referred to by Chinese patients in Hong Kong was pain management and what the patients referred to as "recuperation" or the body's recovery after an illness or injury. The time it took to recover from an illness using TCM, and the time needed to prepare medicines before consumption, were, however, aspects of TCM that were considered weaknesses of TCM. In previous research by Lam, (2001) strengths and weaknesses of TCM and WM were studied in Chinese people in Hong Kong.

This qualitative study of Chinese subjects' opinions involved semi-structured focus group interviews. Twenty-Nine Chinese participants from Hong Kong took part in eight focus group interviews in which the participants' attitudes towards TCM and WM were explored. The results of the study found that both TCM and WM are used concurrently by many Chinese people in Hong Kong.

During the interviews, TCM was claimed to be better at curing the root of the problem as this forty-five-year-old woman explained:

> Chinese medicine can eradicate the root cause of a disease, unlike Western medicine which only treats the symptoms. Take the case of my dad, who suffered from depression for many, after he retired. My dad received treatment at a psychiatry department in a Western medicine hospital but, after taking lots of anti-depression drugs, my dad looked sluggish. Then, he went to a provincial Chinese medicine hospital and registered at their insomnia department. Half a year later, my dad completely recovered (CN, 45-year-old Guangzhou female).

However, another patient in Hong Kong who agreed to take part in an interview for this study believed that TCM took longer than WM before recovery could be expected,

> As Chinese medicine has a longer recovery time, some people may not feel better after taking just one or two doses. Some people in Hong Kong are impatient so that they may seek WM instead (CSY, 38-year-old Hong Kong female).

For more acute medical problems, Chinese patients in Hong Kong perceived that WM worked faster than TCM, but the main strength of TCM was to help the body recuperate after receiving treatment with WM:

> The strength of Chinese medical treatment is recuperation, removing dampness and killing pains when you've got problems with your back or kidneys. It works for me. Western medical treatment provides immediate pain relief, but Chinese medicine treatment is better for the recuperation of the body (YZQ, 58-year-old Hong Kong male).

Another weakness, according to "CGQ" a 65-year-old Chinese male was the time it took to "cook" Chinese medicine herbs. Before Chinese medicines can be taken, the mixture of dried herb is usually boiled into a broth or soup. This preparation is time considered time-consuming for many Chinese people.

> Chinese medicine herbs need to be cooked. Cooking medicine is a disadvantage. It would be good if there were ready-made pills for Chinese medicine like Western medicine (CGQ, 65-year-old Hong Kong male).

Like patients in Hong Kong, patients in Guangzhou also spoke about the strengths and weaknesses of TCM and WM. They believed that one of the main strengths of WM was surgery,

> Western medicine is good for surgery, and Chinese medicine is good for recuperation. For example, a patient should use Chinese medicine for recuperation after having a tumour excised (SY, 23-year-old Guangzhou female).

However, after surgery and during the time a patient was convalescing, taking TCM was perceived as being necessary for the body to "recuperate" or recover fully. As well as recuperation, particularly after surgery, several of the patients who took part in interviews agreed that TCM could treat the root cause of a disease. TCM, unlike WM, which some Chinese people claim only controls the symptoms, the capacity for TCM treat the body holistically, and the perception that is less harmful than WM was also perceptions considered to be main strengths of TCM.

> Unlike Western medicine treatment, which often requires operations, Chinese medicine doesn't need operations; Chinese medicine also focuses more on taking care of the body and is mild and does no harm to the body (LRJ, 34-year-old Guangzhou male).

For example, patients with rheumatoid arthritis thought that WM would provide rapid control of symptoms and better access to laboratory tests that monitor progresses. At the same time, TCM would relieve the side-effects of Western medication and provide a tonic effect.

Similar believes about the apparent strengths of TCM in patients diagnosed with cancer was indicated by one Chines patient in Guangzhou Patients who shared here perception about the strengths of TCM when Chinese patients receive Western medical treatments,

> With cancer, chemotherapy and radiotherapy is a must. After that, we use Chinese medicine to adjust the body (SY, 23-year-old Guangzhou female).

6.3.5 Impact of Government Legislation on TCM in Hong Kong

Patients in Hong Kong often spoke about how the implementation of legislation regarding the training and practice of TCMPs in Hong Kong had given them more confidence in TCM and its safety:

> Since there are regulations for Chinese medicine, I have changed my views a bit. The Chinese medicine practitioner I consulted before was under a government clinic. I am more confident in Chinese medicine

> practitioners working in government clinics who are recommended by the government (CSY, 38-year-old Hong Kong female).

> The legislation does build up my confidence in Chinese medical treatment, and the more the legislation, the better the protection for all. The legislation in Hong Kong is good for Chinese medical treatment to build up people's confidence and a positive image. There are some people they won't try Chinese medical treatment because they don't have confidence in it, but with legislation and promotion, they will be eager to try when they have a certain understanding towards it (YLC, 43-year-old Hong Kong female).

> Since some Chinese herbal medicines are poisons or chronic poisons, it's essential to regulate the prescriptions, as some prescriptions are just scrawled that you can see from some private Chinese medical clinics; ordinary people may not recognise the handwriting, and then the prescriptions are filled at a Chinese medicine practitioner's own Chinese herbal medicine store (YZQ, 58-year-old Hong Kong male).

6.3.6 Integration of TCM and WM in Hong Kong

Strong beliefs about the complementary nature of TCM and WM were repeatedly highlighted throughout the interviews with patients in Hong Kong and Guangzhou. It is commonly believed by many Chinese people who use TCM that the synergistic use of both forms of medicines would yield a better outcome than using either form of medicine alone.

The perceived advantage of using TCM and WM was mainly confined to the improvement of physical health. Patients with chronic or severe illnesses are more likely to opt for integrated TCM - WM treatment because they perceive that the simultaneous use of both forms of medicine would holistically address the medical condition they were experiencing.

The patient comments reflected the perceived value of choosing an integrative approach and possibly the assumption that co-use of TCM and WM would cancel out the weaknesses of both modalities while retaining their respective strengths. The integration of TCM and WM is the Chinese version of integrative medicine (Lao and Ning, 2015). WM was first introduced to China from the middle of the 17th century. During the first two centuries, several different views related to the future of TCM and the relation between TCM and WM emerged.

In Hong Kong, the integration of TCM and WM does not follow the practices in China. However, since the transfer of sovereignty to China in 1997, the Hong Kong Government has been supportive in promoting the

integration of TCM and WM. However, there are no hospitals in Hong Kong, at the time of writing this thesis, where TCM services are integrated to the same extent that they are in the People's Republic of China.

WM has always been the mainstream form of medicine promoted by the Hong Kong government; however, after 1997, the government passed legislation governing the education, training and practice of TCM in Hong Kong. After the implementation of legislation and the establishment of the Chinese Medicine Council of Hong Kong (Chinese Medicine Council of Hong Kong, 2001), the Hong Kong government provided financial support to Chinese herbal medicine research institutions.

> I have heard that hospitals in China integrate Western and Chinese medical treatments, and they have promoted it for a long time. It sounds great, but it's just not popular here (MSL, 34-year-old Hong Kong female).

> Integration of Chinese medicine is good, like what they do in China. It's good to treat a disease with both Chinese and Western medical treatment. I understand it's difficult to do the integration as they have got different aims. It takes time to learn both Chinese and Western medical treatments. Most of the doctors in China know both Chinese and Western medical treatment, which is good (LTW, 34-year-old Hong Kong male).

6.4 Summary of Chapter

This chapter describes the findings from Phase Two, the qualitative part of this study. The data were collected using semi-structured interviews with Chinese patients. In the next chapter (Chapter 7) the data collected using semi-structured interviews with TCMPs in Hong Kong and Guangzhou are analysed and reported.

Chapter 7: Qualitative Results & Analysis - Practitioners

Challenge yourself with something you know you could never do,
and what you'll find is that you can overcome anything.
Anonymous

7.1 Introduction

The findings of Phase Two of the study qualitative are presented in this chapter. The data was obtained from conducting semi-structured interviews with traditional Chinese medicine practitioners (TCMPs) in Hong Kong and Guangzhou. Seven primary themes were identified from the analysis of the interview transcripts (See Chapter 4, Section 4.5.7). The themes titles are, why TCMPs practice TCM; TCMPs' attitudes towards TCM and Western medicine (WM); TCMPs perceptions about TCM and WM; the integration of TCM; recognition of TCMPs in Hong Kong; geographical differences among TCMPs; and the concomitant prescribing of TCM and WM by TCMPs.

7.2 Participants

Semi-structured interviews were conducted to explore TCMPs' experiences about TCM. A total of 16 TCMPs' (eight in Hong Kong and eight in Guangzhou) who had previously participated in Phase One of this study. The age of eight of the participants in Hong Kong ranged from 28-65 years. This cohort comprised of four males with an age range of 30 – 52 years (mean age 42.2 years) and four females with an age range ranged from 28 to 65 years (mean age 50.5 years). In the Guangzhou cohort, the age of the eight participants ranged from 33-48 years and comprised of four males with an age range of 35-42 years (mean age 38.2 years) and four females with an age range from 33 to 48 years (mean age 42.2 years). At the time of data collection, all TCMPs interviewed were registered to practice.

7.2.1 Why TCMPs Practice TCM

Just over half of TCMPs interviewed in Hong Kong and Guangzhou when asked why they chose to practice TCM stated that they had a family connection to TCM.

> Both my father and brother are Chinese medicine practitioners. I learned Chinese medicine from them. I had also studied Chinese medicine in Guangzhou for four years during the "Cultural Revolution" and followed by a four-year study of Western medicine. However, my study of Western medicine was not recognised by the Hong Kong government when I emigrated from Mainland China in 1979. That made me a Chinese medicine practitioner eventually (LLM, 46-year-old female TCMP, Hong Kong).

7.2.2 TCMPs' Attitudes Towards TCM and WM

The main form of medicine adopted by many countries is WM, and this is the primary form of medicine adopted and officially used and regulated by governments in different countries throughout Asia. However, in countries where the population is predominantly composed of ethnic Chinese, such as Taiwan (95%), Macau (95%), Hong Kong (93%), China (91.5%) and Singapore (74.1%), TCM is also likely to be widely utilised and practised by Chinese people.

There have been no studies published in the literature to date that examines TCMPs' attitudes towards TCM and WM. However, some studies have examined attitudes towards TCM by WM doctors (Harmsworth and Lewith, 2001, Ho, 2002) and attitudes toward TCM by medical students in their final year of training in Hong Kong (Ho, 2002).

The TCMPs from Hong Kong and Guangzhou who took part in interviews for this study provided a range of different attitudes about TCM. Some commented about the efficacy and safety of TCM. At the same time, other spoke about what they perceived as the "superiority" of TCM compared to WM, because TCMPs, as they put it in their own words, was "more flexible" than WM doctors, as TCMPs provide a more comprehensive range of therapies or treatment modalities than a WM doctor. One TCMP in Hong Kong summed up concisely what all the other TCMPs had mentioned about TCM.

> Chinese medicine is good for rehabilitation. It is also effective for curing infectious diseases. It helps reduce sequela and adverse effects of the WM. For example, the adverse effects of chemotherapy and electrotherapy are hair-loss and vomiting, but patients may get rid of these by taking Chinese medicine (TWM, 52-year-old male TCMP, Hong Kong).

The use of TCM to treat the adverse effects of chemotherapy has been described extensively in the literature. Meng et al. (2008) conducted a survey which revealed a high prevalence of CAM use among patients with cancer receiving outpatient chemotherapy in Taiwan. Zhang et al. (2008) performed a meta-analysis of randomised controlled trials where treatment with Chinese herbal medicine has been explored, for the treatment of hepatocellular carcinoma. The authors sought to evaluate the effectiveness of Chinese herbal medicine when combined with chemotherapy.

Furthermore, the use of TCM by patients diagnosed with cancer has also been reported extensively in the literature (Arthur et al., 2012, Izzo and Ernst, 2009, Liao et al., 2012, Chinese Medicine Council of Hong Kong, 2001, Pu et al., 2008, Simpson, 2003, Wei and Chien, 2008, Wu et al., 2009, Zhang et al., 2008).

7.2.3 TCMPs Perceptions of the Strengths and Weaknesses of TCM

Almost all the practitioners in Guangzhou who took part in an interview spoke enthusiastically about what they perceived are strengths of TCM, compared with WM:

> Chinese medicine has lots of strengths; just one example can't completely state all of them. In dermatology, Chinese medicine is preferable when treating chronic dermatitis and pruritic dermatitis (LJ, 42-year-old male TCMP, Guangzhou, PRC)

> Chinese medicine treats the root cause of a disease. Moreover, under circumstances in which the pathology of a disease is not clear, Chinese medicine can also treat a disease through treatment based on syndrome differentiation, this is the primary advantage of Chinese medicine (LHJ, a 45-year-old female, TCMP, Guangzhou).

One other TCMP related how TCM could "cure" colds or fevers if they were not too severe. He also described TCM as useful in reducing relapses, of specific chronic diseases:

> Chinese medicine can cure diseases such as a cold, fever if they are not too severe. Furthermore, Chinese medicine has advantages in reducing the number of relapses, chronic diseases like eczema and reducing the number of relapses when treating diseases such as allergic rhinitis (LIU, a 35-year-old male, TCMP, Guangzhou).

Research on the attitudes of WM doctors towards TCM is minimal (Wong et al., 2006). However, a study conducted in Shenyang, Northern China which focused on attitudes towards TCM amongst WM doctors in the People's Republic of China (Harmsworth and Lewith, 2001) found that 98% (n=177) of the respondents who completed a questionnaire and who also took part in structured interviews, had some theoretical and practical training about TCM.

The study by (Harmsworth and Lewith, 2001) also found that older doctors had significantly more theoretical and practical TCM training. There was also a clear consensus that TCM (mainly herbal medicine), was useful and safe in treating patients with chronic or intractable illnesses. The open interviews

yielded some interesting observations. However, the qualitative interview data did not provide in-depth insight into the doctors' attitudes towards TCM and WM or the relative strengths and weaknesses of TCM compared with WM.

The results of the study by (Harmsworth and Lewith, 2001) also found that doctors trained in WM were influenced in their choice of treatment by their training, clinical experience and the available published literature. Also, a large proportion (76%) treated their patients with TCM and treated their friends or family with TCM (90%), and many (82%) referred their patients to TCM specialists.

Although the number of studies about WM doctors attitudes towards TCM is very limited_Wong et al. (2006) conducted focus group discussions with medical students in the fourth year of their medical degree at the Chinese University of Hong Kong, to explore their attitudes to TCM and its impact on the future of medical training. Their study found that most of the medical students interviewed believed that TCM was a good alternative for specific health problems. However, the lack of scientific evidence and the absence of regulation were also considered to be other significant barriers. The students were also concerned about the limitations of TCM (Wong et al., 2006).

7.2.4 Integration of TCM and WM

In China, TCM and WM have existed side-by-side over the last century. Although TCM suffered from discrimination because of its retarded development for several decades, with the implementation and encouragement from the Chinese government, TCM has steadily flourished. Moreover, the Chinese government also implemented a new policy relating to the integration of TCM with WM (Cai, 1988).

Although TCM has been integrated alongside WM for many years in China, the same degree of integration that has not yet been implemented in Hong Kong, it is likely that there are several reasons why TCM and WM have not yet been integrated in Hong Kong, or whether it will even be possible in the future.

This study found that TCMPs in Hong Kong and Guangzhou believed that the integration of TCM with WM in Hong Kong was a complicated issue, because of conflicting concepts and visions of integration and of the proper balance between the two types of medicine. There were also concerns that TCMPs would also be expected to learn about WM, and this might overwhelm their TCM mindset. Two TCMPs, one who was interviewed in Hong Kong and Guangzhou, provided their views about the integration of TCM and WM.

> I think it is almost impossible for the two professions to be integrated. Patients may use whatever they want or even to use both to see the outcome. This may be a way they can be integrated: according to the preferences of patients. I think they should be supporting each other, but should not merge (WLL, 65-year-old female TCMP, Hong Kong)

> It takes time for Western medicine community to understand what "energy, mind and spirit" are. It would be good if they could understand this. But it's hard for them to understand. Where is the merging point? What's important to patients the most is they are cured (LSH, 43-year-old female TCMP, Guangzhou).

Views about the integration of TCM and WM also focused on whether TCMPs should be able to make use of WM instruments and to request or order WM investigations, such tests such as blood tests and radiological examinations.

> Since Chinese medicine practitioners are not allowed to do blood tests or X-ray examinations, I would recommend that my patients go to a Western medical doctor if they need these medical check-ups, or if I cannot cure them (HWM, 28-year-old female TCMP, Hong Kong).

The tension between WM doctors and TCMPs can be traced back to the 19th century, when European missionaries in China considered TCM backwards and unscientific, and introduced the medicine and practices from their home countries. TCMPs have also mentioned that they have experienced prejudice from the Western-trained doctors about their diagnostic approach, who often discouraged patients from seeking TCM treatment (Liu et al., 2001).

This scepticism by the Western medical establishment not only regarding TCM, but also complementary and alternative forms of medicine, is attributable in part to a lack of controlled studies. The fact that herbs used in TCM have multiple active components, unlike conventional Western pharmaceutical drugs, in which active components are identified; this was evident from the comments provided by two TCMPs interviewed in Guangzhou.

> Nowadays, Chinese medicine has conducted many studies relating to pharmacology. If Chinese medicine can prove its pharmacology, Western medicine will be more willing to accept Chinese medicine (LHJ, 45-year-old female TCMP, Guangzhou).

> I have asked some experts this question before. They thought that, if you want to be accepted by the Western medical community, you need to show a curative effect first. Western medicine emphasises the importance of double-blind, randomised clinical controlled trials. So, if a Chinese medicine hospital can conduct strict trials as well and invite Western medicine experts to join in when they think your trials are strict and see your curative effect, you will be accepted. To what you have said and written, and then we will believe you (LJ, 42-year-old male TCMP, Guangzhou).

In a recent publication, Tsang, Huang, and Koehler, (2013) argue that TCM and WM cannot be integrated until TCM has been proven to be effective in clinical trials. However, they suggested that there were other ways in which integration could be handled.

In this study, four out of the eight TCMPs in Guangzhou who were interviewed expressed views and opinions about how TCM and WM could be integrated if more clinical trials could be conducted.

> There is evidence-based medicine, and Chinese medicine is going to follow it to develop. If you develop Chinese medicine at the laboratory level, it will be good for the Western medical community to accept Chinese medicine (LIU, 35-year-old male TCMP, Guangzhou, PRC)

In 1994, a critical review of the integration of TCM and WM in Taiwan was conducted by Kang et al. (1994). Before this study, TCM and WM were practised separately. Furthermore, Leung et al. (2003), in their review of the proposed integration of TCM and WM described how China maintained and developed three kinds of medical sciences, that is, TCM, WM, and 'integrated medicine'. They drew attention to the fact that much had been achieved regarding clinical, experimental and theoretical research, and that the development of any science can be furthered by "cross-fertilisation" based on absorption and fusion of whatever useful theory and experience might be available (Leung et al., 2003)

The most recent study of the integration of TCM and WM from TCMPs in Hong Kong is that by Hariman et al. (2013) who conducted focus group interviews of TCMPs in Hong Kong participating in a WM training course. The two focus groups, which comprised of 13 practitioners, were held before the session, and two others with ten practitioners afterwards. The results of their study showed that TCMPs believed that they acted in a supportive role to WM doctors, but they also recognised their strengths.

7.2.5 Recognition of Practitioners of TCM in Hong Kong

Most of the TCMPs interviewed in Hong Kong for this research commented on the benefits brought about by the enactment of the Chinese Medicine Ordinance (Cap 549) in Hong Kong (see Section 2.2.2 in Chapter 2) and the changes to the law that permit them to issue medical certificates as WM doctors are permitted to do.

> Medical certifications issued by TCMPs are now accepted by law. It's a kind of recognition of the work of Chinese medicine practitioner. It is a great help to the Chinese medicine industry. Following that, many insurance companies accept the medical certifications issued by Chinese medicine practitioners (CHL, 42-year-old male TCMP, Hong Kong).

During the review of the interview transcripts with TCMPs in Hong Kong, it became apparent that during the interviews, many TCMPs felt that the issuance of medical certificates allowed them to assert their status not only among patients but also among WM doctors. They also believed that their status was also enhanced as some medical insurance companies also accepted medical certificates issued by TCMPs.

7.2.6 Geographical Differences among TCMPs

Three practitioners in Guangzhou commented on the popularity of TCM in different regions of China. One TCMP who worked in a hospital in Guangzhou describes how he perceives that the practice of TCM in Guangzhou, compared with other parts of China.

> West Guangdong mainly uses Western medicine. I am from East Guangdong. Western medicine is not prevalent there. Normally, you would see Chinese medicine clinics all over the street if you went there. In the Pearl River Delta, some people worship Western medicine very much. Beijing mainly uses Western medicine too (LSH, 43-year-old female TCMP, Guangzhou)

7.2.7 Concomitant Prescribing of TCM and WM

In Hong Kong, TCMPs are not permitted to prescribe or use Western pharmaceutical medicines. However, patients frequently use TCM concomitantly with Western pharmaceutical drugs, particularly patients with cancer. In China, however, the prescribing of TCM and conventional Western medicines is common, as many doctors in China are qualified in both WM and TCM, as this TCMP from Guangzhou commented.

> For a doctor who can practice both Chinese and Western medicine, there are no rules that specify which medicine should be used. You can choose whichever medicine as long as it is suitable for treating a disease (HS, 48-year-old female TCMP, Guangzhou)

The concept of using TCM and Western pharmaceutical medicines to treat diseases was evident in 2002 during the outbreak of severe acute respiratory syndrome (SARS), a newly identified human infection caused by a unique coronavirus for which no effective treatment or vaccine is currently available. During this time, the World Health Organization (WHO) convened an international meeting of experts to review the treatment of SARS using TCM (WHO, 2003) and many TCMPs from Guangzhou discussed the concomitant use of TCM with WM for the treatment of the condition.

7.3 Summary of Chapter

This chapter described the themes that were identified during structured interviews with TCMPs in Hong Kong and Guangzhou. The next chapter, (Chapter 8) provides a discussion of the results of the whole study.

