

**Regulation of the Practice of Traditional Medicine in China, India,
and