Chapter 8: Discussion

8.1 Introduction

This descriptive, two-phase study of Chinese patients and TCM practitioners, (TCMP) in Hong Kong and Guangzhou, five factors were found that impact on Chinese patients' decisions to utilise TCM. Furthermore, significant factors relating to age, gender, education and knowledge of TCM were found identified for patients in Hong Kong and Guangzhou. For TCMPs nine factors that impact on TCMPs decisions to practice TCMPs were also found.

A sequential mixed-methods approach was used. In the first phase of the study, quantitative data was collected from 505 patients in Hong Kong and 550 patients in Guangzhou using a structured questionnaire. Also, 110 TCMPs in Hong Kong and 123 in Guangzhou were sampled. In the second phase of the study, semi-structured interviews were conducted with 16 patients and 16 TCMPs in Hong Kong and Guangzhou, respectively.

This concluding chapter discusses the factors that impact on Chinese patients' decisions to use TCM; the factors that impact TCMPs decisions to practice TCM; and also, the differences found in the factors identified for Chinese patients and TCMPs practitioners in Hong Kong and Guangzhou, respectively. Finally, the limitations of the study and implications for future research are also discussed, as are the research contributions to knowledge.

8.2 Factors that impact on Chinese patients' decisions to use TCM

The present study explored factors associated with utilisation of TCM by Chinese people in Hong Kong and Guangzhou. Findings revealed that the majority of Chinese people in Hong Kong utilise WM doctors (WMD) when they are unwell. However, in Guangzhou, the findings revealed that fewer Chinese people utilise WM doctors when they are unwell. Among those who reported using TCM practitioners (TCMPs), fewer Chinese people in Hong Kong, compared to Chinese people in Guangzhou reported using both TCM and WMD concurrently.

Studies on the utilisation of TCM by Chinese people in Hong Kong have shown that the prevalence of use of TCM among Chinese people is between 8% and 10% of the total population (Chung et al., 2007, Lau and Yu, 2000, Wong et al., 1993b). Although the vast majority of Chinese people in Hong Kong, and Guangzhou tend to consult a WMD when unwell, those individuals who reported consulting a doctor, was accounted for 32.2% of Chinese people in Hong Kong. Furthermore, 55.7% consulted a TCMP instead of a WMD. The practice of co-consulting, consulting both WMDs and TCMPs, suggests that Chinese people may use TCM and WM to treat different medical conditions.

Factor analysis of other variables associated with Chinese people attitudes and beliefs towards TCM and WM unveiled five further factor factors. The first factor is associated with the "modern quality" of WM; the second factor is associated with the "restorative effect" of TCM; the third factor is associated with the "apparent effect" of WM; the fourth factor is associated with Chinese people's assumptions that TCM has fewer side-effects than WM. Finally, the fifth factor is associated with whether TCM should be prioritised over the use of of-of WM. After analysing the different factors for age, gender and location, age were found to be a significant factor for patients in their middle-ages who were also likely to put their trust in WM.

Age has also been found to be an essential factor related to the use of TCM by Chinese people. In a study by Wong et al. (1995), they found that older people utilised TCM more than younger people Rochelle and Yim (2014). However, findings from a study by Chung et al. (2007) that they conducted in Hong Kong, also showed that TCM is highly prevalent among local Chinese residents in their middle-ages. Especially among Chinese people who use TCM for health maintenance. Moreover, older patients with chronic diseases were less likely to consult TCMPs and did not express a preference for either TCM or WM treatment when they were sick. Chung et al. (2007).

Gender is another factor associated with TCM. There is reasonably consistent evidence that women are more likely than men to use TCM. The research for this study found that Chinese female patients who were more confident in the health-promotion effects of TCM and who also agreed about the apparent effect of WM are more likely than men to use TCM. These results appear to in line with previous studies (Chen et al., 2007, Chung et al., 2007, Chang et al., 2008) where it was also found that TCM is used more by women than men. There are several possible reasons why the use of TCM among women is higher than men. Firstly, women have better knowledge, attitudes and practices for self-care than men. Women are also higher users of health care services in general, including complementary and alternative medicine (CAM) and

acupuncture, and they are often the primary agents in family healthcare utilisation decisions (Lo-Fo-Wong et al., 2012). It has also been found that women are more likely to demonstrate more help-seeking behaviours than men (Yeung, 2010). As compared with men, women are more likely to use any form of health care; this could also include the use of TCM (Lo-Fo-Wong et al., 2012). Secondly, it is suggested that women have more opportunities to use TCM for maintaining regular menstruation (Huang et al., 2014); promoting health during pregnancy (Chen et al., 2015) and treating the post-menopausal symptoms (Tang et al., 1995). Thirdly, women may use acupuncture treatment to reduce body weight, waist circumference and body mass index to improve their body the image (Teng et al., 2014). Finally, the cost of accessing medical care is often lower for women than it is for men as the proportion of women who are homemakers or without a job is higher than in men.

Education is also another factor associated with TCM use. In this research study, it was found that Chinese patients with a higher level of education were more likely to show an appreciation for the modern quality of WM as well as the health-promoting effects of TCM, but were less likely to agree that the use of TCM should be prioritised over WM. Some researchers have studied the prevalence, costs and patterns of use TCM in Hong Kong Luk (2001) and found that respondents with a primary school level of education below are more likely to self-medicate with TCM. The same researcher found that some Chinese people with a higher level of education, as well as those who received education to tertiary level or above, who also perceived they are health is weak, on average, spent the money in buying TCM treatments for self-medication Luk (2001). Another interesting study by Chung et al. (2007) also found that Chinese people who had a higher education level, who also had a chronic disease are more likely to have insurance coverage for TCM. While older patients, and patients with chronic diseases, and single people, were least likely to have insurance coverage.

Moreover, there are also many other reasons why Chinese people with a higher level of education in this study were found to appreciate the modern quality of WM and the health-promoting effects of TCM. Firstly, for many Chinese people in China, the use of TCM to treat chronic medical conditions was found to be quite low (Zhang and Verhoef, 2002). One reason why so few Chinese people in China turn to TCM to treat chronic diseases is that many Chinese people believe that chronic medical conditions can be more effectively controlled using WM drugs. Secondly, it is also possible that treatment with TCM for a chronic medical condition may not be a Chinese person's choice of treatment. Moreover, a conventional belief

among many Chinese people that although TCM is is effective in treating some chronic diseases, but it is not useful for the treatment of many acute medical conditions. Also, some Chinese people will generally visit a WMD first, to obtain a diagnosis and treatment. However, if the WM drugs prescribed by a WMD are not perceived to be effective, or have many side-effects, they will consult a TCMP (Chung et al., 2009a) thus implying that TCM may be used as an alternative, or complementary therapy to WM, particularly when it comes to treating chronic diseases (Chau, 2004). A situation that may also happen if a Chinese person is diagnosed with cancer (Lam et al., 2009) or back problems and has experienced a stroke (Yi et al., 2015).

Precisely why Chinese patients who have been diagnosed with a chronic disease such as hypertension continue to use TCM may involve factors such as decision making, previous experience with WM drugs, openness to treatment with TCM, and costs associated with WM drugs compared to TCM treatment. In mainland China, unlike Hong Kong, health insurance covers Chinese patients in China for WM drug treatment and TCM treatments. However, some users of TCM may feel that the drugs prescribed by a WMD to treat a chronic disease are ineffective, or they may be concerned about side-effects of the WM drugs that have been prescribed. According to a study by (Chan and Tsang, 2018), it was found that Chinese users of TCM are more likely to have higher education than non-users. However, this conflicts with the findings of a study by (Leung et al., 2005) who found that TCM users tend to be older, female and have lower educational attainment.

Moreover, studies by (Chen et al., 2007, Chung et al., 2007, Chang et al., 2008) reported that Chinese people with high education levels were less likely to use TCM compared with those with lower education. The results of this research study also found that more Chinese patients in Guangzhou than in Hong Kong agreed that the WM was more modern and of better quality than TCM and had a better therapeutic effect than WM. Moreover, it was also found that more patients in Guangzhou than in Hong Kong believed that TCM caused fewer side-effects than WM, and they also believed that TCM should be given priority over WM. Furthermore, more patients in Guangzhou than in Hong Kong were more sceptical about the health-promoting effects of TCM and the apparent effect of WM.

The regional analysis of the factors that impact on Chinese patients' decision to use TCM showed that more Chinese patients in Guangzhou than in Hong Kong perceived that WM was more modern than TCM. Because many Chinese people understand that TCM is based on ancient principles and uses basic principles to diagnose and treat a patient's medical condition when compared with WM which is based on scientific

principles and also makes use of diagnostic test and medical equipment such as x-rays and scanners. When compared to the advanced techniques of WM, it is not surprising that some Chinese people often perceive that WM is modern, as such better quality than TCM. Another factor that was identified in this study, as being associated with the use of TCM I is a therapeutic effect.

This study found that one factor associated with the use of TCM and WM was that more patients in Guangzhou than in Hong Kong perceive that TCM had a better therapeutic effect than WM. A therapeutic effect is a consequence of the medical treatment of any kind, the results of which are judged to be desirable and beneficial. Studies have shown (Lam, 2001) that Chinese people perceive that one particular strength of TCM is its ability to cure or treat a particular medical condition. According to some Chinese people when compared with WM, TCM can cure the root cause of a medical condition (Lam, 2001), unlike WM, which some Chinese people perceive only treats the symptoms of a disease. Because some Chinese people perceive that TCM is much better than WM at clearing a disease, it means that TCM may also use concurrently with some WM drugs (Lam, 2001).

Furthermore, some Chines people will treat TCM as a supplement to a WM drug treatment prescribed by a WMD, The purpose of this according to some Chinese people is that TCM treatment is used to eradicate the disease (Lam, 2001). Compared with Chinese people in Guangzhou, Chinese people in Hong Kong, many of whom may initially consult a WMD for the treatment of their illness. Some Chinese people in Hong Kong will consult a TCMP after taking WM drugs to ensure they fully recover and some may also take TCM treatments to remove what many Chinese people refer to as the “toxic effect’ of WM drugs (Lam, 2001).

Moreover, more Chinese people in Guangzhou than people in Hong Kong Chinese perceive that TCM is likely to cause fewer side-effects than WM. Because of this perception, another factor associated with the use of TCM by Chinese people is that TCM should be used or prioritised over the use of WM for the treatment of illnesses, if necessary. This study also found other factors associated with Chinese people’s use of TCM. The first concerns the health-promoting effect of TCM compared with WM and the second is related to the apparent effect of WM to treat certain diseases. Regarding the health-promoting effects of TCM, is that more Chinese people in Guangzhou.

8.3 Factors impacting on TCMPs decisions to train in and practice TCM

The findings from this research study found nine factors that impact on TCMPs decisions to practice TCM. The various factors found for TCMPS were extracted from TCMPs attitudes and beliefs about TCM and WM. Nine factors found. These factor related to the modern quality of WM; the restorative effect of TCM, the speciality of TCM; standards; prioritising WM over TCM; control of TCM treatments; safety of TCM compared with WM; under-recognition of TCMPs by WMD and lastly the status of TCM s compared to WM). TCMPs demographic, training and education variables were used to examine their relationship to the attitudes and beliefs of TCMP in this study practitioners, most of the variables were not significant. However, it was found that more practitioners in Guangzhou than in Hong Kong were confident that WM was of high quality compared to TCM. Furthermore, more TCMPS in Hong Kong than in Guangzhou were more likely to possess a training certificate over other qualifications than TCMPS in Guangzhou.

In general, TCMPs who belonged to a TCM association gave tended to prioritise TCM over WM. TCMPs in Guangzhou who possessed a higher level of training such as a bachelor, master, or doctoral degree, were less likely to agree that TCM is safe. Whereas, more TCMPs in Hong Kong than in Guangzhou who held a doctorate were more likely to agree that TCM as a profession was under-recognised. No variables were significant regarding attitudes towards other factors such as the restorative effect, of TCM; WM standards, control and the status of TCM.

8.4 Differences in factors for Chinese patients in Hong Kong and Guangzhou

The findings from this research found four factors for Chinese patients' in Hong Kong and three factors for patients in Guangzhou. Factors for Chinese patients in Hong Kong are associated with gender, level of education, knowledge about TCM and the apparent effect of TCM. While factors for Chinese patients Guangzhou are associated with, education level; knowledge of TCM and the health-promoting effect of TCM. In this study, a validated instrument developed by (Liang, 1999) which contains ten items relating to the efficiency of treatment and therapeutic effects and of TCM or WM and whether it has better quality than WM, was used. The questions contained within the CWMB are designed to detect whether a Chinese

patient had an overall belief in the superiority of WM. Furthermore, the CWMB instrument incorporated also contains four questions relating to TCM about the "restorative effects" of TCM, side effects, therapeutic effects and priority over WM, and these questions are designed to detect whether patients had an overall belief in the superiority of TCM.

8.4.1 Hong Kong

This study found that for Chinese patients in Hong Kong who had an apparent belief in the "restorative effect" of TCM and who are female and had a higher level of education but had less knowledge about TCM, were more likely to view TCM as an effective way to promote and maintain health. The factors identified in this study echo the findings of a study by Chung et al. (2007) who in the study of *the use of traditional Chinese medicine in Hong Kong* found that TCM use was highly widespread among Hong Kong Chinese residents in the middle-age group, who used TCM for health maintenance. Furthermore, the results of the study (Chung et al., 2007) by Chinese patients in Hong Kong also found that Chinese patients who believed in the "restorative effect" of TCM, and who also believed in the "apparent effect" of WM, were found to be older females.

8.4.2 Guangzhou

For Chinese patients in Guangzhou, this study found, that Chinese patients in Guangzhou with a higher education level, who believe that WM is of better quality compared to WM, and Chinese patients in Guangzhou, who had less knowledge of TCM, had a favourable view that TCM had fewer side-effects than WM. Furthermore, it was also found that Chinese patients in Guangzhou with a higher level of education who showed an appreciation for the "modern quality" of WM and the health-promoting effects of TCM are less likely to prioritise the of TCM over WM.

8.5 Differences in the factors for TCMPs in Hong Kong and Guangzhou

The findings from this research found three factors that are different for TCMPs in Hong Kong and Guangzhou. These factors included: the use of WM diagnostic tests; procedures and instrument; the integration of TCM and WM; and consultation fees charged.

8.5.1 Use of WM diagnostic tests, procedures and instruments

Although demographic variables and training and education variables were used to examine their relationship to attitudes and beliefs of TCMPS in Hong Kong and Guangzhou, most of the variables were not significant. However, it was found that TCMPs in Guangzhou had more confidence that WM was of higher quality than TCMPs Hong Kong. Also, TCMPs in Hong Kong were more likely to possess a formal qualification in TCM, such as a training certificate over other qualifications compared to TCMPs in Guangzhou. In general, TCMPs, who belonged to a TCM association, gave TCM higher priority over WM when treating patients. Those with a higher level of training such as a bachelor, masters, or doctoral degree were less likely to agree that TCM is safe. TCMPs in Hong Kong holding a doctorate were more likely to agree that TCM was under-recognised. There were no variables significant for TCMPs attitudes about TCM, such as its restorative effect, standards, control and status.

The role of TCM as a part of the Hong Kong healthcare system was not formally recognised before the implementation of the Chinese Medicine Ordinance in July 1999. Before this, anyone in Hong Kong was permitted to establish a clinic and practice TCM. To date, there has only been one study that has examined the practice of TCM in Hong Kong (Wong et al., 1993a). Results from this study showed, for the total cohort of TCMPs there was a significant difference ($p<0.001$) in the number of TCMPs who reported using WM diagnostic tests and procedures in their practice, furthermore a significant proportion ($p<0.05$) of TCMPs in Guangzhou reported that they used WM instruments when they practised TCM. The study by (Wong et al., 1993a) was before the introduction of new laws governing the education training, registration and practice of TCMPS in Hong Kong, a substantial proportion of TCMPs, used Western medical instruments such as a stethoscope and sphygmomanometer to check a patient 's blood pressure. Furthermore, over half of TCMPS in Hong Kong admitted to checking their patients' blood pressure regularly.

In addition to the use of sphygmomanometers, it was also found that approximately 58% of TCMPs in Hong Kong used a stethoscope, and 50% admitted using the stethoscope regularly In addition to making use of blood examinations, urine examinations, X-ray, electrocardiography and ultrasonography results.

Approximately 35% of TCMPs in Hong Kong also reported that they had received training in blood examination, and 12% reported they had requested diagnostic tests for blood examinations (37%) and urine examination (15%). Furthermore, some TCMPs in Hong Kong also claimed that in the past they had

requested X-rays, electrocardiography and ultrasonography. In China, where the practice of TCM and WM is a fully integrated TCMPs who have received training are also permitted to prescribe WM drug treatments and also request WM diagnostic tests. However, TCMPs in Hong Kong are only permitted to practice TCM.

8.5.2 Integration of TCM and WM

In China, TCM and WM have existed side by side since the last century. However, the development of TCM has been slow to develop. The government established a national policy to promote its development, today TCM flourishes steadily. The fact that the TCM and WM in China have been fully integrated. However, the practice of TCM in Hong Kong is substantially different from the practice of TCM in China. One of the most apparent differences between the way TCM is practised in Hong Kong and China is the degree of integration of TCM and WM. In China, despite the significant differences between TCM and WM, the two approaches have been successfully integrated into the current Chinese healthcare structure and form a complementary relationship, in which WM takes the primary position. To date, there has been very little integration of TCM and WM services in Hong Kong, other than the establishment of HA sub-vented clinics in Hong Kong and the Government of Hong Kong is committed to promoting the development of Chinese medicine in Hong Kong. In 2014, they announced they would establish a Chinese medicine hospital in Hong Kong. In the same year, they also launched a pilot programme to explore the feasibility of establishing in-patient services in a dedicated Chinese medicine hospital in Hong Kong.

8.5.3 Consultation Fees

In this study, it was found that the consultation fee charged by a TCMP in Hong Kong was higher than the consultation fee charged by a TCMP in Guangzhou. This factor was identified using a validated instrument known as the CWMB (Liang, 1999). As previously mentioned, the instrument was incorporated within the patient questionnaire used in this study. The CWMB contains one question that is designed to measure Chinese patients' preference patterns that equate with patient trust in TCMP and WM physicians. The second question is designed to measure a Chinese patient’s preference patterns for consultation fees; the attitude of the healthcare professional; the efficacy of the treatment; and the waiting time during the consultation.

8.6 Limitations of the study and implications for future research

This study has contributed to a more in-depth understanding of Chinese patients and TCMPs' utilisation and practice of TCM. However, it has some limitations. These limitations relate to the research design, sampling, data collection processes and the survey questionnaires used. A central goal of most research is the identification of causal relationships or demonstrating that an independent variable (the cause) influences the dependent variable of interest (the effect). The three criteria for establishing cause and effect are an association, time ordering (or temporal precedence) and non-spuriousness. The cross-sectional survey design used in this study cannot determine the arrangement of events in time or any associations between predictors and outcomes. Therefore, no cause and effect relationship can be drawn from the results.

This study was limited to sampling patients from only two TCM outpatient clinics, one in Hong Kong and one in Guangzhou. Also, the sample under investigation may not accurately represent the two populations being studied. Sampling patients from only one TCM clinic at each location means that the sample should not be considered as being representative of the entire population of Hong Kong and Guangzhou.

Although significant differences were identified, other significant relationships may have been missed, because statistical tests, in general, require a considerable sample size, to ensure a representative distribution of the population being studied. The qualitative data collected from conducting semi-structured interviews for this study provides valuable information about Chinese people's use and practice of TCM. In order to obtain a wide variety of responses, a random selection of patients and TCMPs were asked to take part in semi-structured interviews. While it is possible that the patients and TCMPs' who were interviewed did not talk all about their own particular experiences, the patients and TCMPs who did not volunteer to take part in an interview also have their perceptions about the use and practice of TCM, which could differ from those patients who took part in an interview.

This study has some specific implications for TCMPs. Firstly, the results of the study could be of use of to TCMPs in Hong Kong and Guangzhou, as the findings will help them to understand the differences regarding the utilisation and practise of TCM in regions of China where they currently live and work. Another implication of this study is for TCMPs practising in Western countries such as the UK, USA, Australia and New Zealand who may not have had much exposure to the treatment of Chinese patients in

their practice. The results of this study will, therefore, provide TCMPs with a better understanding of the concerns of such patients.

This study could also be of use in the training of TCMPs in an academic setting, as the results useful information about the utilisation and practice of TCM by TCMPs in Hong Kong and Guangzhou.

Furthermore, the result of this study could be of use to healthcare workers in the UK who have a limited understanding of Chinese patients' attitudes and beliefs towards TCM and WM, and whose healthcare needs are sometimes masked by myths, stereotyping and other barriers (Chau, 2008).

This study examined two groups of Chinese patients: one group in Hong Kong and the other in Guangzhou. The results indicate that Chinese patients from the two separate both consider TCM and WM have certain strengths and weaknesses.

Understanding Chinese patients' views about TCM will encourage more healthcare professionals to discuss and advise Chinese patients about the use of TCM and any likely side-effects, or interactions that may occur if TCM is used with WM pharmaceutical drugs.

The fact that some Chinese patients may consider WM to have significant side effects and may also be too powerful to treat their medical condition may lead some Chinese patients to stop taking any prescribed Western medications, which is of concern when it comes to the treatment of chronic medical conditions such as diabetes and hypertension. On the other hand, Chinese people's perceptions that WM is faster than TCM may lead to some patients becoming over-dependent on certain medications. This overdependence could result in an increased number of drug prescriptions for certain illnesses where medications are not necessary. Worse still, it could be harmful the medicine is taken over a prolonged period without the knowledge of the doctor who originally prescribed the drug(s).

Furthermore, unless a WM doctor is aware that a Chinese patient may be already taking TCM medications when they attend for a consultation with a WM doctor, the patient could be exposed to potential interactions between the TCM treatment that the patients are already taking to treat their medical condition and Western medications with significant health effects. To improve patient-doctor relationships during initial and follow-up consultations it might be useful if doctors and other health care workers who are responsible for

the care and treatment of Chinese people become more familiar with some of the terms Chinese people use to describe their health and treatment of the various illnesses they may experience.

Moreover, in many parts of Asia, studies have highlighted that some Chinese women and sometimes other Asian women use TCM if they have been diagnosed with breast cancer, even though there is a lack of scientific evidence supporting its benefits. However, despite inconclusive data regarding the anti-tumour properties of TCM, many women using TCM report that they perceive a beneficial effect from using TCM. Rather than ignoring patients use of TCM, WM doctors and other healthcare workers should ask patients directly about any concurrent or intended use of TCM.

In this study, Chinese patients use TCM based on interpretations of the present against a background of an enduring cultural legacy grounded in ancient Chinese philosophical beliefs about health and healthcare. TCM use may improve quality of life over time. Therefore, healthcare professionals should be aware of patients' use of TCM and other integrative modalities. Furthermore, recent attention given to the concepts of 'medical pluralism' and 'integrative medicine' to explain the evolution of healthcare in countries such as Taiwan does not necessarily illuminate the differences in decision making on individual patient's use of TCM, integrative medicine and WM.

8.7 Research contributions to knowledge

This research provides valuable information about the utilisation and practises of TCM in two main ways. Firstly, the overall understanding of the utilisation of TCM by Chinese people in Hong Kong and Guangzhou has been advanced. Secondly, another significant contribution made by this study lies in the study of TCMPs in Hong Kong and Guangzhou although Wong et al. (1993a) published a study about the TCMP workforce in Hong Kong in 1993, to date, there are no recent studies about the TCMP workforce in Hong Kong and China. Therefore, this study provides unique, up to date information about the practice of TCM in both Hong Kong and Guangzhou.

Lastly, the findings derived from the semi-structured interviews conducted with patients in Hong Kong and Guangzhou represent a unique set of perceptions and beliefs of Chinese patients about the use of TCM in Hong Kong and Guangzhou which are two separate regions of China.

8.8 Summary of Chapter

Despite the existence of evidence-based WM practices, TCM is becoming more and significant in people's lives, either as a complementary, or alternative form of treatment. Where people have access to TCM, it is anticipated that they will seek these forms of complementary or alternative therapies to optimise their care. However, the integrated use of TCM within the healthcare system requires careful consideration, since it plays a crucial role in a person's overall health and will increasingly assume a more significant role in the treatment of different chronic and acute ailments or medical conditions.

This study sought to explore the utilisation and practice of TCM by Chinese people in Hong Kong and Guangzhou, two separate regions of China. In particular, it also examined demographic and attitudinal factors relating to the use TCM by Chinese people and by TCMPs with regards to the practice of TCM In addition, this study also sought to explore The significance of the study is, therefore, the contribution it makes to the current level of knowledge of TCM and its practice by Chinese people.

Patients seek and make their judgements about what constitutes holistic and patient-centred healthcare. Many Chinese patients are willing to accept TCM as part of a treatment regime when they are unwell. Thus, the outcome for patients is significant. The findings of this study indicate that the use of TCM by Chinese people is affected by multiple factors. Therefore, it is also essential that patients, in particular, Chinese patients have an opportunity to discuss their use of TCM, in order for WMDs to gain a better-understanding patient understanding about the treatment of the medical condition, as well as any contraindications that may preclude the use of any complementary or alternative treatments patients are taking. The study findings also suggest some implications for this study, which are described in the next chapter, along with suggestions for further research.

Chapter 9: Conclusion and Recommendations

It does not matter how slowly you go as long as you do not stop.
Confucius

9.1 Introduction

Traditional Chinese Medicine (TCM) is a system of healing that originates from China. While TCM is regarded as an alternative medicine system in the West, it is primarily used as a complementary or alternative medicine approach. In China, both TCM and Western medicine (WM) are integrated with each within the healthcare system. In other places such as Hong Kong, Taiwan and Singapore TCM continues to be utilised by many Chinese people as a complementary, or alternative form of medical treatment TCM is based on concepts which have been developed in China thousands of years ago and makes use of herbal medicines, acupuncture, massage and exercise to treat a range of medical illnesses. In the past decade, there has been increasing research into the field of TCM use. This chapter highlights some significant findings of this study. Recommendations are also included as outlines as they relate to both practice and educational settings.

9.2 Main Conclusions

9.2.1 Chinese patients use of TCM and WM

The present study explored factors associated with utilisation of TCM by Chinese people in Hong Kong and Guangzhou. Findings revealed that the majority of Chinese people in Hong Kong utilise WM doctors (WMD) when they are unwell. However, for patients in Guangzhou, the findings of this study revealed that fewer Chinese people utilise WM doctors when they are unwell. Among those who reported using TCM practitioners (TCMPs), fewer Chinese people in Hong Kong, compared to Chinese people in Guangzhou reported using both TCM and WMD concurrently. Studies on the utilisation of TCM by Chinese people in Hong Kong have shown that the prevalence of use of TCM among Chinese people is between 8% and 10% of the total population (Chung et al., 2007, Lau and Yu, 2000, Wong et al., 1993b). Although the vast majority of Chinese people in Hong Kong, and Guangzhou tend to consult a WMDs when unwell, those individuals who reported consulting a doctor accounted for approximately 32.2% of Chinese people in Hong Kong. Furthermore, approximately 55.7% consulted a TCMP instead of a WMD. The practice of co-consulting, consulting both WMDs and TCMPs, suggests that Chinese people may use TCM and WM to treat different medical conditions. Factor analysis of other variables associated with Chinese people

attitudes and beliefs towards TCM and WM unveiled five further factor factors. The first factor is associated with the "modern quality" of WM; the second factor is associated with the "restorative effect" of TCM; the third factor is associated with the "apparent effect" of WM; the fourth factor is associated with Chinese people's assumptions that TCM has fewer side-effects than WM.

Finally, the fifth factor is associated with whether TCM should be prioritised over the use of of-of WM. After analysing the different factors for age, gender and location, age were found to be a significant factor for patients in their middle-ages who were also likely to put their trust in WM. Age, among other factors, has also been found to be an essential factor related to the use of TCM by Chinese people. Age, gender, and level of education, as well as Chinese peoples perceived strengths and weaknesses about TCM and WM, are also other factors that relate to the use of TCM by Chinese people.

9.2.2 Consultation patterns of Chinese patients

Hong Kong has a health system in which both WM and TCM exist in parallel. However, as Hong Kong has no primary healthcare network, many Chinese people tend to consult different WMDs or TCMPs, sometimes simultaneously. Sometimes Chinese people will consult WMD or TCMPs simultaneously, or even concurrently for the same illness or ailment (Chung et al., 2009a). However, when ill, some Chinese people may try to treat themselves by buying over-the-counter CHMs or PCMs, a phenomenon identified by (Hon et al., 2006) who found that 37% of the patients would immediately use TCM without consulting a TCMP, if their symptoms persisted, or if their illness got worse. As to the type of healthcare professional Chinese people consult when unwell some studies have reported that the majority of Chinese patients in Hong Kong tend to consult WMDs (Chung et al., 2009a). A study by Rochelle and Yim in 2013 found that although the vast majority of respondents in their study in Hong Kong reported that they would consult a WMD when unwell, more than one-third of the respondents in their survey said they had consulted a TCMP instead of a WMD (Rochelle and Yim, 2014). The precise reason why some Chinese patients consult a TCMP instead of a WMD may be explained by a study that was conducted by (Chan et al., 2003). This group examined Chinese patients trust scores for TCMPs and WMDs using a validated instrument known as the "Chinese-Western belief (CWMB) scale, a 22 item, general-purpose, medical system beliefs scale that can be used to understand beliefs concerning complementary and alternative medicine to predict medical use behaviours (Liang, 1999). It was also found that trust scores for some Hong Kong Chinese

people who consulted TCMPs and WMD ranged from moderate to high while trust scores for patients who consulted the only WMD were average.

9.2.3 Chinese people's knowledge of TCM

This study has provided some useful information about how Chinese people in Hong Kong and Guangzhou learn, or acquire information about TCM. One such study by (Chen, 2004) found that 44 per cent of patients stated that they learnt about TCM from non-professional people such as friends and relatives. Sources of information generally included medical books and journals as reported by 28% of patients. In 2005, a study by (Wong et al., 2005) found that over half (52%) of patients obtained information about TCM from a relative or friend. While 30% per cent of patients obtained information from herbalists, and a small minority of patients reported that they got information from the internet, advertisements, while other patients, they got information about TCM their physician (Wong et al., 2005).

Moreover, a study that examined the utilisation of TCM and associated factors in Taiwan by Shih et al. (2009) that sampled over 26,000 subjects found that younger people in Taiwan had more knowledge of TCM. In December 2017, the State Administration of Traditional Chinese Medicine (SATCM) in China surveyed the Country of 87,000 Chinese people aged 15 to 69, to test Chinese their knowledge about TCM. The survey was conducted using a questionnaire which contained 140 questions about TCM. According to the SATCM, the results found that Chinese people in the age group 60-69 years had lower knowledge of TCM. The SATCM believes that one reason why the majority of older Chinese people did not achieve a high score in the survey, was because they had not received much education, or that they are unable to quickly obtain and understand the medical knowledge when browsing information about TCM on the internet. Furthermore, according to the SATCM, one reason why the younger generation had more knowledge about TCM, is that they can absorb medical knowledge a lot easier than older people. Compared with a similar study conducted by the SATCM in 2014, the results obtained from this study also found that overall, more people in China also know more about TCM than they did in 2014 (State Administration for Traditional Chinese Medicine of the People's Republic of China, 2017a).

9.2.4 Education and training of TCMPs

This study provides useful and up-to-date information about the training of TCMP in Hong Kong and China. In 1998, Hong Kong established undergraduate degree programs in Chinese medicine at three public universities in Hong Kong, the University of Hong Kong (The University of Hong Kong, 2018), the Chinese University of Hong Kong (The Chinese University of Hong Kong, 2018) and Hong Kong Baptist University (Hong Kong Baptist University, 2018). Although the curriculums of the courses offered by the three universities in Hong Kong are similar, there are some differences in structure and emphasis.

The content of the courses mostly originates from TCM universities in China and include the teaching of both WM and TCM subjects (Chung et al., 2009b). A study of CMPs in Hong Kong by (Wong et al., 1993a) found that approximately 21 % of TCMPs in Hong Kong had attended a part-time course in TCM, of which 59% undertook the course in Hong Kong and 39% took a course in China. Most of the TCM students attended had a duration of between two to three years. However, a survey published in 2005, showed that a high proportion (72.3%) of CMP graduates in Hong Kong failed to obtain a full-time clinical job one year after graduation (Li and Liang, 2005). Because of the lack of employment opportunities and a career pathway for TCMPs in Hong Kong after graduation from university.

A system of continuing medical education (CME) in CM was launched by the Chinese medicine Council of Hong Kong (CMCHK) which became an integral component of the registration system for CMPs in Hong Kong (Chung et al., 2009b). In China, it generally takes around five years to complete a TCM undergraduate degree program, and according to information obtained from the State Administration of Traditional Chinese Medicine (SATCM) the People's Republic of China in 2013, 45 tertiary institutions provide undergraduate degree programs in TCM. Also, a further 215 tertiary institutions provided TCM programmes (Xue et al., 2015). In 2011, Beijing University of Chinese Medicine started a 9 year Chinese medicine programme (a combined undergraduate and doctoral programme) where in the first 5 years students are trained according to an undergraduate teaching plan. In the fourth year, an entrance examination is held to enrol eligible students directly into the following doctoral program (Xue et al., 2015).

9.3 Recommendations

This study has contributed to the existing body of knowledge about the utilisation and practice of TCM by Chinese people in Hong Kong and Guangzhou. A number of similarities and differences about the use of and practice of TCM in two regions of China where data for the study were collect, the following recommendations are suggested.

Because Chinese people have beliefs, perceptions and preferences regarding the use of TCM that is different to non-Chinese people who use WM it is recommended that health-related cultural beliefs of Chinese people be better understood, in particular the role of TCM medicine during end of life care held by older Chinese people living overseas, who may be in the minority.

As TCM and WM are both seen to have benefits and side effects it is recommended that healthcare professionals are aware that Chinese people may use integrated approaches to treatment of certain medical conditions, or diseases.

Previous studies have found that Chinese people are likely to self-medicate, or consult a TCM practitioner, prior to a Western medical doctor. Therefore, it is recommended that public resources be made available in Chinese and English, on the internet that are open the public and are easily available that provided information and advice about potential interactions, side-effects and life-threating dangers of using Chinese herbal and Chinese proprietary medicines in combination with Western medicines.

9.4 Future Research

This study has raised several questions where further investigation involving the use and practice of TCM is warranted. The following future research could therefore enhance our knowledge and understanding of the use of TCM by Chinese and non-Chinese people:

1. A comparison of the education, regulation, training and practice of TCMPs in China, Taiwan and Hong Kong.
2. A study comparing the utilisation and practice of TCM by Chinese people born and raised overseas, compared with Chinese people born in China.

3. A study of the use of TCM in Chinese children, to evaluate the reasons for using TCM and reported side-effects.
4. A study of the of TCM by women, before, during and after pregnancy.
5. A study of the use and outcome of TCM use among women diagnosed with fertility problems.
6. A study of TCM to reduce the side-effects of chemotherapy.

Glossary

Acupuncture	a system of complementary medicine in which fine needles are inserted in the skin at specific points along what is referred to as lines of energy or meridians.
Ailment	An ailment is a physical disorder or illness, especially, one that is minor, or chronic in nature.
Attitude	a way of feeling or acting toward a person, thing or situation.
Back translation	a procedure by which a translator or team of professional translators interpret a document previously translated into another language back to the original language.
Bone setting	a traditional Chinese medicine therapy for the treatment of bone fractures and joint dislocations through pulling, repositioning and aligning with small splints to keep the broken bones in position.
Cantonese	a Chinese language spoken predominantly in Hong Kong and the southern parts of China.
Chinese herbal medicine	a Chinese herbal medicines specified in Schedule 1 of the Ordinance and the Chinese herbal medicines specified in Schedule 2 of the Ordinance which is commonly used in Hong Kong.
Chinese Medicine Ordinance	A law related to Chinese medicine in Hong Kong, passed by the Legislative Council in Hong Kong on 14 July 1999.
Chi-square test	a test to determine the association between two categorical variables - for example, gender (males and females) and smoking habit (smoker and non-smoker).
Cronbach's alpha	is a common measure of internal consistency ("reliability"). It is most commonly used in survey questionnaires that contain multiple Likert questions that form a scale, in order to determine if the scale is reliable.
Chronic disease	a human health condition, or disease that is persistent or otherwise long-lasting in its effects, or a disease that comes with time. The term chronic is often applied when the course of the disease lasts for more than three months.
Clinical trial	A research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes.
Cohort	a group of subjects who share an event during a time period.
Confidentiality	I an ethical principle or legal right that a physician or other health professional will hold secret all information relating to a patient unless the patient gives consent permitting disclosure.
Confirmatory Factor Analysis	a statistical technique used to verify the factor structure of a set of observed variables.
Cupping	a traditional Chinese medicine therapy in which heated glass cups are applied to the skin along the meridians of the body, creating suction which is believed to stimulate the flow of energy.
Demographic data	statistical data about the characteristics of a population, such as the age, gender and income of the people within a population.
Dependent variable	a variable that is measured in an experiment which is affected during the experiment.

Dermatology	the scientific study of the skin and its diseases.
Descriptive analysis	a set of brief descriptive coefficients that summarises a given data set, which can either be a representation of the entire population or a sample.
Diagnostic test	a kind of medical test performed to aid in the diagnosis or detection of diseases.
Efficacy	a term used in the practice of pharmacology and related areas of medicine that refers to both the maximum response achievable from an applied or dosed agent in research settings, and to the capacity for therapeutic effect or beneficial change of a given therapeutic intervention in clinical settings.
Eigenvalues	are most commonly reported in factor analyses. They are calculated and used in deciding how many factors to extract in the overall factor analysis.
Ethics	the branch of philosophy that deals with morality. Ethics is concerned with distinguishing between good and evil in the world, between right and wrong human actions, and between virtuous and no virtuous characteristics of people.
Exploratory Factor Analysis	a statistical method used to uncover the underlying structure of a relatively large set of variables.
Factor analysis	a statistical method used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors.
Framework analysis	a qualitative data analysis method developed by the National Centre for Social Research in the 1980s. Framework analysis is used to organise and manage research through the process of summarisation, resulting in a robust and flexible matrix output which allows the researcher to analyse data both by case and theme.
Grounded theory	a general research method which guides you on matters of data collection and details rigorous procedures for data analysis.
Herbalist	a person who (1) collects or grows herbs or (2) who practices herbal medicine.
Holistic	dealing with, or treating the whole of something, or someone and not just a part.
Hypotheses	in science, a statement of a possible explanation for some natural phenomenon. A hypothesis is tested by drawing conclusions from it; if observation and experimentation show a conclusion to be false, the hypothesis must be false.
Independent t-test	also called the two-sample t-test or student's t-test, is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups.
Independent variable	the variable that is changed or controlled in a scientific experiment.
Inference	an idea or conclusion that's drawn from evidence and reasoning.
Inferential statistics	are statistics that make inferences about populations using data drawn from the population. Instead of using the entire population to gather the data, the statistician will collect a sample or samples from the millions of residents and make inferences about the entire population using the sample.

Informed Consent	a voluntary agreement to participate in research. It is not merely a form that is signed but is a process, in which a subject understands the research and its risks.
Institutional Review Board	a committee established to review and approve research involving human subjects. The purpose of the IRB is to ensure that all human subject research be conducted in accordance with all federal, institutional, and ethical guidelines.
Integration of TCM	the presence of a dualistic medical system involving TCM and Western medicine side-by-side.
Likert Scale	a five (or seven) point scale which is used to allow the individual to express how much they agree or disagree with a statement.
Mandarin	also known as Putonghua, is a standard language that is the language of China and one of the four official languages of Singapore.
Materia Medica	a body of remedial substances used in the practice of medicine.
Medical practitioner	a qualified physician or medical doctor is a professional who practices medicine, which is concerned with promoting, maintaining, or restoring human health through the study, diagnosis, and treatment of disease, injury, and other physical and mental impairments.
Mixed methods research	a methodology for conducting research that involves collecting, analysing and integrating quantitative (e.g., experiments, surveys) and qualitative (e.g., focus groups, interviews) research.
Moxibustion	a form of heat therapy in which dried plant materials called "moxa" are burned on or very near the surface of the skin. The intention is to warm and invigorate the flow of Qi in the body and dispel specific pathogenic influences.
Open-ended questions	an open-ended question is designed to encourage a full, meaningful answer using the subject's own knowledge and feelings. It is the opposite of a closed-ended question, which encourages a short or single-word answer.
Pearl River Delta	the dense network of cities that covers nine prefectures of the province of Guangdong, namely Guangzhou, Shenzhen, Zhuhai, Dongguan, Zhongshan, Foshan, Huizhou, Jiangmen and Zhaoqing, and the SARs of Hong Kong and Macau.
Per capita	a Latin prepositional phrase meaning “by head” or “for each head”, i.e., per individual or person.
Perception	a belief or opinion, often held by many people and based on how things seem.
Pharmacological efficacy	a term used in the practice of pharmacology and related areas of medicine that refers to both the maximum response achievable from an applied or dosed agent in research settings, and to the capacity for therapeutic effect or beneficial change of a given therapeutic intervention in clinical settings.
Pharmacology	the science that deals with the origin, nature, chemistry, effects, and uses of drugs; it includes pharmacognosy, pharmacokinetics, pharmacodynamics, pharmacotherapeutics, and toxicology.
Pilot test	a small-scale trial, where a few examinees take the test and comment on the mechanics of the test.
Positivist	a philosophical theory stating that positive knowledge is based on natural phenomena and their properties and relations.
Principal component analysis	a statistical technique used to examine the interrelations among a set of variables to identify the underlying structure of those variables.

Proprietary Chinese medicine	according to the Hong Kong Chinese medicine Ordinance as any proprietary product: (a) composed solely of the following as active ingredients (i) any Chinese herbal medicines; or (ii) any materials of herbal, animal or mineral origin customarily used by the Chinese; (iii) or any medicines and materials referred to in sub-paragraphs (i) and (ii) of 3(a) respectively; (b) formulated in a finished dose form; and (c) known or claimed to be used for the diagnosis, treatment, prevention or alleviation of any disease or any symptom of a disease in human beings, or the regulation of the functional states of the human body.
Qigong	a system of breathing exercises, body postures and movements, and mental concentration, used by the Chinese which is intended to maintain good health and control the flow of vital energy.
Quantitative data analysis	a systematic approach to investigations during which numerical data is collected and/or the researcher transforms what is collected or observed into numerical data
Recuperation	means to become well again after an illness, or a process of regaining one's strength or health after feeling unwell.
Regression analysis	a statistical process for estimating the relationships among variables. It includes many techniques for modelling and analysing several variables when the focus is on the relationship between a dependent variable and one or more independent variables (or 'predictors').
Relapse	the context of drug use, relapse or reinstatement of drug-seeking behaviour, is a form of spontaneous recovery that involves the recurrence of pathological drug use after a period of abstinence.
Reliability	can be thought of as consistency. In the case of a survey using a questionnaire, does the survey questionnaire consistently measure what it is intended to measure?
Respondent	a person who gives a response or answer to a question that is asked, especially as part of a survey.
Schizophrenia	a severe brain disorder in which people interpret reality abnormally. Schizophrenia may result in some combination of hallucinations, delusions, and extremely disordered thinking and behaviour.
Semi-structured interview	a semi-structured interview is a method of research used in the social sciences. A structured interview has a rigorous set of questions which does not allow one to divert. A semi-structured interview is open, allowing new ideas to be brought up during an interview as a result of what an interviewee says.
Side-effect	a secondary, typically undesirable effect of a drug or medical treatment.
Simplified Chinese	are simplifications of the "structure" or "body" of Chinese characters that have existed for thousands of years alongside regular, more complicated forms of Chinese Traditional forms of Chinese Characters.
Special Administrative Region	An autonomous territory of the People's Republic of China.
Stethoscope	a medical instrument used by doctors, nurses and some other healthcare professionals to listen to low-volume sounds such as a heartbeat (or intestinal, venous, or foetal sounds).
Structured questionnaire	a questionnaire that contains only closed-ended questions. A semi-structured questionnaire contains both open-ended and closed-ended questions.
Systematic review	a type of literature review that collects and critically analyses multiple research studies or papers. A systematic review aims to provide a complete, exhaustive summary of current literature relevant to a research question.

Thematic analysis	a common form of analysis in qualitative research. It emphasises pinpointing, examining, and recording patterns (or "themes") within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated with a specific research question.
Themes	patterns across data sets that are important to the description of a phenomenon and are associated with a specific research question.
Traditional Chinese Medicine	a style of traditional Asian medicine informed by modern medicine but built on a foundation of more than 2,500 years of Chinese medical practice that includes various forms of herbal medicine, acupuncture, massage (tuina), exercise (qigong), and dietary therapy.
Traditional medicine	the World Health Organization defines traditional medicine as, "the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness."
Transcription	transcription in the linguistic sense is the systematic representation of language in written form. The source can either be utterances (speech or sign language) or pre-existing text in another writing system.
Translation	the process of translating words or text from one language into another.
Treatment modalities	are methods of treatment, or ways in which a medical practitioner or an allied health professional would go about treating a condition.
Triangulation	a powerful technique that facilitates validation of data through cross-verification from two or more sources. In particular, it refers to the application and combination of several research methods in the study of the same phenomenon.
Validity	describes the degree to which a tool measures what it claims to measure; in this case, the validity is an equivalent to accuracy.
Variance	variance measures how far each number in a set is from the mean.
Varimax rotation	In statistics, a Varimax rotation is used to simplify the expression of a particular sub-space in terms of just a few major items each. The actual coordinate system is unchanged; it is the orthogonal basis that is being rotated to align with those coordinates.
Verbatim	a term that means to cite or quote something in a manner that corresponds word for word.
Western Medicine	a term sometimes used to describe evidence-based medicine, which, for various historical reasons, emerged from Western civilisation.
World Health Organization	the WHO is a specialised agency of the United Nations that is concerned with international public health. It was established on 7 April 1948 and is headquartered in Geneva, Switzerland.

Appendix A: Database Searches

AMED

Search #		Result
#1	traditional Chinese medicine	6,003
#2	util*	5,911
#3	use	29,437
#4	practice	22,891
#5	attitude*	11,171
#6	#2 OR #3 OR #4 OR #5	59,729
#7	#1 AND #6	931

10 papers identified from the review of titles
1980 - 2016
Limited by English

CINAHL

Search #		Result
#1	traditional Chinese medicine	5,003
#2	util*	185,899
#3	use	577,127
#4	practice	377,452
#5	attitude*	183,395
#6	#2 OR #3 OR #4 OR #5	1,088,069
#7	#1 AND #6	2,002

45 papers identified from the review of titles
1979 -1980
Limited by English

PUBMED

Search #		Result
#1	traditional Chinese medicine	32,729
#2	util*	800,964
#3	use	3,544,258
#4	practice	792,010
#5	attitude*	342,985
#6	#2 OR #3 OR #4 OR #5	4,807,332
#7	#1 AND #6	9,242

20 papers identified from the review of titles
1979 -1980
Limited by English

Appendix B: Literature Review - Data Extraction Table

Paper No.	1	2	3	4	5	6	7
Title of paper	Traditional Chinese medicine and Western medicine in Hong Kong: a comparison of the consultation processes and side effects	Prevalence and Determinants of the Use of Traditional Chinese Medicine in Hong Kong.	Factors associated with the utilisation of traditional Chinese medicine in a small town in Hong Kong	The choice between Chinese medicine and Western medicine practitioners by Hong Kong adolescents.	Strengths and weaknesses of traditional Chinese medicine and Western medicine in the eyes of some Hong Kong Chinese	Predicting traditional Chinese medicine's use and the marginalisation of medical care in Hong Kong.	Traditional Chinese Medicine in Hong Kong: Prevalence, Costs and Patterns of Use.
Author:	Wong (1993)	Wong (1995)	Wong (1997)	Lau (2000)	Lam (2001)	Lau (2001)	Luk (2001)
Location:	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong
Methodology:	Mixed methods	Telephone interview	Telephone survey	Survey	Focus group interviews	Questionnaire	Telephone interview
Sample size:	2,822	2,822	847	3,355	4,339	4,339	7,913
Age:	18 years and older	<30 years to 60+ years	18 years and older	< 14 years to 17+ years	<12 years to 65+ years	<12 years to 65+ years	<15 years - 65+ years
Consulted a TCMP or WMD	Ten per cent consulted traditional Chinese medicine practitioners, mostly herbalists. 2,025 (73%) respondents consulted Western doctors while 275 (10%) consulted TCMPs 252 (9%) consulted herbalists. 19 (0.68%) consulted bonesetters and 4 (0.14%) consulted acupuncturists	A much higher proportion (40%) of individuals consulted TCMPs as subsequent action compared to primary action.	The percentage of Tai Po residents who consulted a TCMP when ill was higher than a territory-wide estimate obtained from a previous study.	This study showed that 8.6% of adolescents had consulted TCM doctors over three months. This became 7.8% for those who have consulted a doctor in three months in the past three months	Among the 1,651 respondents who had consulted a doctor in the three months before the survey, 8.6% consulted a TCM doctor.		13 used TCM only, 77% used Western medicine alone, and 10% used both
Knowledge of TCM							

Paper No.	1	2	3	4	5	6	7
Author:	**Wong (1993)**	**Wong (1995)**	**Wong (1997)**	**Lau (2000)**	**Lam (2001)**	**Lau (2001)**	**Luk (2001)**
Medical conditions that TCM was used	The majority were respiratory tract diseases with a cough and cold constituting 58% and other respiratory diseases representing 6% of the total. Twelve per cent had gastrointestinal diseases. Six per cent had musculoskeletal injuries or diseases. Diseases of the circulatory system and genitourinary system accounted for 3% and 2% respectively. A variety of other diseases made up the remaining 13%. Acupuncturists were consulted mostly for musculoskeletal injuries or diseases			Chronic disease such as rheumatism, bronchitis, asthma, and those taking non-prescribed medication and not seeking treatment when falling ill were more likely to use TCM		Low back pain and deafness were associated with both TCMP consultation and TCM drug use. TCMP were consulted for hypertension, rheumatism, bronchitis and psychiatric problems. On the other hand, TCM drugs were used for peptic ulcer and asthma	
Self-medication with TCM	485 of 2,785 (17%) respondents self-medicate	Approximately 17% self-medicated while 9% consulted herbalists					Patients spent less on self-medicating with Western medicines than self-medicating with Chinese medicines. Also, people who are older and who perceive their health to be poor, have a doctor visit, have a non-reported health problem and take self-medication of Western medicine are significantly more likely to self-medicate with TCM

Paper No.	1	2	3	4	5	6	7
Author:	**Wong (1993)**	**Wong (1995)**	**Wong (1997)**	**Lau (2000)**	**Lam (2001)**	**Lau (2001)**	**Luk (2001)**
Concurrent use of TCM and WM							
Informed WM doctors about their use of TCM?							
Consulted a WMD and a TCMP				Around 5.9% of adolescents in the study consulted both TCMP and WMD		Patients who had experienced illness and consulted a TCM doctor was 8.6% in this study. A patient who had been taking non-prescription medication were more likely to consult a TCM doctor and use TCM drugs	
Perceptions of the effectiveness of TCM and WM		Approximately (57%) switched to herbalists when WM doctors failed to provide relief. Likewise, 80% switched to WM doctors when herbalists failed.	TCM users also come from families with household heads who are dissatisfied with the private sector and public specialist care				
Regional difference in the use of TCM							
Age and gender differences		Age was an important determinant of their health care choice		Health seeking behaviours were found in older, female		TCM users tended to be older persons	

Paper No.	1	2	3	4	5	6	7
Author:	**Wong (1993)**	**Wong (1995)**	**Wong (1997)**	**Lau (2000)**	**Lam (2001)**	**Lau (2001)**	**Luk (2001)**
Socioeconomic differences			Socially disadvantaged residents were more likely to use TCMPs than their privileged counterparts.	Sociodemographic factors increase the likelihood of using TCM			
Education level						Education level was not associated with the choice of a TCM doctor after adjusting for age and sex	Those with education to tertiary level or above and with poor perceived health status have the highest spending on TCM self-medication on average
TCM treatment covered by medical insurance							
Perceptions of the safety of TCM and WM	Serious side effects of Western and herbal medicines were rare. Minor side effects were reported in 25% of patients given Western oral medication and in 6% of those given herbal medicines. Skin reactions caused by external herbal medications given by bonesetters were reported in 27% of patients						

Paper No.	1	2	3	4	5	6	7
Author:	**Wong (1993)**	**Wong (1995)**	**Wong (1997)**	**Lau (2000)**	**Lam (2001)**	**Lau (2001)**	**Luk (2001)**
Use of TCM by immigrants				Immigrants were more likely to use TCM		New immigrants were more likely to use TCMPs. Almost half of the new immigrants came from Mainland China, and they were more likely to stay with the TCM practice with which they felt familiar in China	
Location of TCM clinic							

Paper No.	8	9	10	11	12	13	14
Title of paper:	Attitudes of Hong Kong Chinese to traditional Chinese medicine and Western medicine: survey and cluster analysis	The use of traditional Chinese medicine in Hong Kong: A Chinese patients questionnaire survey	A hospital clinic-based survey on traditional Chinese medicine usage among chronic hepatitis B patients	Chinese nursing students' attitudes toward traditional Chinese medicine	Strengths, Weaknesses, and Development of Traditional Chinese Medicine in the Health System of Hong Kong: Through the Eyes of Future Western Doctors	Use of Traditional Chinese Medicine in Hong Kong Special Administrative Region, China.	Factors Affecting the Usage of Chinese Medicine Treatments in Hong Kong
Author:	Chan (2003)	Chen (2004)	Wong (2005)	Hon (2006)	Wong (2006)	Chung (2007)	Lai (2007)
Location:	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong
Methodology:	Questionnaire	Questionnaire	Questionnaire	Questionnaire	Focus group discussions	Face to face survey	Telephone survey
Sample size:	503	628	362	439	160	31,762	544
Age range:	18 years- 50+ years	18 years to 50+ years	44 years to 57 years	19 years to 23 years	Not stated	Not stated	18 years to 65+ years
Consulted a TCMP or a WMD	The Chinese-Western Medical Belief scores of some Hong Kong Chinese, on TCM (range: 3.31–4.07) and WM (range: 3.60–4.18) range from moderate to high, while their trust scores on TCM (range: 3.30–3.82) and WM (range: 3.50–3.90) physicians were moderate. These might partly explain why Chinese choose TCM or WM for a specific type of illness that they are suffering			A total of 22% reported they would consult a Chinese medicine practitioner first and then use the recommended TCM, whereas 31% would consult a Western medicine physician first and then resort to TCM if the other treatment was ineffective	Many medical students had either tried TCM or consulted a TCM doctor	1.8% had utilised TCM regularly in the past six months; 8.8% had consulted a TCMP, 3.9% preferred TCM when they experienced medical problems	

Paper No.	8	9	10	11	12	13	14
Author:	**Chan (2003)**	**Chen (2004)**	**Wong (2005)**	**Hon (2006)**	**Wong (2006)**	**Chung (2007)**	**Lai (2007)**
Knowledge of TCM		Mainly based on reading and media advertisements as reported by 44% of patients, or recommendation of non-professionals such as friends and relatives as reported by 41% of patients. Other sources included medical books and journals as reported by 28% of patients	Over half (52%) patients obtained information on traditional Chinese medicine from relatives or friends. While 35 (30%) patients obtained information from herbalists. A minority of patients obtained information from the internet, advertisements, or recommendations from other patients or their physicians	All 263 respondents rated their current TCM knowledge using a Likert-type scale from 0 (none) to 10 (most knowledgeable). The mean score was 2.3 (SD = 1.6). Regarding information sources, 15% of respondents reported they obtained information on TCM from only one source, whereas the remaining 85% reported using two or more sources. Conventional sources of TCM information included family or friends (70%), the newspaper (67%), television (58%), and the Internet (40%). However, textbooks (17%) and journals (14%) were not common information sources	Most had some knowledge of TCM; for example, the balance between yin and yang, the holistic approach to patient care and treatment, and the importance of treating the "root" of the illnesses beyond patients' presenting symptoms.		
Medical conditions that TCM was used					Minor ailments such as acne or for bone-setting	Currently, there is a lack of data concerning the reasons for using TCM in Hong Kong and China, and further research on this issue is therefore warranted	TCM treatment is sought for various medical conditions, such as sprains bone fractures and common cold, coughs and flue. The most popular reason for TCM use is health maintenance, particularly among women and the chronically ill in the middle-age group

Paper No.	8	9	10	11	12	13	14
Author:	**Chan (2003)**	**Chen (2004)**	**Wong (2005)**	**Hon (2006)**	**Wong (2006)**	**Chung (2007)**	**Lai (2007)**
Self-medication with TCM				37% of the would immediately use TCM without consulting a TCMP		Approximately 2.7% had used TCM over-the-counter products	
Concurrent use of TCM and WM?							TCM services are often used after or concurrently with WM treatment. Commonly used Western medicine and Chinese medicine treatments included chemotherapy (63.7%), radiotherapy (62.0%), surgery (57.6%), Chinese herbal medicine (53.9%) and Chinese dietary therapy (9.5%). Participants receiving chemotherapy used Chinese medicine (63.3%) more than those receiving any other Western medicine treatments
Informed WM doctors about the use of TCM?			Most (81%) patients did not inform their physicians about their use of TCM				
Consulted a WMD and a TCMP		.					

Paper No.	8	9	10	11	12	13	14
Author:	**Chan (2003)**	**Chen (2004)**	**Wong (2005)**	**Hon (2006)**	**Wong (2006)**	**Chung (2007)**	**Lai (2007)**
Perceptions of the effectiveness of TCM and WM			Forty-eight (42%) patients rated TCM as very effective or effective in the treatment of chronic hepatitis B, 47 (42%) patients found the effectiveness fair while only 18 (16%) patients thought that TCM had little or no effect	Only one-fifth of the respondents thought that TCM had definite effectiveness in treating diseases, while three-fifths thought that WM had limited effectiveness. Half of the respondents thought TCM was more effective in treating minor ailments than WM, while fewer respondents thought it more effective in treating serious diseases. A vast majority of respondents thought TCM was more effective in general health care than WM. One-third of respondents thought that TC M was more effective in the prevention of diseases than WM	Students thought TCM was effective for illnesses in which Western medicine had failed), Also useful for treating allergies, viral infections, cancer, pain, and various chronic illnesses.		
Regional difference in the use of TCM							

Paper No.	8	9	10	11	12	13	14
Author:	**Chan (2003)**	**Chen (2004)**	**Wong (2005)**	**Hon (2006)**	**Wong (2006)**	**Chung (2007)**	**Lai (2007)**
Age and gender differences	The second cluster (63%) is younger and have considerably more belief in Western than traditional Chinese medicine. The third group (14%) is intermediate in age and is noted for a marked faith in both TCM and WM					Preference for TCM was higher among women. Older patients with chronic disease were less likely to consult TCMPs and did not express a preference for TCM treatment when they were sick. The utilisation rate of TCM for respondents younger than 14 years was lower	The results show the high popularity of TCM services among local Chinese residents in the middle-age group who use TCM for health maintenance
Socioeconomic differences	One cluster (24%) of the sample, is noted for being older, poorer, more likely to be female and to have chronic conditions and are sceptical of WM doctors					These results suggested that TCM services continued to be used by the lower socioeconomic groups in the Hong Kong population, with a simultaneously rising popularity of TCM among the higher socioeconomic groups following the 1997 handover of Hong Kong. The lower-income groups' choice of TCM could be linked to their poorer health status, while the higher income group's choice could be related to patients purchasing power in obtaining additional care	
Education level			.			Respondents with a higher education level and chronic disease patients were more likely to have insurance coverage for TCM, while those who were older, chronic disease patients, and single persons were least likely to have such coverage	

Paper No.	8	9	10	11	12	13	14
Author:	**Chan (2003)**	**Chen (2004)**	**Wong (2005)**	**Hon (2006)**	**Wong (2006)**	**Chung (2007)**	**Lai (2007)**
TCM treatment covered by medical insurance							
Patients perceived safety of TCM and WM			91% of patients felt that traditional Chinese medicine had few or no side effects and nine patients found the side effects were moderate and only one patient experienced severe side effects	Many respondents thought TCM was safer than WM and that TCM has fewer side effects than Western medicine (48%)			
Use of TCM by immigrants							
Location of TCM clinic							In recent years, many TCM clinics have been established in hospitals and universities which emphasise quality service and TCM speciality medical care, yet the most common venue for TCM consultation is still traditional herbal shops

Paper No.	15	16	17	18	19	20	21
Title of paper:	Age, chronic non-communicable disease and choice of traditional Chinese and western medicine outpatient services in a Chinese population.	Cancer patients' attitudes towards Chinese medicine: a Hong Kong survey.	Attitude toward traditional Chinese medicine among allopathic physicians in Hong Kong	Factors associated with the utilisation of traditional Chinese medicine among Hong Kong Chinese	Patients' attitudes towards traditional Chinese medicine and Western medicine in Mainland China and Hong Kong: A mixed-methods study	Traditional Chinese Medicine use In Children in Hong Kong: A Pilot Study.	Attitudes towards acupuncture in Hong Kong.
Author:	Chung (2009)	Lam (2009)	Griffiths (2012)	Rochelle (2013)	Thorburn (2013)	Yan (2013)	Chan (2015)
Methodology:	Dataset	Questionnaire	Questionnaire	Questionnaire	Questionnaire	Questionnaire	Online survey
Sample size:	18,087	786	3320	300	1055	70	879
Age:	15 years to 80+ years	<40 years to 61+ years	31 years to 50 years	18 years to 90 years	18 years to 65+ years	< 2 years to 10+ years	20 years plus
Consulted a TCMP or a WMD	The majority of Hong Kong patients Choose WM doctors as their sole outpatient service providers			The vast majority of respondents in this study reported that they would generally consult a WM doctor when unwell. Of those individuals who reported consulting a doctor in the last month, more than one-third of respondents had consulted a TCMP rather than a WMD			Lack of trust in acupuncturists and perceived inferiority of acupuncture to biomedicine were the major barriers of the public's recognition of acupuncture
Knowledge of TCM			Cross-disciplinary familiarisation and shared education between WM medicine and TCM students may foster mutual trust				

Paper No.	15	16	17	18	19	20	21
Author:	**Chung (2009)**	**Lam (2009)**	**Griffiths (2012)**	**Rochelle (2013)**	**Thorburn (2013)**	**Yan (2013)**	**Chan (2015)**
Medical conditions that TCM was used	According to Chinese medicine theory, cancer is the manifestation of a qi disturbance which may be treated by mobilising qi. The study results support the use of Chinese medicine to treat liver cancer					In the present study, behavioural problems were found being the leading condition that children sought TCM treatment	
Self-medication with TCM			Evidence of personal use of TCM				
Concurrent use of TCM and WM?	Double consulters were more likely to be older, female, non-communicable disease (NCD) patients, and have higher socioeconomic backgrounds.	56.5% used Chinese medicine during Western medicine treatment				Over half (54.3%) of the caregivers admitted using TCM and WM concurrently on their children. Although this percentage was lower than that (80.3%) in Singapore	
Informed WM doctors about the use of TCM?		Nearly two-thirds of the participants (N=274) did not tell their physicians about using Chinese medicine					

Paper No.	15	16	17	18	19	20	21
Author:	**Chung (2009)**	**Lam (2009)**	**Griffiths (2012)**	**Rochelle (2013)**	**Thorburn (2013)**	**Yan (2013)**	**Chan (2015)**
Consulted a WMD and a TCMP				Although the vast majority of respondents reported that they would typically consult a GP when unwell, of those individuals who reported consulting a doctor in the last month, more than one-third of respondents had consulted a TCMP rather than a WMD			
Age and gender	The relationship between age and double consulting was curvilinear (inverted U shaped). Middle-aged (45-60 years) NCD patients and the relatively healthy "young, old" group (60-75 years) were most likely to double consult. On the other hand, the relationship between age and using TCM only in the past year was linear regardless of NCD status. The NCD free segment of the population was more inclined to use TCM alone as they become older		Middle-aged (41-50 years old) physicians' reluctance to refer to TCM	Findings revealed an association between age, gender and education level, with older age, being female and lower educational attainment, all being predictive of TCM utilisation	The gender-related difference was identified. Subjects in GZ favoured TCM more than patients in HK, and female patients in both regions appeared to respond more positively to TCM than male subjects		
Socioeconomic differences						higher socioeconomic status including income and education was related to a higher prevalence of TCM use	

Paper No.	15	16	17	18	19	20	21
Author:	**Chung (2009)**	**Lam (2009)**	**Griffiths (2012)**	**Rochelle (2013)**	**Thorburn (2013)**	**Yan (2013)**	**Chan (2015)**
Education level				Findings revealed an association between education level			
TCM treatment covered by medical insurance							
Perceptions of the effectiveness of TCM and WM			Western medicine doctors may be inclined to collaborate with TCMPs once evidence and patient choice are concordant. However, their awareness of the availability of systematic reviews and randomised controlled trials on the efficacy and safety of TCM remains unknown	People who are high in Confucian thinking may be more likely to favour the belief in the effectiveness and superiority of TCM over WM	Subjects in Guangzhou appear to consider WM to have better facilities	TCM was perceived as a holistic medical practice that treated the whole person instead of the disease alone and could cure the roots of the health problems. Herbs, acupuncture and tuina were considered as 'natural' remedies that helped in to restore the body's balance. This perception and belief that TCM was a natural holistic medical alternative was the principal reason of TCM use in the present study. Although TCM was believed having fewer side effects and being safer, many caregivers considered TCM could only supplement WM. This attitude was supported by the fact the TCM was thought of as an alternative and used when WM failed	

Paper No.	15	16	17	18	19	20	21
Author:	**Chung (2009)**	**Lam (2009)**	**Griffiths (2012)**	**Rochelle (2013)**	**Thorburn (2013)**	**Yan (2013)**	**Chan (2015)**
Regional difference in the use of TCM						Subjects in Guangzhou favoured TCM more than patients in HK, and female patients in both regions appeared to respond more positively to TCM than male subjects	
Perceptions of the safety of TCM and WM						TCM was believed having fewer side effects and being safer. Further, herbs were considered to be safe	Acupuncture has fewer side effects and is good for preventive care
Use of TCM by immigrants							
Location of TCM clinic							

Paper No.	22	23	24	25	26	27	28
Title of paper:	Choices between Chinese and Western medicine in Hong Kong - interactions of institutional environment, health beliefs and treatment outcomes	Use frequency of traditional Chinese medicine in Taiwan	Utilization patterns of Chinese medicine and Western medicine under the National Health Insurance Program in Taiwan, a population-based study from 1997 to 2003.	The utilisation of traditional Chinese medicine and associated factors in Taiwan in 2002	Utilization of Western Medicine and Traditional Chinese Medicine Services by Physicians and Their Relatives: The Role of Training Background.	Use of Chinese medicine by women with breast cancer: a nationwide cross-sectional study in Taiwan.	The association between socioeconomic status and traditional Chinese medicine use among children in Taiwan
Author:	Sun (2017)	Chen (2007)	Chang (2008)	Shih (2009)	Huang (2009)	Lin (2011)	Shih (2012)
Methodology:	Focus group	Dataset (NHRID)	Dataset (NHRID)	Questionnaire	Dataset (NHRID)	Database (NHRI)	Database (NHRI)
Sample size:	52	21,653,555	136,720	26 755	13,652,794	70,012	5,971
Age:	18 years and over	<10 years - 81> years	2 years to 65+ years	15 years to 100 years	> 25 years	-40 years to 80+ years	10-18 years
Location:	Hong Kong	Taiwan	Taiwan	Taiwan	Taiwan	Taiwan	Taiwan
Consulted a TCMP or WM doctor		The results show that people visited Western medicine clinics more commonly than TCM clinics for their illnesses. Thus, Western medicine remains the mainstream of healthcare		This study found that 10.4% of people in Taiwan had visited practitioners of TCM in the previous one month. Compared with WM (39%), TCM is still the second main type of medical services. Combination of TCM and WM services' is the main type of medical service provided in Taiwan, although many people continue to seek treatment using TCM		A significant portion of breast cancer patients used TCM, and most TCM users also used Western medicine. Chinese herbal medicine was used most frequently	
Knowledge of TCM				Younger people had more knowledge of TCM			

Paper No.	22	23	24	25	26	27	28
Author:	**Sun (2017)**	**Chen (2007)**	**Chang (2008)**	**Shih (2009)**	**Huang (2009)**	**Lin (2011)**	**Shih (2012)**
Medical conditions that TCM was used		The top ten diseases for TCM visits were diseases of the respiratory system; diseases of the musculoskeletal system and connective tissue; symptoms, signs and ill-defined conditions; injury and poisoning; diseases of the digestive system, the genitourinary system, the skin and subcutaneous tissue, the nervous system and sense organs, the circulatory and endocrine system; nutritional and metabolic diseases; and immunological disorders	It was found that diseases of the respiratory system, diseases of the musculoskeletal system and connective tissue, injury and poisoning, signs, symptoms and ill-defined conditions, and diseases of the digestive system were the primary indications in TCM. Similar patterns have been reported previously			Breast cancer patients used TCM for non-cancer diseases more than for breast cancer	
Self-medication with TCM	Some also lacked English proficiency to understand the ingredients of Western drugs, a common phenomenon among individuals with low literacy. However, the popularity of drugs might overcome this barrier. Without prescriptions, the participants tended to choose OTC medicine which was popular to reduce risk						

Paper No.	22	23	24	25	26	27	28
Author:	**Sun (2017)**	**Chen (2007)**	**Chang (2008)**	**Shih (2009)**	**Huang (2009)**	**Lin (2011)**	**Shih (2012)**
Concurrent use of TCM and WM?							
Informed WM doctors about the use of TCM?							
Consulted a WMD and a TCMP							
Perceptions of the effectiveness of TCM and WM							
Regional difference in the use of TCM			Although CM usage was more prevalent in the central and southern parts of Taiwan, CM was not frequently used in mountainous areas and offshore islands. One possible explanation for this phenomenon is the uneven distribution of CM providers since there are only 6 CM hospitals and 24 CM clinics in eastern Taiwan				

Paper No.	22	23	24	25	26	27	28
Author:	**Sun (2017)**	**Chen (2007)**	**Chang (2008)**	**Shih (2009)**	**Huang (2009)**	**Lin (2011)**	**Shih (2012)**
Age and gender differences		Female use TCM more frequently than male. We found that the age distribution of TCM users peaked in the 30s, followed by the 20s and 40s. More than 50% of people over ten years old had used TCM at least once in the six years surveyed.	Females used both health care services more than males. The higher utilisation of CM in females has also been reported in Singapore [9] and the Western countries as well as in Taiwan. Moreover, the age distribution of CM utilisation peaked at 45–54 years.	Younger people more frequently utilised TCM services than older people. Sex has also been shown to be an important factor associated with the utilisation of TCM services. Generally speaking, women are more likely to use TCM services than men. The similar results were found in this study		In this study, patients younger than 60 years old, with higher income, and employed by the government, schools, enterprises or institutions were more likely to be TCM users	
Socioeconomic differences			The utilisation of CM was higher in the regular salary income group than the low-income group, farmers and fishermen and the other group. These results are similar to the previous findings that CAM users are those with higher education and in the middle to the upper socioeconomic status		Compared with other adults with equivalent socioeconomic status, both the TCMPs and WMD had more significant use of TCM services. For WMDs, although the WMDs' probability and frequency of usage were similar to other adults, they incurred considerably higher expenditure		The results of this large-scale NHIS study found that, among children in Taiwan, a higher prevalence of TCM visits was associated with higher SES. High-SES adolescent girls were more likely to visit TCMPs than low-SES girls
Education level				In this study, it was found that education level was an essential determinant of utilising TCM services. People with higher education level (≥13 years) were more likely than people with zero-year education to visit TCMPs			

Paper No.	22	23	24	25	26	27	28
Author:	**Sun (2017)**	**Chen (2007)**	**Chang (2008)**	**Shih (2009)**	**Huang (2009)**	**Lin (2011)**	**Shih (2012)**
TCM treatment covered by medical insurance							
Patient-perceived safety of TCM and WM							
Use of TCM by immigrants							
Use of TCM by immigrants							
Location of TCM clinic		Most TCM visits were to private TCM clinics (82.6%), followed by private TCM hospitals (12.0%)					

Paper No.	29	30	31	32	33	34	35
Title of paper:	Utilization pattern of traditional Chinese medicine for liver cancer patients in Taiwan	A nationwide population-based study of traditional Chinese medicine usage in children in Taiwan	The trends of utilisation in traditional Chinese medicine in Taiwan from 2000 to 2010: A population-based study	Utilization and prescription patterns of traditional Chinese medicine for patients with hepatitis C in Taiwan: a population-based study	Attitudes to traditional Chinese medicine amongst Western-trained doctors in the People's Republic of China	Health Remedies: From Perceptions to Preference to a Healthy Lifestyle	Utilisation of and Attitudes towards Traditional Chinese Medicine Therapies in a Chinese Cancer Hospital: A Survey of Patients and Physicians
Author:	Liao (2012)	Huang (2014)	Yeh (2016)	Liu (2016)	Harmsworth (2001)	Wang (2007)	McQuade (2012)
Methodology:	Database (NHRI)	Database (NHRI)	Database (NHRI)	Database (NHRI)	Mixed Methods	Mixed Methods	Questionnaire
Sample size:	6,358	2 million	245,199	one million	177	123	Mean age of 51 years
Age range:	<50 years - >70 years	0 years – 18 years	<20 years - >65 years	18 years - >65 years	20 years - >41 years	18 years to 60 years	245 patients + 72 docs
Location:	Taiwan	Taiwan	Taiwan	Taiwan	China	China	China
Consulted a TCMP or WMD	1,240 (19.50%) used TCM outpatient services	75% of TCM users visited outpatient clinics one to five times throughout a year.					The use of TCM by Chinese cancer patients is exceptionally high, and physicians are generally well informed and supportive of their patients' TCM use. The 83.5% rate of TCM use by patients in this study is similar to that found in the few prior studies of Chinese cancer populations
Knowledge of TCM							

Paper No.	29	30	31	32	33	34	35
Author:	**Liao (2012)**	**Huang (2014)**	**Yeh (2016)**	**Liu (2016)**	**Harmsworth (2001)**	**Wang (2007)**	**McQuade (2012)**
Medical conditions that TCM was used	The two most frequently recorded coexisting diseases for both biomedicine and TCM outpatient visits specifically for liver cancer were (1) chronic liver disease and cirrhosis, and (2) malignant neoplasm of the liver and hepatic bile duct. LC patients in Taiwan like to seek TCM treatments for relieving their "general symptoms."	Among adolescents and school-age children, menstrual disorders, such as dysmenorrhea and irregular menstrual cycles, were frequent reasons for visiting TCM clinics	Neoplasms and diseases of the respiratory system	Overall, 66.4 % of the patients with Hepatitis C had used TCM from 2000 to 2010.	TCM was suggested in 75% of all chronic illness and for 99% of all psychiatric illness. Two-thirds of the diseases considered suitable for TCM referrals are chronic, and 40% of all referrals for TCM were for chronic illnesses. TCM is rarely prescribed by WM doctors in isolation	Consumers prefer TCM (WM) to cure the underlying illness (alleviate symptoms) and when the time-frame is longer (shorter)	Many patients report using TCM for symptom control or as an "immune booster," but the most common reported reason for many of the biologics was to treat or cure cancer or to prolong life
Self-medication with TCM							
Concurrent use of TCM and WM?							
Informed WM doctors about the use of TCM?							

Paper No.	29	30	31	32	33	34	35
Author:	**Liao (2012)**	**Huang (2014)**	**Yeh (2016)**	**Liu (2016)**	**Harmsworth (2001)**	**Wang (2007)**	**McQuade (2012)**
Consulted a WM and a TCMP							
Perceptions of the effectiveness of TCM and WM					There was no doubt among the doctors that TCM was safe and effective, but uncertainty as to how or why it worked	Consumers perceive TCM (vs WM) to have slower action, and a greater focus on treating the underlying illness versus alleviating the symptoms	
Regional difference in the use of TCM			The ratio of TCM users in the central region was the highest among the six regions in 2010, which could be due to the presence there of the earliest professional TCM physician training school, China Medical University. Establishment of China Medical University, resulting in a higher number of TCM physicians and more TCM clinics and TCM departments in hospitals in the central region. The Taipei region had the highest increase of percentage change in mean TCM visits, which may have resulted from the convenience of transportation, high accessibility of TCM service, and high population density around Taipei and New Taipei cities				

Paper No.	29	30	31	32	33	34	35
Author:	**Liao (2012)**	**Huang (2014)**	**Yeh (2016)**	**Liu (2016)**	**Harmsworth (2001)**	**Wang (2007)**	**McQuade (2012**
Age and gender differences	TCM services were utilised more often by females and residents of central Taiwan, but less often by patients >70 years old, residents of Taipei, as well as farmers and fishermen. The higher TCM use of central Taiwan residents may probably be due to the higher availability of TCM providers in this area		TCM users among women were more than those among men, and this difference between genders increased as time went on	The utilisation rate of TCM increased with age and peaked in the age group of those 40 − 64 years old.	Older, better trained, doctors had stronger positive feelings about TCM than younger doctors		
Socioeconomic differences		Children with higher socioeconomic status were also more likely to use TCM	The high socioeconomic status group used TCM more and more over time				As in other populations, Chinese users of CAM tended in a higher income bracket
Education level					The length of university TCM training reported varied widely amongst respondents. Training was longer and more detailed for older doctors. WMDs with further elective training in TCM practised more frequently and used more individualised prescriptions of both herbal medicines and acupuncture		As in other populations, Chinese users of TCM tended to be more educated

Paper No.	29	30	31	32	33	34	35
Author:	**Liao (2012)**	**Huang (2014)**	**Yeh (2016)**	**Liu (2016)**	**Harmsworth (2001)**	**Wang (2007)**	**McQuade (2012)**
TCM treatment covered by medical insurance		The costs of insurance covering TCM were consistently lower than those covering biomedicine					
Patients perceived safety of TCM and WM					There was no doubt among the doctors that TCM was safe. TCM is dangerous in that it may prevent people from getting proper treatment. Agree (14.9%), not sure (17.2%), Disagree (67.8%)	Consumers perceive TCM (vs WM) had milder side-effects	
Use of TCM by immigrants							
Location of TCM clinic					The study analyses the attitudes of Western-trained doctors to traditional Chinese medicine (TCM) in Shenyang, Northern China		

Paper No.	36	37	38	39
Title of paper:	A survey and analysis of using traditional Chinese medicine during pregnancy	The Prevalence and Determinants of Using Traditional Chinese Medicine Among Middle-aged and Older Chinese Adults: Results from the China Health and Retirement Longitudinal Study	Factors associated with traditional Chinese medicine utilisation among urban community health centres in Hubei Province of China	The use of traditional Chinese medicine among breast cancer patients: implications for the clinician
Author	Chen (2015)	Liu (2015)	Cai (2015)	Wong (2014)
Methodology:	Questionnaire	Questionnaire	Questionnaire	Questionnaire
Sample size:	1010 patients	17,708	234	300
Age range:	30 years	45 years and older	Not applicable	33 years to 80 years
Location:	China	China	China	Singapore
Consulted a TCMP or WMD			TCM outpatient visits accounted for 15% of these visits	
Knowledge of TCM				
Medical conditions that TCM was used	This study showed that the reasons for TCM usage during pregnancy were mainly to treat acute upper respiratory tract infections and miscarriage	Patients with stroke, cardiovascular disease, and chronic kidney diseases		
Self-medication with TCM	Many pregnant women use TCM themselves, instead of consulting medical specialists, because most of them thought that TCM only had minimal adverse effects during pregnancy on account of it being a natural treatment			A total of 35% (104 of 296) of patients reported using TCM. The majority of the patients were introduced to TCM by family and friends following the diagnosis of breast cancer
Concurrent use of TCM and WM?				
Informed WM doctors about the use of TCM?				Most patients did not inform their clinicians of TCM use
Consulted a WMD and a TCMP				

Paper No.	36	37	38	39
Perceptions of the effectiveness of TCM and WM				
Regional difference in the use of TCM			The findings show that district type is associated with TCM outpatient visits. Many studies show that TCM use is related to factors such as gender, age, education, and health belief, all of which may demonstrate regional variation. Service prices are fixed, patients' incomes are higher in regions with better economic development conditions than those with worse economic development conditions, resulting in the varying capacity of patients to afford TCM services within a province	
Age and gender differences		Age was associated with TCM use		Younger patients and those of Chinese ethnicity were more likely to use TCM
Socioeconomic differences		Individual income and family income were associated with TCM use		
Education level				There was no significant difference in educational level between the two groups

Paper No.	36	37	38	39
TCM treatment covered by medical insurance			In total, 67% of the urban population in Hubei province were under health insurance coverage in 2009. Outpatient services are covered by the individual accounts of urban employees (3.8% of employee payrolls) or by a minimum subsidy of RMB 40 per month for disabled people, low-income households, and the elderly with low incomes. Inpatient services are reimbursed 70% from health insurances. The findings show that 92% of Community Health Centres (CHCs) were designated by health insurance. TCM services provided by the designated CHCs are reimbursed to patients covered by health insurance	
Perceptions of the safety of TCM and WM	Many pregnant women use TCM because most of them think that TCM only has minimal adverse effects during pregnancy-on the account of natural treatment			
Use of TCM by immigrants				
Location of TCM clinic				

Paper No.	40	41	42
Title:	A Study of Traditional Chinese Medicine Practitioners in Hong Kong.	Postgraduate education for Chinese medicine practitioners: a Hong Kong perspective.	The practice of Chinese medicine in Taiwan.
Author	Wong (1993)	Chung (2009)	Chi (1996)
Methodology:	Mixed method	Focus group discussions	Mixed methods
Sample size:	196	19	300
Age:	<35 years to 75+ years	No stated	<35 years to 66+ years
Location:	Hong Kong	Hong Kong	Taiwan
Duration of the practice of TCM	About three-quarters of respondents have been in practice for ten years or more. 8% had been in practice for less than five years.		Most of the TCMPs (35.6%) had practised TCM 11-20 years. The mean number of years is 14.7 years
No of consultations			On average, a TCMP spent 30.8 hours per week seeing patients. At the same time. TCMP in this study spent an average of 53 hours per week in their clinics. On average, TCMP provided 199 patient visits per week
Medical problems commonly treated			Diseases of the respiratory system are the most frequent category (21.1%), followed by other symptoms and signs (20%). Three other common conditions of patients seeking Chinese medicine providers were diseases of the musculoskeletal system and connective tissue (15.3 %), injuries and poisoning (12.5 %), and diseases of the digestive system (11.4%)
Type of TCM practice	The majority (60%) practised as 'generalists', 17% practised 'internal medicine', 3% practised bone setting and 1 % practised acupuncture exclusively; 12% practised in more than one specialty;		Most of the sample CMPs (88.9%) do not declare a speciality in their practices. Only a very small number of them practised in a speciality area. These are internal medicine, gynaecology, injury, and haemorrhoid. This is partly a result of the tradition of their practice, and partly reflects the environment
Hospital or clinic-based	61% had previously practised outside Hong Kong, and 38% had worked in a hospital setting Private practice. Working form Chinese medicine herbal shops		In Taiwan, most (82.5%) of TCMPs are clinic-based while 15.5 per cent is hospital-based. In this study
Education & training	Apprenticeship, the traditional form of TCM training under a master and often regarded as an honour and pride for the practitioners, has been undertaken by 65% of respondents, either alone or combined with coursework	New entrants to the TCM profession must obtain formal registration with the CMCHK, and this requires the passing of a two-part licensing examination with written and clinical components. Currently, only holders of recognised TCM degree(s) are eligible for sitting the examination	As for education, 13.9% of them had a school education that was above the college level. This is higher than the national profile in 1989, which had 11.8% of CMPs completed college or postgraduate level education

Paper No.	40	41	42
Type of TCM training	21 % had attended a part-time course in TCM, mostly (59%) in Hong Kong and China (39%). Most attended courses which ranged from two to three years		The proportion of CMPs that graduated from a medical school offering Chinese medicine education, only 10.6% of those in our sample were formally trained in such a program. Among the sample hospitals, only 24% of them have residence training programs for Chinese medicine physicians. A slightly higher proportion (33%) of them has internship programs for CMPs
Postgraduate training		Most graduates would prefer a system of practice-based training with feedback on their performance from experienced TCMPs. They felt that an active learning style would readily expose their weaknesses and thus allow their accelerated improvement	11.8% of CMPs completed college or postgraduate level education
Other qualifications			A small proportion of the sample of TCMPs is also licensed as other types of health professionals. Among them, CMPharm is the most popular profession (9.1% of them). A CMPharm may obtain a license for CMP to widen his/her practice options
Registration of TCMPs	86% were in favour of registration. 8% gave no opinion, while 6% were against it. A large proportion of those who had received some form of institutional training or education supported the idea 93% of those whose highest educational level was a part-time course, 92% of those with a Western medical education and 89% of those with a full-time TCM course as the highest level of training), and a slightly smaller majority (78%) of those with only apprenticeship training also agreed to registration		There are two parallel licensure systems for Chinese medicine physicians in Taiwan. They are the Chinese Medicine Physician License Exam (CMPLE) and the Chinese Medicine Physician Special License Qualifying Exam (CMPLE). The former is offered only to persons with medical degrees in Chinese medicine. Only one medical college in Taiwan, the China Medical College (established in 1958), provides a formal professional training program and a medical degree of Chinese medicine that was started in 1966 (it also provides training and degrees in modern Western medicine)
Career development		lack of employment opportunities and career pathways continue to be a significant issue for TCM graduates A survey published in 2005 showed that 72.3% of the graduates failed to obtain a full-time clinical job after one year of graduation	Most TCMPs with medical degrees practice only modern Western medicine, many other licensed TCMPs practice Chinese medicine part-time, Therefore, they are not considered professionally active

Paper No.	40	41	42
Treatment modalities used	97% used processed herbal medicine while 42% used raw herbs, 48% used external applications, and 36% used proprietary Chinese medicines; 5% used injectable Chinese medicines, 5% of respondents used Western medicine in their practice. Other common methods of treatment were acupuncture (34%) and spinal manipulation (22%)		The majority of TCMPs (60%) practised as 'generalists', 17% practised 'internal medicine', 3% practised bone setting, and 1 % practised acupuncture exclusively; 12% practised in more than one speciality; 97% used processed herbal medicine while 42% used raw herbs, 48% used external applications, and 36% used proprietary Chinese medication; 5% used Chinese injectable medication, 5% of respondents used Western medicine in their practice
Membership of TCM Associations	Fifty-eight per cent of respondents were members of one or more TCM associations		
Understanding of Western medicine	(The use of dangerous drugs and antibiotics by unregistered medical practitioners is illegal and to reduce the sensitivity of the question, we simply asked whether the TCM	Educational needs beyond TCM, in particular, a better understanding of western medicine and team working so that primary care provision might be more integrated in the future	it is intended for them to be able to practice modern Western and Chinese medicine in an integrated way. To take the license examination, students must first complete the 7-year medical college training courses and receive a Bachelor of Science and Bachelor of Medicine (BSBM) degree. Since the mid-1980s, a new 5-year post-baccalaureate program for Chinese medicine was added to the same college, which offers the same BSBM degree for college graduates. After passing the CMP license examination, they are eligible to take the license examination to become a modern Western medicine physician (WMP)
WM treatments used	60% of respondents had been trained in the use of sphygmomanometers, while 54% used the instruments in their practice. 58% had been trained in the use of stethoscopes, and 50% used them. Blood examination, urine examination, X-ray, electrocardiography and ultrasonography. Overall, 35% had training in blood examination, and 12% reported using it. For urine examination, the corresponding figures were 37% and 15% respectively. The proportions of those trained in X-ray, electrocardiography and ultrasonography were 31%, 28% and 24%, while the percentages of those using them were 13%, 11% and 11% respectively		There are two parallel licensure systems for Chinese medicine physicians in Taiwan. They are the Chinese Medicine Physician License Exam (CMPLE) and the Chinese Medicine Physician Special License Qualifying Exam (CMPLQE). The former is offered only to persons with medical degrees in Chinese medicine

Paper No.	40	41	42
Professional Standards of TCM	Other problems were variations in professional standards (12%)	the government in providing employment opportunities. Graduates admitted that they had low professional esteem due to their lack of competitiveness, especially when compared to the prospects of other western medicine colleagues	Government standards for Chinese medicine hospitals or general hospitals that include Chinese medicine. Apart from those unique to Chinese medicine, such as personnel, the Government has required the same standards for Chinese medicine hospitals as those for hospitals of modern Western medicine
Government recognition of TCMPs	Lack of government recognition (10%	The government was obliged to enact the requirement laid down in the constitutional law, in which the development of TCM was explicitly stated. A decade has passed since the first Chief Executive of Hong Kong announced the government's commitment to developing TCM in Hong Kong and his official addresses had reiterated commitment as in the Chief Executive Policy Addresses of 2005 and in the recent 2007 Election Manifesto of the current Chief Executive of the SAR	Taiwan has the first government insurance to cover Chinese medicine

Appendix C: Cover Letter - Pilot Test of Questionnaires

Dear _____

Enclosed is a questionnaire that will be used to collect research data from:

☐ Patients receiving TCM treatment

☐ TCM practitioners

Before we can use the questionnaire, we need to pilot test it, so that we can obtain feedback on the questions as well as the content of the questionnaire.

Please kindly test the questionnaire by answering all the questions and afterwards provide some feedback about the questionnaire by answering the following questions:

1. Are the directions in the questionnaire clear?
2. Do you misunderstand any of the questions?
3. Approximately, how long did it take you to answer the questionnaire?
4. Are any of the questions too difficult to answer?
5. Is the sequence of the individual questions logical?
6. Any additional comments?

Thank you for your time and effort in testing the questionnaire

Yours sincerely,

Appendix D: Initial Ethics Committee Approval Letter - Hong Kong

香港中文大學醫學院
Faculty Of Medicine
The Chinese University Of Hong Kong

醫院管理局
新界東醫院聯網
Hospital Authority
New Territories East Cluster

Joint The Chinese University of Hong Kong – New Territories East Cluster Clinical Research Ethics Committee
香港中文大學–新界東醫院聯網 臨床研究倫理 聯席委員會

Flat 3C, Block B, Staff Quarters, Prince of Wales Hospital, Shatin, HK
Tel : (852) 2632 3935 / 2144 5926 Fax : (852) 2646 6653 Website : http://www.crec.cuhk.edu.hk

To: Prof. Zhi Xiu LIN (Principal Investigator)
School of Chinese Medicine
The Chinese University of Hong Kong

15 JUL '09

Ethics Approval of Research Protocol

CREC Ref. No.:	**CRE-2009.351**
Date of Approval:	**07 July 2009***
Study Title:	**Utilisation and Practice of Chinese Medicine by Chinese people in Hong Kong, Guangzhou and Taipei.**
Investigator(s):	**Zhi Xiu LIN and James THORBURN**

I write to inform you that ethics approval has been given for you to conduct the captioned study in accordance with the following document(s) submitted:

- Study Protocol Version dated 12 June 2009
- Information Sheet and Consent Form, English Version dated 05 April 2009
- Information Sheet and Consent Form, Chinese Version dated 21 March 2009
- Patient Interview Questions, English Version dated 05 April 2009
- Patient Interview Questions, Chinese Version dated 21 January 2009
- Patient Questionnaire, English Version dated 05 April 2009
- Patient Questionnaire, Chinese Version dated 12 January 2009

This ethics approval* will be valid for 12 months. Application for further renewal can be made by submitting the Ethics Renewal and Research Progress Report Form to the CREC (Download the electronic form template from the http://www.crec.cuhk.edu.hk or http://ntec.home/Research%20Ethics/main.asp). You are kindly requested to report to the Committee upon completion of the project.

The Joint CUHK-NTEC Clinical Research Ethics Committee is organized and operates according to ICH-GCP and the applicable laws and regulations.

Miss Winkie Lui
CREC Officer
Joint CUHK-NTEC
Clinical Research Ethics Committee

Encl.
WL/ci

Appendix E: Ethics Committee Approval Letter, UK

Middlesex University

School of Health and
Social Sciences
The Archway Campus
Furnival Building
10 Highgate Hill
London N19 5LW

To: James Thorburn
MPhil/PhD Research Degree

Date: 14 November 2006

Dear James

Re: James Thorburn (329): '*The utilisation and practice of traditional Chinese medicine by Chinese people in Hong Kong, mainland China and Taiwan*'. Category A2 - Supervisor, Celia Bell & Ming Zhao Cheng.

Thank you for the response which adequately answers the ethics committee's queries. On behalf of the committee, I am pleased to give your project its final approval. Please note that the committee must be informed if any changes in the protocol need to be made at any stage.

I wish you all the very best with your project. The committee will be delighted to receive a copy of the final report.

Yours sincerely

Dr John M Foster
Chair of Ethics Sub-committee (Health Studies)

Appendix F: Renewal Ethics Committee Approval Letter – HK

香港中文大學醫學院
Faculty Of Medicine
The Chinese University Of Hong Kong

醫院管理局
新界東醫院聯網
Hospital Authority
New Territories East Cluster

Joint Chinese University of Hong Kong-New Territories East Cluster Clinical Research Ethics Committee
香港中文大學-新界東醫院聯網 臨床研究倫理 聯席委員會

Flat 3C, Block B, Staff Quarters, Prince of Wales Hospital, Shatin, HK
Tel : (852) 2632 3935 / 2144 5926 Fax : (852) 2646 6653 Website : http://www.crec.cuhk.edu.hk

19 JUL '10

To: Prof. Zhi Xiu LIN (Principal Investigator)
School of Chinese Medicine
The Chinese University of Hong Kong

Renewal of Ethics Approval

CREC Ref. No.:	**CRE-2009.351**
Date of Renewal Approval:	**07 July 2010***
Study Title:	**Utilisation and Practice of Chinese Medicine by Chinese people in Hong Kong, Guangzhou and Taipei**
Investigator(s):	**Zhi Xiu LIN and James THORBURN**

I write to inform you that ethics approval has been renewed for the captioned study in accordance with the approval letter dated 15 July 2009.

This ethics approval* will be valid for 12 months starting from the date of renewal. Application for further renewal can be made by submitting the Ethics Renewal and Research Progress Report Form to the CREC (Download the electronic form template from the http://www.crec.cuhk.edu.hk or http://ntec.home/Research%20Ethics/main.asp). You are kindly requested to report to the Committee upon completion of the project.

The Joint CUHK-NTEC Clinical Research Ethics Committee is organized and operates according to ICH-GCP and the applicable laws and regulations.

Miss Winkie Lui
CREC Officer
Joint CUHK-NTEC
Clinical Research Ethics Committee

WL/ci

Appendix G: Information Sheet - Patient Questionnaire

WHAT IS THE PURPOSE OF THE STUDY?

Chinese people have their own values and perceptions about health and illnesses, and these values can influence the type of medical treatment they may seek out when they are ill. It is possible that Chinese people only utilise Chinese medicine to treat diseases that mainstream Western medicine cannot cure, or because of the relatively lower cost and fewer side effects that Chinese medicine has compared to Western forms of medicine, or it may be because of some other reasons. The purpose of this study, therefore, is to examine the utilisation of Chinese medicine in Hong Kong, from the perspective of Chinese people's attitudes, perceptions and beliefs, and health perceptions towards Chinese medicine, as well as the disease conditions for which Chinese medicine treatment is sought and whether there are differences associated with the different locations.

DO I HAVE TO TAKE PART?

No, it is entirely up to you to decide whether or not you want to take part in this study. If you do take part, you will be given a copy of this Information Sheet, which you may keep for your own reference. Furthermore, as your participation in this study is entirely voluntary, if you decide that you do not want to participate, or later, that you wish to withdraw from the study, your decision will not result in any adverse effects.

WHAT DO I HAVE TO DO?

If you agree to participate in this study, we would like you to complete a questionnaire, which should only take you approximately 15-20 minutes to complete.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

The number of patients who will take part in this study will be based on the number of Chinese medicine clinics in Hong Kong and also the number of patients attending each clinic for a consultation.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

There are no direct benefits for the individuals who take part in the survey, but we hope the results we get from the study may help us to understand how Chinese medicine is utilised by Chinese people.

WHAT ARE THE POSSIBLE INDIRECT BENEFITS OF TAKING PART?

The possible indirect benefits of taking part in this study are that the information obtained from performing the research will provide a better understanding of traditional health beliefs of Chinese patients who use Chinese medicine and may also assist healthcare workers who manage and provide healthcare better understand the needs of Chinese patients in non-Chinese communities.

ARE THERE ANY FORESEEABLE RISKS INVOLVED IN TAKING PART IN THIS STUDY?

We do not anticipate any risk associated with this study.

WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

Yes, all information that is collected about you during the course of the research will be kept strictly confidential. Any information such as your name address or any other form of personal identity will be removed so that you cannot be recognised from it.

WILL I BE PAID?

You will not be paid for taking part in this study. However, individuals who complete the questionnaire and who agree to be interviewed will be given HKD 100 as a transportation subsidy to cover the cost of their travel in order to participate in the interview.

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

We will write a research report about the results obtained from the study. This report will be available in January 2018. If you would like a copy of the summary of the report, please contact the researcher whose name and address is given below.

WHO HAS REVIEWED THE STUDY?

The Chinese University of Hong Kong-New Territories East Cluster Research Ethics Committee Hong Kong.

WHO IS ORGANISING THE STUDY?

The School of Chinese Medicine School, the Chinese University of Hong Kong, Shatin, New Territories.

CONTACTS FOR FURTHER INFORMATION:

Appendix H: Patient Questionnaire

Chinese Medicine
Patient Questionnaire

This survey questionnaire aims to explore Chinese peoples' attitude towards Chinese Medicine in different Chinese communities throughout Asia.

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

1. *Please answer all the questions.*
2. *You may use a (✓) or (✗) to answer the questions.*
3. *When you have completed the questionnaire, place it in the envelope and seal it.*
4. *Hand the sealed envelope containing the questionnaire to the clinic staff.*

SECTION 1 - ABOUT YOUR CONSULTATION

1. Have you ever visited a Chinese Medicine practitioner before?

   ☐ Yes
   ☐ No

2. If you have visited a Chinese medicine practitioner before, was the treatment for your most recent condition helpful?

   ☐ Yes
   ☐ No

3. From the list below, indicate where you usually (i.e., most often) go for a Chinese medicine consultation?

   ☐ Herbal shops
   ☐ Chinese medicine clinic in hospitals
   ☐ Chinese medicine clinic in universities
   ☐ Chinese medicine clinic in a health maintenance organisation
   ☐ Private Chinese medicine clinic
   ☐ Other (please specify) _____

4. How did you decide which Chinese medicine practitioner to go consult?

   ☐ Word-of-mouth
   ☐ Suitable location
   ☐ Suitable consultation fee / with discount
   ☐ Chinese medicine practitioner is designated by my medical insurance company
   ☐ Referred by Western medical doctor
   ☐ Other reason (please specify) _____

5. If you intend to consult a Chinese medicine practitioner, do you take the practitioner's qualifications into account before going ahead with the consultation?

   ☐ Yes
   ☐ No

6. When you are sick, do you usually consult a Western medical doctor before consulting a Chinese medicine practitioner?

   ☐ Yes
   ☐ No

7. When you are sick, do you usually consult a Western medical doctor and a Chinese medicine practitioner at the same time?

   ☐ Yes
   ☐ No

8. How would you rate your own knowledge of Chinese medicine?

   ☐ Very good
   ☐ Good
   ☐ Fair
   ☐ Poor
   ☐ Very poor

9. For the medical condition that you are currently consulting a Chinese medicine practitioner for, how would you classify your condition?

   ☐ Not at all serious
   ☐ Quite serious
   ☐ Reasonably serious
   ☐ Serious
   ☐ Very serious

10. Have you ever experienced any side effect from Chinese Medicine?

    ☐ Yes
    ☐ No

SECTION 2 – ABOUT CHINESE MEDICINE AND WESTERN MEDICINE

Questions 11 to 32 are intended to determine how you perceive Chinese medicine and Western medicine:

11. Compared with Chinese medicine, Western medicine can diagnose illness more accurately:

    ☐ Strongly agree
    ☐ Agree
    ☐ Undecided
    ☐ Disagree
    ☐ Strongly disagree

12. Compared with Chinese medicine, Western medicine has better facilities available:

    ☐ Strongly agree
    ☐ Agree
    ☐ Undecided
    ☐ Disagree
    ☐ Strongly disagree

13. Compared with Chinese medicine, the overall quality of Western medicine is better:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

14. Compared with Chinese medicine, the process of education and training in Western medicine is more rigorous:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

15. Compared with Chinese medicine, Western medicine has a more scientific approach:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

16. Compared with Chinese medicine, Western medicine is specialised towards particular diseases:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

17. Compared with Chinese medicine, Western medicine acts more quickly:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

18. Compared with Chinese medicine, the therapeutic effect of Western medicine for acute symptoms is greater:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

19. Compared with Chinese medicine, the therapeutic effect of Western medicine is more apparent:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

20. Compared with Western medicine, the therapeutic effect of Chinese medicine for medical diseases is greater:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

21. Compared with Western medicine, the therapeutic effect of Chinese medicine for chronic diseases is greater:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

22. Compared with Western medicine, Chinese medicine has fewer side effects:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

23. Compared with Western medicine, Chinese medicine causes less gastrointestinal side effects:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

24. Compared with Western medicine, Chinese medicine is slower and less potent in its action:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

25. Chinese medicine treats the causative agent while Western medicine only relieves symptomatic distress:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

26. Chinese medicine should be prioritised over Western medicine when it is equally effective:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

27. Chinese medicine can cure diseases and also promote health:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

28. Chinese medicine can have a restorative effect which can promote health over time:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

29. Chinese medicine can improve one's constitution:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

30. Western medicine is used only when all other treatments in Chinese medicine have failed:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

31. While relying mainly on Chinese medicine, when necessary, Western medicine may be used as an adjunct:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

32. The labelling of the contents of Western medicines is more accurate than Chinese medicine:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

SECTION 3 - ABOUT YOURSELF

So that we can put your other replies in greater context we, please could you provide the following information about yourself:

33. What sex are you?

- ☐ Male
- ☐ Female

34. What is your age in years?

    _____

35. Where were you born?

    ☐ Hong Kong
    ☐ Macau
    ☐ Mainland China
    ☐ Taiwan
    ☐ Other (specify): _____

36. What is your highest education level?

    ☐ Never been in full-time education
    ☐ Primary
    ☐ Secondary
    ☐ Post-Secondary/vocational
    ☐ Graduate/Postgraduate

37. Are you currently in employment?

    ☐ Yes
    ☐ No

Finally, we would like to interview some of the patients who have completed this questionnaire. If you are able to take part in the interview, please provide your name and contact telephone number in the boxes below:

Name: | Telephone:

Thank you for taking the time to complete the questionnaire

Appendix I: Information Sheet - Patient Questionnaire

研究題目

華人在香港的中醫使用狀況。

引言

我們正進行一項香港研究去探討香港使用中醫藥的情況。由於您正在中醫診所接受中醫師的治療，所以我們邀請您參與這次研究。

這次研究目的是什麼?

華人對健康及疾病有本身的價值觀及觀點。他們在生病時，這些價值觀及觀點可能會影響他們尋求治療的類別。 華人可能僅使用中醫藥治療一些西醫不能醫治的疾病，或因為中藥較西藥成本低和較少副作用，又或可能因為某些其它原因。 所以本研究的目的是從華人對中醫藥的態度、觀點、信念以及健康意識和尋求中醫藥治療時的疾病狀況等方面去探討香港人在香港使用中醫藥的情況，並研究不同地區會否有不同的情況。

我是否必須參與?

不是，您可全權決定是否參與本研究。如果您決定參與，我們將給你這一份資訊函作保存以供參考。 此外，因為您的參與完全是自願，如果您決定不參與，或在其後希望退出這次研究，您的決定不會有任何負面影響。

我需要做什麼?

如果您同意參與這次研究，我們希望您能花15-20分鐘完成隨附的問卷。

多少人參與這次研究?

參與這次研究的病人數目視乎中醫診所的數目，以及到診所求診病人人數而定。

參與這次研究會否得到任何的利益?

參與這次研究的人士不會直接獲得利益，但我們希望研究所收集的資料可幫助我們了解華人在香港使用中醫藥的情況。

參與這次研究會否得到任何間接利益?

參與這次研究的可能間接利益是令我們更明白使用中醫藥的病人的傳統健康信念，以及幫助負責管理和提供健康護理的醫護人員更明白在非華人社會中華裔病人的需要。

參與這次研究會否有任何可預見的風險?

我們預期這次研究沒有任何風險。

我參與這次研究會否保密?

絕對會。我們在進行研究時所收集有關您的所有資料將絕對保密。我們將刪去您的名稱、地址和任何其他可辨別身份的資料。

我會有報酬嗎?

您不會因為參與這次研究而得到任何報酬。然而，完成這份問卷並同意進行訪問的人士可獲得100港元，作為接受訪問的交通津貼。

研究的結果有什麼用途?

我們將會根據研究的結果編寫成研究報告。有關報告將於2010年1月公佈。如果您希望獲得該報告的摘要，請按以下的名稱及地址聯絡研究員。

誰負責審閱這次研究?

誰負責統籌這次研究?
聯合CUHK-NTEC臨床研究倫理委員會
呂智宇臨床科學樓8樓
威爾斯親王醫院
沙田
香港

Appendix J: Patient Questionnaire

指引

1. 請回答所有問題。
2. 請使用 (✓) 或 (X) 回答問題。
3. 當您回答所有問題後，請將本問卷放進信封並密封。
4. 請將已密封的信封交給診所的職員。

第1部份 - 關於中醫藥治療

1. 您是否曾經光顧中醫師?

   ☐ 是
   ☐ 否

2. 如果您曾經光顧中醫師，最近的治療是否有幫助?

   ☐ 成功
   ☐ 不成功

3. 在下列名單中，指出您一般(經常)於何處接受中醫藥治療?

   ☐ 藥材舖
   ☐ 醫院的中醫診所
   ☐ 大學的中醫診所
   ☐ 保健機構的中醫診所
   ☐ 私人中醫診所
   ☐ 其他(請註明) _____

4. 您如何決定選擇那一位中醫師?

   ☐ 口耳相傳
   ☐ 適當的地點
   ☐ 合適的診金/提出折扣
   ☐ 本人醫療保險公司指定的中醫
   ☐ 西醫轉介
   ☐ 其他原因 (請註明) _____

5. 如果您決定找中醫師看病，您會否於治療前考慮該中醫師的資歷?

   ☐ 會
   ☐ 不會

6. 當您生病時，您通常會否先尋求西醫治療，然後才尋求中醫治療?

   ☐ 會
   ☐ 不會

7. 當您生病時，您通常會否同時尋求中西醫治療?

☐ 會
☐ 不會

8. 您認為您對中醫藥有多少認識?

☐ 非常了解
☐ 認識很多
☐ 一般
☐ 不大認識
☐ 完全不懂

9. 對於您正尋求中醫治療的病症，您認為您的情況如何?

☐ 不嚴重
☐ 頗嚴重
☐ 一般嚴重
☐ 嚴重
☐ 非常嚴重

10. 你有沒有曾經試過因中藥治療而產生任何副作用?

☐ 有
☐ 沒有

第2部份 – 關於中藥及西藥

第 11-32 條題目是了解您對中西藥的認知：

11. 與中醫藥相比，西方醫學更能準確地作出診斷：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

12. 與中醫藥相比，西方醫學有較佳的醫療設備：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

13. 與中醫藥相比，西方醫學的整體水平較佳：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

14. 與中醫藥相比，西方醫學的教育及培訓過程較嚴格：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

15. 與中醫藥相比，西方醫學使用較科學的方法：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

16. 與中醫藥相比，西方醫學更精於特定的疾病：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

17. 與中醫藥相比，西方醫藥更快見效：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

18. 與中藥相比，西藥對急性病的治療較有效：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

19. 與中醫藥相比，西方醫藥的治療效果較明顯：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

20. 與西藥相比，中藥的治療較有效：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

21. 與西藥相比，中藥對慢性疾病的治療較有效：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意

22. 與西方醫藥相比，中藥的副作用較少：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

23. 與西方醫藥相比，中藥在胃腸方面產生較少副作用：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

24. 與西方醫藥相比，中藥成效較慢，效用較差：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

25. 中藥治療病源；西藥僅舒緩症狀：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

26. 如果中藥及西藥的治療效果相等時，應優先使用中藥：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

27. 中藥可治療疾病及促進健康：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

28. 中藥有康復的效用，長遠而言可促進健康：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

29. 中藥可改善個人的體質：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

30. 西藥僅應在所有中藥治療無效時方使用：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

31. 即使主要依賴中藥，但當需要時西藥可作為輔助：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

32. 西藥的藥物標籤較中藥準確：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意
☐ 非常不同意

第3部份 - 您的資料

為了讓我們進一步分析您的答案，請您提供以下個人資料：

33. 您的性別

☐ **男性**
☐ **女性**

34. 您的年齡

_____

35. 您的出生地

☐ 香港
☐ 澳門
☐ 中國大陸
☐ 台灣
☐ 其他(請註明)：_____

36. 您的最高學歷

☐ 沒有接受全日制教育
☐ 小學
☐ 中學
☐ 專上學院/職業訓練
☐ 學士/碩士

37. 您現在是否受僱?

☐ 是
☐ 不是

最後，我們希望與部份完成本問卷的病人進行面談。如果您能夠與我們進行面談，請您在以下方格提供您的姓名及聯絡電話號碼：

姓名： | 電話號碼：

多謝您完成本問卷

Appendix K: TCM Practitioner Questionnaire

Chinese Medicine
Practitioner Questionnaire

This survey questionnaire aims to explore Chinese Medicine practices in different Chinese communities throughout Asia.

Instructions for completing the questionnaire

1. *Please answer all the questions.*
2. *You may use a (✓) or (✗) to answer the questions.*
3. *When you have completed the questionnaire, please place it in the stamped addressed envelope (provided) and then post it.*

SECTION 1 – YOUR TCM PRACTICE

1. On average, how many hours per week do you practice TCM?

   ☐ None → There is no need to continue answering any further questions. Please return the questionnaire in the pre-paid reply envelope. Thank you for your help.
   ☐ 5 to 10 hours
   ☐ 11 to 16 hours
   ☐ 17 to 22 hours
   ☐ 23 to 28 hours
   ☐ 29 to 34 hours
   ☐ 35 to 40 hours
   ☐ 41 or more hours

2. How many TCM consultations do you perform in a week?

   ☐ Less than 10
   ☐ 10 to 25
   ☐ 26 to 50
   ☐ Above 50
   ☐ Not applicable

3. Do you rely predominantly on a TCM philosophy and theoretical framework for making your diagnosis and guiding your acupuncture or Chinese herbal medicine treatments?

   ☐ Yes
   ☐ No

4. Do you use Western medical diagnoses to guide your acupuncture or Chinese herbal medicine treatments?

   ☐ Yes
   ☐ No

5. Which of the following TCM treatment modalities do you perform in your practice?

- ☐ Acupuncture (manual needle stimulation with skin penetration)
- ☐ Laser acupuncture
- ☐ Electroacupuncture
- ☐ Auricular acupuncture
- ☐ Chinese herbal medicine (raw herb decoctions)
- ☐ Chinese herbal medicine (pills, tablets, powders, syrups)
- ☐ External applications of TCM medicines
- ☐ TCM massage (Tuina, An Mo)
- ☐ TCM dietary advice
- ☐ Lifestyle advice
- ☐ Moxibustion
- ☐ Cupping
- ☐ Exercise advice (Tai Chi; Qi Gong)
- ☐ Point injection therapy
- ☐ Scarring moxibustion
- ☐ Scraping
- ☐ Plum Blossom technique
- ☐ Imbedding needles
- ☐ Other (please specify) _____

6. On average, how long does an initial TCM consultation last with a patient?

- ☐ Up to 5 minutes
- ☐ Between 5 minutes and 20 minutes
- ☐ Between 20 minutes and 30 minutes
- ☐ More than 30 minutes

7. How much do you charge for an initial TCM consultation?

8. On average, how long does a follow-up TCM consultation last with a patient?

- ☐ Up to 5 minutes
- ☐ Between 5 minutes and 20 minutes
- ☐ Between 20 minutes and 30 minutes
- ☐ More than 30 minutes

9. How much do you charge for a follow-up TCM consultation?

10. Do you make use of Western diagnostic tests, procedures and/or investigations in your practice (e.g. blood tests, X-rays, etc.)?

- ☐ Yes
- ☐ No

11. Are the Western diagnostic tests, procedures and/or investigations self-initiated or provided by patients or colleagues?

- ☐ Self-initiated
- ☐ Provided by patients or colleagues

12. How frequently do you make use of Western diagnostic tests, procedures and/or investigations?

Self-initiated	Provided by patients or colleagues
☐ Never	☐ Never
☐ Occasionally	☐ Occasionally
☐ In about half of the cases	☐ In about half of the cases
☐ Frequently	☐ Frequently
☐ Always	☐ Always

13. Which of the following tests do you make use of?

☐ Electrocardiogram (ECG)
☐ Ultrasound
☐ X-Ray
☐ CT/ MRI scan
☐ Blood tests
☐ Urine tests
☐ Other (please specify) _____

14. Do you use any Western medical instruments in your practice?

☐ Yes
☐ No

15. If yes, please indicate which of the following instruments you use?

☐ Thermometer
☐ Sphygmomanometer
☐ Stethoscope
☐ Other (specify) _____

16. Do you keep records of each new patient consultation?

☐ Yes
☐ No

17. Do you make notes on every subsequent patient consultation?

☐ Yes
☐ No

18. In what form are your medical records and notes kept?

☐ Paper or cards
☐ Computerised records
☐ A combination of computer and paper or cards
☐ Other (please specify) _____

SECTION 2 - YOUR QUALIFICATIONS AND TRAINING

19. How many years have you practiced TCM?

☐ 0 to 4	☐ 25 to 29
☐ 5 to 9	☐ 30 to 34
☐ 10 to 14	☐ 35 to 39
☐ 15 to 19	☐ 40 to 44
☐ 20 to 24	☐ 45 and over

20. How did you obtain your initial qualification in TCM?

	Duration
☐ Apprenticeship under a Master	_____
☐ Apprenticeship under a master + additional coursework	_____
☐ Part-time course in TCM	_____
☐ Full-time course in TCM	_____

21. In which of the following places in Asia are your TCM qualifications recognised?

☐ Hong Kong
☐ Macau
☐ Mainland China
☐ Singapore
☐ Taiwan
☐ Other regions in Asia (specify) _____

22. Please indicate the highest level of training in TCM that you have:

☐ Certificate
☐ Diploma
☐ Bachelor
☐ Master
☐ Doctorate
☐ Other (please specify) _____

23. Are you required to be registered with a professional body to practice as a TCM Practitioner?

☐ Yes
☐ No

24. Are you required to undertake any formal continuing education in TCM?

☐ Yes
☐ No

25. Are you a member of any TCM associations?

☐ No
☐ Yes- please state below which associations:

26. Other than your qualification(s) in TCM, do you also hold professional qualifications for any of the healthcare professions listed below? (You may tick more than one box.)

☐ Chiropractor
☐ Physiotherapist
☐ Laboratory Technologist
☐ Nurse
☐ Radiographer
☐ Dentist
☐ Pharmacist
☐ Medical practitioner
☐ Occupational Therapist
☐ Optometrist
☐ Other (specify) _____

27. Have you ever in your practice caused any adverse effect(s) in a patient due to acupuncture? (Exclude point bleeding and small haematomas).

☐ Yes
☐ No

If yes, please identify the adverse effect(s) and the relative intensity for each event:

	Mild	Moderate	Severe
☐ Fainting during treatment	☐	☐	☐
☐ Nausea/Vomiting	☐	☐	☐
☐ Increase pain	☐	☐	☐
☐ Pneumothorax	☐	☐	☐
☐ Local skin infection	☐	☐	☐
☐ Psychiatric disturbance	☐	☐	☐
☐ Convulsions	☐	☐	☐
☐ Other (please specify) _____			

28. Have you ever in your practice caused any significant adverse effect(s) in a patient due to the consumption or application of Chinese herbal medicine(s)?

☐ Yes
☐ No

If yes, please identify the adverse effect(s) and the relative intensity for each event:

	Mild	Moderate	Severe
☐ Severe gastrointestinal symptoms	☐	☐	☐
☐ Significant skin reaction	☐	☐	☐
☐ Severe fatigue	☐	☐	☐
☐ Jaundice	☐	☐	☐
☐ Fainting or dizziness	☐	☐	☐
☐ Palpitations	☐	☐	☐
☐ High blood pressure	☐	☐	☐
☐ Hepatoxicity (as identified by blood tests)	☐	☐	☐
☐ Renal toxicity (as identified by blood tests)	☐	☐	☐
☐ Significant respiratory disturbance	☐	☐	☐
☐ CNS effects (e.g. numbness, palsy)	☐	☐	☐
☐ Referral to Western medical practitioner/hospital	☐	☐	☐
☐ Death	☐	☐	☐
☐ Other (specify)_____	☐	☐	☐

SECTION 3 - PERCEPTIONS OF TCM

This section contains questions that will examine your perceptions of Chinese and Western medicine:

29. TCM has long been regarded in Western medical circles as being un-scientific:

☐ Strongly agree
☐ Agree
☐ Undecided
☐ Disagree
☐ Strongly disagree

30. Legislation should be established to tighter control the import of Chinese herbal and proprietary medicines?

☐ Strongly agree
☐ Agree
☐ Undecided
☐ Disagree
☐ Strongly disagree

31. The sale of Chinese herbal and proprietary medicines should be restricted to prescriptions issued only by TCM practitioners?

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

32. The constituents of all Chinese proprietary medicines should be specified.

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

33. I feel that the general public has trust in TCM Practitioners:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

34. Compared with traditional Chinese medicine, Western medicine can diagnose illness more accurately:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

35. There is variation in professional standards among TCM Practitioners

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

36. Compared with traditional Chinese medicine, Western medicine has better facilities available:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

37. TCM and Western medicine practitioners should be given equal status under the law:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

38. Compared with traditional Chinese medicine, the process of education and training in Western medicine is more rigorous:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

39. I feel that the public perceives TCM as safe:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

40. Compared with traditional Chinese medicine, Western medicine has a more scientific approach:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

41. Compared with traditional Chinese medicine, Western medicine is specialised towards diseases:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

42. Compared with Western medicine, the therapeutic effect of traditional Chinese medicine for medical diseases is greater:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

43. Compared with traditional Chinese medicine, Western medicine acts more quickly:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

44. Compared with Western medicine, the therapeutic effect of traditional Chinese medicine for chronic diseases is greater:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

45. Compared with traditional Chinese medicine, the therapeutic effect of Western medicine for acute disease is greater:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

46. Compared with Western medicine, traditional Chinese medicine has fewer side effects:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

47. Compared with traditional Chinese medicine, the therapeutic effect of Western medicine is more apparent:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

48. Compared with Western medicine, traditional Chinese medicine causes less gastrointestinal side effects:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

49. Compared with Western medicine, traditional Chinese medicine is slower and less potent in its action:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

50. Traditional Chinese medicine treats the causative agent while Western medicine only relieves symptomatic distress:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

51. Traditional Chinese medicine should be prioritised over Western medicine when it is equally effective:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

52. The labelling of the contents of Western medicines is more accurate than traditional Chinese medicine:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

53. Traditional Chinese medicine can cure diseases and also promote health:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

54. Traditional Chinese medicine can improve one's constitution:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

55. Traditional Chinese medicine can have a restorative effect which can promote health over time:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

56. Western medicine is used only when all other treatments in traditional Chinese medicine have failed:

- ☐ Strongly agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

SECTION 4 - DEMOGRAPHIC INFORMATION

In order to help us understand a little bit about you. Please kindly provide answers to the following questions:

57. What sex are you?

- ☐ Male
- ☐ Female

58. What is your age in years?

59. Where were you born?

- ☐ Hong Kong
- ☐ Singapore
- ☐ Macau
- ☐ Mainland China
- ☐ Taiwan
- ☐ Other (please specify) _____

Finally, we would like to interview some Chinese medicine practitioners who have completed this questionnaire. If you are able to take part in the interview, please provide your name and contact telephone number in the boxes below:

Name:		Telephone number:	

Thank you for taking the time to complete the questionnaire!

Appendix L: Information Sheet - TCM Practitioner Questionnaire

INTRODUCTION

We are conducting a study to explore how Chinese medicine is utilised and practised in Hong Kong. You have been asked to participate in this study because you are a practising TCM practitioner.

WHAT IS THE PURPOSE OF THE STUDY?

Chinese people have their own values and perceptions about health and illnesses, and these values can influence the type of medical treatment they may seek out when they are ill. It is possible that Chinese people only utilise Chinese medicine to treat diseases that mainstream Western medicine cannot cure, or because of the relatively lower cost and fewer side effects that Chinese medicine has compared to Western forms of medicine, or it may be because of some other reasons. The purpose of this study, therefore, is to examine the utilisation and practice of Chinese medicine in Hong Kong, from the perspective of Chinese people's attitudes, perceptions and beliefs, and health perceptions towards Chinese medicine, as well as the disease conditions for which Chinese medicine treatment is sought and whether there are differences associated with the different locations.

DO I HAVE TO TAKE PART?

No, it is entirely up to you to decide whether or not you want to take part in this study. If you do take part, you will be given a copy of this Information Sheet, which you may keep for your own reference. Furthermore, as your participation in this study is entirely voluntary, if you decide that you do not want to participate, or later, that you wish to withdraw from the study, your decision will not result in any adverse effects.

WHAT DO I HAVE TO DO?

In a short interview, lasting no more than 45 minutes, we will ask you some questions about Chinese medicine and record your answers to the questions. So that the information obtained from the interview can be summarised, recording of the interview is necessary.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

It is anticipated that approximately five TCM practitioners will be interviewed as part of this study. If you decide to be in this study, you will be one of approximately fifteen TCM practitioners who will take part in this research study.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

There are no direct benefits for taking part in this study. But if you do agree to take part, the information that we obtain will most certainly help us to understand how Chinese medicine is practised by Chinese people in Hong Kong.

WHAT ARE THE POSSIBLE INDIRECT BENEFITS OF TAKING PART?

The possible indirect benefits of taking part in this study are that the information obtained from performing the research will provide a better understanding of traditional health beliefs of Chinese patients who use Chinese medicine and may also assist healthcare workers who manage and provide healthcare better understand the needs of Chinese patients in non-Chinese communities.

ARE THERE ANY FORESEEABLE RISKS INVOLVED IN TAKING PART IN THIS STUDY?

We do not anticipate any risk associated with this study.

WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

Yes, we will not use your name or any other information that might identify you and all information that is collected about you during the course of the research will be kept strictly confidential. Any information about you which is used will have your name and address removed so that you cannot be recognised from it. Furthermore, to protect your confidentiality, your name or other identifying data about you will not be recorded during the interview.

WILL I BE PAID?

You will not be paid for taking part in this study. However, individuals who have completed the questionnaire associated with this study and who agree to be interviewed will be given HKD 100 as a transportation subsidy to cover the cost of their travel, in order to participate in the interview.

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

We will write a research report about the results obtained from the study. This report will be available in January 2010. If you would like a copy of the summary of the report, please contact the researcher whose name and address is given below.

WHO HAS REVIEWED THE STUDY?

1. The Middlesex University School of Health and Social Sciences
   Health Studies Ethics, Sub-Committee.
2. The Chinese University of Hong Kong
   Survey and Behavioural Research Faculty Sub-Committee.

Appendix M: Information Sheet - TCM Practitioner Questionnaire

研究題目

華人在香港的中醫使用狀況。

引言

我們正進行一項香港研究去探討香港使用中醫藥的情況。由於您正在中醫診所接受中醫師的治療，所以我們邀請您參與這次研究。

這次研究目的是什麼?

華人對健康及疾病有本身的價值觀及觀點。他們在生病時，這些價值觀及觀點可能會影響他們尋求治療的類別。 華人可能僅使用中醫藥治療一些西醫不能醫治的疾病，或因為中藥較西藥成本低和較少副作用，又或可能因為某些其它原因。 所以本研究的目的是從華人對中醫藥的態度、觀點、信念以及健康意識和尋求中醫藥治療時的疾病狀況等方面去探討香港人在香港使用中醫藥的情況，並研究不同地區會否有不同的情況。

我是否必須參與?

不是，您可全權決定是否參與本研究。如果您決定參與，我們將給你這一份資訊函作保存以供參考。 此外，因為您的參與完全是自願，如果您決定不參與，或在其後希望退出這次研究，您的決定不會有任何負面影響。

我需要做什麼?

如果您同意參與這次研究，我們希望您能花15-20分鐘完成隨附的問卷。

有多少人參與這次研究?

參與這次研究的病人數目視乎中醫診所的數目，以及到診所求診病人人數而定。

參與這次研究會否得到任何的利益?

參與這次研究的人士不會直接獲得利益，但我們希望研究所收集的資料可幫助我們了解華人在香港使用中醫藥的情況。

參與這次研究會否得到任何間接利益?

參與這次研究的可能間接利益是令我們更明白使用中醫藥的病人的傳統健康信念，以及幫助負責管理和提供健康護理的醫護人員更明白在非華人社會中華裔病人的需要。

參與這次研究會否有任何可預見的風險?

我們預期這次研究沒有任何風險。

我參與這次研究會否保密?

絕對會。我們在進行研究時所收集有關您的所有資料將絕對保密。我們將刪去您的名稱、地址和任何其他可辨別身份的資料。

我會有報酬嗎?

您不會因為參與這次研究而得到任何報酬。然而，完成這份問卷並同意進行訪問的人士可獲得100港元，作為接受訪問的交通津貼。

研究的結果有什麼用途?

我們將會根據研究的結果編寫成研究報告。有關報告將於2010年1月公佈。如果您希望獲得該報告的摘要，請按以下的名稱及地址聯絡研究員。

誰負責審閱這次研究?

聯合CUHK-NTEC臨床研究倫理委員會
呂智宇臨床科學樓8樓
威爾斯親王醫院
沙田
香港

Appendix N: TCM Practitioner Questionnaire

中醫師的問卷調查

本問卷調查旨在探討亞洲區內不同中國人社區對中醫藥(TCM)的使用習慣。

指引

1. *請回答所有問題。*
2. *請使用 (✓) 或 (X) 回答問題。*
3. *於完成本問卷後，請以所提供的回郵信封寄回(郵費已預付)。*

第1部份 – 您對中藥的習慣

1. 您每周平均有多少時間以中醫診症?

   ☐ 沒有 → 如果選擇沒有，您毋需繼續回答任何問題。請將本問卷放進預先提供的信封並交回。多謝
   ☐ 5-10小時
   ☐ 11-16小時
   ☐ 17 to 22小時
   ☐ 23 to 28小時
   ☐ 29 to 34小時
   ☐ 35 to 40小時
   ☐ 41小時或以上

2. 您每周會有幾多次用中醫診症?

   ☐ 少於10次
   ☐ 10-25次
   ☐ 26-50次
   ☐ 50次以上
   ☐ 不適用

3. 於診症、針灸或以中藥治療時，您是否主要依據中醫的理念及理論?

   ☐ 是
   ☐ 不是

4. 您會否使用西醫的診斷去指導你的針灸或中藥治療?

   ☐ 會
   ☐ 不會

5. 於診症時，您曾否使用以下中醫藥的治療方式?

☐ 針灸(以手法進針穿過皮膚進行刺激)
☐ 激光針灸
☐ 電子針灸
☐ 耳針
☐ 中藥(煎藥)
☐ 中藥(藥丸、藥片、藥粉或藥水)
☐ 外用中藥
☐ 中醫 (推拿、按摩)
☐ 中醫的飲食意見
☐ 生活方式的意見
☐ 灸
☐ 拔罐
☐ 強身健體的意見(太極、氣功)
☐ 穴位注射療法
☐ 瘢痕灸
☐ 刮痧
☐ 梅花針技術
☐ 埋針
☐ 其他(請注明) _____

6. 平均而言，中醫初次診症需時多久?

☐ 最多5分鐘
☐ 5-20分鐘
☐ 20-30分鐘
☐ 超過30分鐘

7. 你以中醫初次診症的診金是多少?

8. 平均而言，覆診需時多久?

☐ 最多5分鐘
☐ 5-20分鐘
☐ 20-30分鐘
☐ 超過30分鐘

9. 你覆診的診金是多少?

10. 於診症時，您會否使用西方的診療測試、程序及/或檢查(如驗血及X光等)?

☐ 會
☐ 不會

11. 您是自行採用西方的診療測試、程序及/或檢查，還是由病人或同業提供?

☐ 自行採用
☐ 由病人或同業提供

12. 於診症時，您是否經常進行西方的診療測試、程序及/或檢查?

自行提出

☐ 永不使用
☐ 偶然
☐ 半數情況使用
☐ 經常
☐ 一直使用

由病人或同業提供

☐ 永不使用
☐ 偶然
☐ 半數情況使用
☐ 經常
☐ 一直使用

13. 您有否使用以下測試?

☐ 心電圖(ECG)
☐ 超聲波
☐ X光
☐ 電腦斷層掃描 (CT scan)/ 磁力共振掃描 (MRI scan)
☐ 驗血
☐ 驗尿
☐ 其他(請注明) _____

14. 於診症時，您有否使用任何西方醫療器具?

☐ 有
☐ 沒有

15. 如果有，請說明使用什麼西方醫療器具?

☐ 探熱針
☐ 血壓計
☐ 聽診器
☐ 其他(*請注明*) _____

16. 您有否保留每位新病人的醫療記錄?

☐ 有
☐ 沒有

17. 您會否記下每次覆診的詳情?

☐ 會
☐ 不會

18. 您如何保存醫療記錄及資料?

☐ 紙或卡紙
☐ 電腦化記錄
☐ 電腦及紙或卡紙一起使用
☐ 其他(請注明) _____

第2部份 – 您的資歷及培訓方式

19. 您從事中醫藥治療多少年?

☐ 0-4年
☐ 5-9年
☐ 10-14年
☐ 15-19年
☐ 20-24年
☐ 25-29年
☐ 30-34年
☐ 35-39年
☐ 40-44年
☐ 45年或以上

20. 您如何獲得初步的中醫資格?

	年期
☐ 師徒制下的學徙	_____
☐ 師徒制下的學徙 + 額外的課程作業	_____
☐ 中醫的兼讀課程	_____
☐ 中醫的全日制課程	_____

21. 您的中醫資歷於以下那些亞洲地區獲承認?

☐ 香港
☐ 澳門
☐ 中國大陸
☐ 新加坡
☐ 台灣
☐ 亞洲其他地區(請注明) _____

22. 請提供您已完成最高的中醫藥學歷：

☐ 證書
☐ 文憑
☐ 學士
☐ 碩士
☐ 博士
☐ 其他(請注明) _____

23. 您是否需要向某專業機構登記成為中醫師?

☐ 是
☐ 否

24. 您是否需要持續修讀任何正式的中醫課程?

☐ 是
☐ 否

25. **您是否任何中醫業協會的成員?**

☐ **不是**
☐ **是 – 請提供有關協會名稱：**

26. **除了中醫師的資歷外，您是否持有以下任何健康護理的專業資格?** (***您可選擇多於一種資格)***

☐ 脊椎按摩師
☐ 物理治療師
☐ 實驗室技術員
☐ 護士
☐ X光師
☐ 藥劑師
☐ 醫生
☐ 職業治療師
☐ 驗光師
☐ 牙醫
☐ 其他 (請注明) _____

27. **於診治期間，您有否因為針灸而對病人**產生任何不良影響? **(不包括針口流血及輕微血腫)**。

☐ **有**
☐ **沒有**

如果有，請說明那種不良影響及各項的程度：

	輕微	**中度**	**嚴重**
☐ **於治療時暈倒**	☐	☐	☐
☐ **噁心/嘔吐**	☐	☐	☐
☐ **更痛楚**	☐	☐	☐
☐ **氣胸**	☐	☐	☐
☐ **局部皮膚感染**	☐	☐	☐
☐ **精神障礙**	☐	☐	☐
☐ **抽搐**	☐	☐	☐

☐ **其他(請註明)**_____

28. 於您診療時，有沒有病人因為服用或採用中醫藥而導致出現任何嚴重不良響?

☐ 有
☐ 沒有

如果有，請說明那種不良影響及各項的程度：

	輕微	中度	嚴重
☐ 嚴重胃腸症狀	☐	☐	☐
☐ 皮膚出現嚴重反應	☐	☐	☐
☐ 嚴重疲勞	☐	☐	☐
☐ 黃疸病	☐	☐	☐
☐ 昏暈或頭昏	☐	☐	☐
☐ 心悸	☐	☐	☐
☐ 高血壓	☐	☐	☐
☐ 肝毒素(以驗血方式鑑定)	☐	☐	☐
☐ 腎臟毒素(以驗血方式鑑定)	☐	☐	☐
☐ 嚴重呼吸障礙	☐	☐	☐
☐ 中樞神經系統(CNS)的影響(如麻木、麻痺)	☐	☐	☐
☐ 轉介西醫/醫院	☐	☐	☐
☐ 死亡	☐	☐	☐
☐ 其他(請註明)_____	☐	☐	☐

第3部份 – 對中醫藥的認知

第3部份的問題是研究您對中西醫藥的認知：

29. 長久以來，西方醫學一直認為中醫藥學缺乏科學根據：

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

30. 應立法加強管制中草藥及中成藥入口?

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

31. 購買中草藥及中成藥必須有中醫的處方?

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

32. 所有中成藥應標明成份?

☐ 非常同意
☐ 同意
☐ 沒意見
☐ 不同意
☐ 非常不同意

33. **我覺得公眾人士信任中醫**

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

34. **與中醫藥相比，西方醫學更能準確地作出診斷**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

35. **中醫的專業水平良莠不齊**

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

36. **與中醫藥相比，西方醫學有較佳的醫療設備**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

37. **政府對中醫藥的承認不足**?

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

38. **與中醫藥相比，西方醫學的整體水平較佳**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

39. **法律應給予中西醫等同的地位**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

40. **與中醫相比，西方醫學的教育及培訓過程較嚴格**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

41. **我覺得公眾人士認為中藥是安全的**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

42. **與中醫藥相比，西方醫學使用較科學的方法**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

43. **與中醫藥相比，西方醫學更精於特定的疾病**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

44. **與西藥相比，中藥的治療較有效**:

- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

45. **與中醫藥相比，西藥更快見效**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

46. **與西藥相比，中醫藥對慢性疾病的治療較有效**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

47. **與西藥相比，中藥對急性病的治療較有效**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

48. **與西方醫藥相比，中藥的副作用較少**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

49. **與中藥相比，西方醫藥的治療效果較明顯**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

50. **與西方醫藥相比，中醫藥在胃腸方面**產生較少副作用:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

51. **與西方醫藥相比，中藥起效較慢，效用較差**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

52. **中醫藥治療病源；西藥僅舒緩症狀**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

53. **如果中藥及西藥的治療效果相等時，應優先使用中藥**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

54. **西藥的藥物標籤較中藥準確**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

55. **中醫藥可治療疾病及促進健康**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

56. **中醫藥可改善個人的體質**:
- ☐ 非常同意
- ☐ 同意
- ☐ 沒意見
- ☐ 不同意
- ☐ 非常不同意

第4部份 – 個人資料

為了使我們進一步了解您，請提供以下資料：

57. 您的性別

☐ 男性
☐ 女性

58. 您的年齡

59. 您的出生地

☐ 香港
☐ 新加坡
☐ 澳門
☐ 中國大陸
☐ 台灣
☐ 其他地區(請註明) _____

我們希望能與部份完成本問卷的中醫師進行面談。如果您能夠與我們進行面談，請您在以下方格提供您的姓名及聯絡電話號碼：

名稱: 電話號碼:

多謝您完成本問卷。

Appendix O: Information Sheet - Patient Interview

INTRODUCTION

We are conducting a research study to explore how Chinese medicine is utilised in Hong Kong. You have been asked to participate in this study because you are currently attending a Chinese medicine clinic and receiving treatment form a Chinese medicine practitioner.

WHAT IS THE PURPOSE OF THE STUDY?

Chinese people have their own values and perceptions about health and illnesses, and these values can influence the type of medical treatment they may seek out when they are ill. It is possible that Chinese people only utilise Chinese medicine to treat diseases that mainstream Western medicine cannot cure, or because of the relatively lower cost and fewer side effects that Chinese medicine has compared to Western forms of medicine, or it may be because of some other reasons. The purpose of this study, therefore, is to examine the utilisation of Chinese medicine in Hong Kong from the perspective of Chinese people's attitudes, perceptions and beliefs, and health perceptions towards Chinese medicine, as well as the disease conditions for which Chinese medicine treatment is sought and whether there are differences associated with the different locations.

DO I HAVE TO TAKE PART?

No, it is entirely up to you to decide whether or not you want to take part in this study. If you do take part, you will be given a copy of this Information Sheet, which you may keep for your own reference. Furthermore, as your participation in this study is entirely voluntary, if you decide that you do not want to participate, or later, that you wish to withdraw from the study, your decision will not result in any adverse effects.

WHAT DO I HAVE TO DO?

In a short interview, lasting no more than 30 minutes, we will ask you some questions about Chinese medicine and record your answers to the questions. So that the information obtained from the interview can be summarised, recording of the interview is necessary.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

It is anticipated that approximately 5-8 people in total will be interviewed as part of this study.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

There are no direct benefits for taking part in this study. But if you do agree to take part, the information that we obtain will most certainly help us to understand how Chinese medicine is utilised by Chinese people in Hong Kong.

WHAT ARE THE POSSIBLE INDIRECT BENEFITS OF TAKING PART?

The possible indirect benefits of taking part in this study are that the information obtained from performing the research will provide a better understanding of traditional health beliefs of Chinese patients who use Chinese medicine and may also assist healthcare workers who manage and provide healthcare better understand the needs of Chinese patients in non-Chinese communities.

ARE THERE ANY FORESEEABLE RISKS INVOLVED IN TAKING PART IN THIS STUDY?

We do not anticipate any risk associated with this study.

WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

Yes, all information that is collected about you during the course of the research will be kept strictly confidential. Any information such as your name address or any other form of identity will be removed so that you cannot be recognised from it. Furthermore, to protect your confidentiality, your name or other identifying data about you will not be recorded during the interview.

WILL I BE PAID?

You will not be paid for taking part in this study. However, individuals who have completed the questionnaire associated with this study and who agree to be interviewed will be given HKD 100 as a transportation subsidy to cover the cost of their travel, in order to participate in the interview

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

We will write a research report about the results obtained from the study. This report will be available in January 2010. If you would like a copy of the summary of the report, please contact the researcher whose name and address is given below.

WHO HAS REVIEWED THE STUDY?

The Chinese University of Hong Kong-New Territories East Cluster Research Ethics Committee (CREC), Hong Kong.

WHO IS ORGANISING THE STUDY?

The School of Chinese Medicine School, the Chinese University of Hong Kong, Shatin, New Territories, Hong Kong.

Appendix P: Patient Interview Questions

Duration of the interview: 45 minutes

1. How often do you go to a Chinese medicine practitioner?

2. What medical conditions do you think Chinese medicine is suitable for treating?

3. With respect to your most recent visit, what are your expectations concerning the outcome of the treatment for your condition?

4. Based on your own knowledge and understanding of Chinese medicine, can you explain how this influences your decision to seek treatment from a Chinese medicine practitioner?

5. What would you say are the strengths of Chinese medicine compared with Western medicine and can you give some examples?

6. Why, and under what circumstances, do you think that you would use Chinese medicine as well as, or instead, of Western medicine?

7. When consulting a Chinese medicine practitioner, describe how you determine if they are qualified to practice?

8. How, and to what extent do you think Chinese medicine could be integrated with Western medicine in the future?

9. Has any past or recent legislation relating to Chinese medicine influenced your decision to consult a Chinese medicine practitioner?

10. Do you have anything else you want to tell me about Chinese medicine or your experiences of it?

Appendix Q: Information Sheet - Patient Interview

研究題目
華人在香港的中醫使用狀況。

引言

我們正進行一項香港研究去探討香港使用中醫藥的情況。由於您正在中醫診所接受中醫師的治療，所以我們邀請您參與這次研究。

這次研究目的是什麼?

華人對健康及疾病有本身的價值觀及觀點。他們在生病時，這些價值觀及觀點可影響他們尋求治療的類別。

華人可能僅使用中醫藥治療一些西醫不能醫治的疾病，或因為中藥成本較低和較西藥少副作用，又或可能因為某些其它原因。

所以本研究的目的是從華人對中醫藥的態度、觀點、信念以及健康意識和尋求中醫藥治療時的疾病狀況等方面去探討香港使用中醫藥的情況，並研究不同地區會否有不同的情況。

我是否必須參與?

不是，您可全權決定是否參與本研究。如果您決定參與，我們將給你這一份資訊函作保存以供參考。

此外，因為您的參與完全是自願，如果您決定不參與，或在其後希望退出這次研究，您的決定不會有任何負面影響。

我需要做什麼?

在一個不超過30分鐘的訪問中，我們將向您提出一些關於中醫藥的問題，並將錄下你的答案。我們將總結訪問所收集的所有資料，所以錄音是必須的。

有多少人參與這次研究?

預期總共5至8人會參加這次研究訪問。

參與這次研究會否得到任何的利益?

參與這次研究的人士不會直接獲得利益，但我們希望研究所收集的資料可幫助我們了解華人在香港使用中醫藥的情況。

參與這次研究會否得到任何間接利益?

參與這次研究的可能間接利益是令我們更明白使用中醫藥病人的傳統健康信念，以及幫助負責管理和提供護理的醫護人員更明白在非華人社會中華裔病人的需要。

參與這次研究會否有任何可預見的風險?

我們預期這次研究沒有任何風險。

我參與這次研究會否保密?

絕對會。我們在進行研究時所收集有關您的所有資料將絕對保密。我們將刪去您的名稱、地址和任何其他可辨別身份的資料。此外，為了保障您的私隱，我們將不會在訪問中錄下您的姓名或其他可辨別身份的任何數據。

我會有報酬嗎?
您不會因為參與這次研究而得到任何報酬。然而，完成這份問卷並同意進行訪問的人士可獲得100港元，作為接受訪問的交通津貼。

研究的結果有什麼用途?

我們將根據研究的結果編寫研究報告。有關報告將於2010年1月公佈。如果您希望獲得該報告的總結，請按以下的名稱及地址聯絡研究員。

誰負責審閱這次研究?

聯合CUHK-NTEC臨床研究倫理委員會
呂智宇臨床科學樓8樓
威爾斯親王醫院
沙田
香港

同意書
研究題目

華人在香港的中醫使用狀況。
請回答以下有關收集和使用研究數據的問題。

		是	否
1.	我已收得一份有關研究的資訊函。	☐	☐
2.	我已細閱並明白資訊函的內容。	☐	☐
3.	我已有機會提出有關這次研究的問題。	☐	☐
4.	我的提問已經得到令我滿意的答覆。	☐	☐
5.	我同意訪問時進行錄音，並作為研究用途。	☐	☐

名稱: (請以正楷填寫) _____

簽名: _____ 日期: _____

Appendix R: Patient Interview Questions

採訪持續時間：45分鐘

患者面試問題

1. 你有幾經常去睇中醫?

2. 你認為什麼病徵是適合由中醫治療?

3. 就你最近的一次求診，你對治療結果有什麼期望呢?

4. 你可否說明一下，你有的中醫知識和對中醫的認識會怎樣影響你去決定向中醫求診?

5. 你會認為與西醫比較，中醫的強項是什麼? 可以舉些例子嗎。

6. 為什麼及在什麼情況下，你認為你會同時使用中西醫或只使用中醫中藥?

7. 當你去睇中醫的時候，試形容一下你如何辨別出他們是一個合資格的中醫師?

8. 你認為中醫將來可以怎樣及在那種程度上與西方醫學結合?

9. 以往或最近有關中醫的立法有沒有影響你去睇中醫的決定?

10. **你有沒有其他關於中醫的事或有關中醫的經驗想告訴我**?

Appendix S: Information Sheet - TCM Practitioner Interview

INTRODUCTION

We are conducting a study to explore how (TCM) is utilised and practised in Hong Kong and Guangzhou. You have been asked to participate in this study because you are a (TCM) Practitioner.

WHAT IS THE PURPOSE OF THE STUDY?

Chinese people have their own values and perceptions about health and illnesses, and these values can influence the type of medical treatment they may seek out when they are ill. It is possible that Chinese people only utilise (TCM) to treat diseases that mainstream Western medicine cannot cure, or because of the relatively lower cost and fewer side effects that (TCM) has compared to Western forms of medicine, or it may be because of some other reasons. The purpose of this study, therefore, is to examine the utilisation and practice of (TCM) in Hong Kong, Guangzhou and Taipei from the perspective of Chinese people's attitudes, perceptions and beliefs, and health perceptions towards (TCM), as well as the disease conditions for which (TCM) treatment is sought and whether there are differences associated with the different locations.

DO I HAVE TO TAKE PART?

No, it is entirely up to you to decide whether you want to take part in this study. If you do take part, you will be given a copy of this Information Sheet, which you may keep for your own reference. Furthermore, as your participation in this study is entirely voluntary, if you decide that you do not want to participate, or later, that you wish to withdraw from the study, your decision will not result in any adverse effects.

WHAT DO I HAVE TO DO?

In a short interview, lasting no more than 30 minutes, we will ask you some questions about (TCM) and record your answers to the questions. So that the information obtained from the interview can be summarised, recording of the interview is necessary.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

It is anticipated that approximately fifteen CM practitioners in total will be interviewed as part of this study. Five of whom will be from Hong Kong, five from Guangzhou and five from Taipei. If you decide to be in this study, you will be one of approximately fifteen CM practitioners in this research study.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

There are no direct benefits for taking part in this study. But if you do agree to take part, the information that we obtain will most certainly help us to understand how (TCM) is practised by Chinese people in Hong Kong and Guangzhou.

WHAT ARE THE POSSIBLE INDIRECT BENEFITS OF TAKING PART?

The possible indirect benefits of taking part in this study are that the information obtained from performing the research will provide a better understanding of traditional health beliefs of Chinese patients who use (TCM) and may also assist healthcare workers who manage and provide healthcare better understand the needs of Chinese patients in non-Chinese communities.

ARE THERE ANY FORESEEABLE RISKS INVOLVED IN TAKING PART IN THIS STUDY?

We do not anticipate any risk associated with this study.

WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

Yes, we will not use your name or any other information that might identify you and all information that is collected about you during the course of the research will be kept strictly confidential. Any information about you which is used will have your name and address removed so that you cannot be recognised from it. Furthermore, to protect your confidentiality, your name or other identifying data about you will not be recorded during the interview.

WILL I BE PAID?

You will not be paid for taking part in this study. However, individuals who have completed the questionnaire associated with this study and who agree to be interviewed will be given HKD 100 as a transportation subsidy to cover the cost of their travel, in order to participate in the interview

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

We will write a research report about the results obtained from the study. This report will be available in January 2010. If you would like a copy of the summary of the report, please contact the researcher whose name and address is given below.

WHO HAS REVIEWED THE STUDY?

The Middlesex University School of Health and Social Sciences

Health Studies Ethics, Sub-Committee.

WHO IS ORGANISING THE STUDY?

The study is being organised by the School of Health and Social Sciences, Middlesex University, United Kingdom.

TCM PRACTITIONER INTERVIEW CONSENT FORM

Please answer each statement concerning the collection and use of the research data.

		Yes	No
1.	I have been given a copy of the Information Sheet for this study?	☐	☐
2.	I have read and understood the Information Sheet?	☐	☐
3.	I have been allowed to ask questions about the study?	☐	☐
4.	I have had my questions answered satisfactorily?	☐	☐
5.	I agree with the interview being recorded and used for research purposes	☐	☐

Name: (printed) _____

Signature: _____ Date: _____

Appendix T: TCM Practitioner Interview Questions

Duration of the interview: 45 minutes

1. Why did you decide to become a Chinese medicine practitioner?

2. For what medical condition would you advise a person to see a Western medical doctor rather than coming to you?

3. When patients consult you, what do you think their expectations are with respect to the outcome of the treatment for their condition?

4. Based on your own knowledge and understanding of Chinese medicine, can you explain how this influences your decision to treat a patient using Chinese medicine?

5. What would you say are the strengths of Chinese medicine compared with Western medicine and can you give some examples?

6. Why, and under what circumstances, do you think Chinese people would use Chinese medicine as well as, or instead, of Western medicine?

7. How do you think Chinese medicine could become more accepted by the Western medical community?

8. How, and to what extent do you think Chinese medicine could be integrated with Western medicine in the future?

9. Has any past or recent legislation relating to Chinese medicine influenced the way you practice it? If so, what?

10. Do you have anything else you want to tell me about Chinese medicine, or your experiences of it?

Appendix U: Information Sheet - TCM Practitioner Interview

資訊函
研究題目
華人在香港的中醫使用及中醫執業狀況。

引言

我們正進行一項研究去探討香港華人如何使用中藥及中醫行醫的情況。由於您是執業的中醫師，所以我們邀請您參與這次研究。

這次研究有什麼目的?

華人對健康及疾病有本身的價值觀及觀點。他們在生病時，有關的價值觀及觀點可影響他們尋求治療的類別。

華人可能僅使用中藥治療一些主流西藥不能醫治的疾病，或因為中藥較西藥成本低和較少副作用，又或可能因為某些其它原因。

所以本研究的目的是從華人對中醫藥的態度、觀點、信念以及健康意識和尋求中醫藥治療時的疾病狀況等方面去探討香港使用中醫藥的情況，並研究不同地區會否有不同的情況。

我是否必須參與?

不是，您可全權決定是否參與本研究。如果您決定參與，我們將給你一份資訊函以供參考。此外，因為您的參與完全是自願，如果您決定不參與，或在其後希望退出這次研究，您的決定不會有任何負面影響。

我需要做什麼?

在一個不超過45分鐘的訪問中，我們將向您提出一些關於中醫藥的問題，並將錄下對話內容。我們將總結訪問所收集的所有資料，所以錄音是必須的。

有多少人參與這次研究?

預期約有五位中醫從業員參與這次訪問。如果您決定參與這次研究，您將成為這次研究十五位受訪者其中一位。

參與這次研究會否得到任何的利益?

參與這次研究沒有直接的利益。但如果您同意參與，我們所收集的所有資料必定有助我們明白香港華人對中藥的使用習慣。

參與這次研究會否得到任何間接利益?

參與這次研究的潛在間接利益是令我們更明白使用中醫藥的病人的傳統健康信念，以及幫助提供健康護理的護理員更明白在非華人社會中華裔病人的需要。

參與這次研究會否有任何可預見的風險?

我們預期這次研究沒有任何風險。

我參與這次研究會否保密?

絕對會。我們絕對不會使用您的姓名或任何其它可辨別您身份的資料。所有在研究過程中所收集的資料將保密。我們將刪去您的名稱、地址和任何其他可辨別身份的資料。此外，為了保障您的私隱，我們將不會在訪問中錄取您的姓名或其他可辨別身份的任何資料。

我會有報酬嗎?

您不會因為參與這次研究而收到任何報酬。然而，完成這份問卷並同意進行訪問的人士會得到100港元，作為接受訪問的交通津貼。

研究的結果有什麼用途?

我們將根據研究的結果編寫研究報告。有關報告將於2015年1月公佈。如果您希望獲得該報告的摘要，請按以下的名稱及地址聯絡研究員。

誰負責審閱這次研究?

聯合CUHK-NTEC臨床研究倫理委員會
呂智宇臨床科學樓8樓
威爾斯親王醫院
沙田
香港

同意書
研究題目

華人在香港的中醫使用及中醫執業狀況。

請回答以下有關收集和使用研究數據的問題。

		是	否
1.	我已獲得一份有關研究的資訊函。	☐	☐
2.	我已細閱並明白資訊函的內容。	☐	☐
3.	我曾經有機會提出有關這次研究的問題。	☐	☐
4.	我已經得到令我滿意的答覆。	☐	☐
5.	我同意訪問時進行錄音，並作為研究用途。	☐	☐

名稱: (請以正楷填寫)_____

簽名: _____日期: _____

Appendix V: TCM Practitioner Interview Questions

面試時間：45分鐘

1. 為什麼你會決定要成為一位中醫師?
2. 在什麼病徵或情況下，你會建議某人去西醫求診而不來找你?
3. 當病人來向你求診時，你會覺得他們在接受你的治療時會有什麼期望?
4. 你可否說明一下，你有的中醫知識和對中醫的認識會怎樣影響你去決定用中醫治療你的病人?
5. 你認為與西醫比較，中醫的強項是什麼? 請舉例。
6. 為什麼及在什麼情況下，你認為中國人會同時使用中西醫藥或只用中醫中藥?
7. 你認為怎樣才會令中醫更為西方醫學界所接受?
8. 8.你認為中醫將來可以怎樣及在那種程度上與西方醫學結合?
9. 以往或最近有關中醫的立法有沒有影響你的行醫方式? 如有，是什麼?
10. 你有沒有其他關於中醫的事或有關中醫的經歷想告訴我?

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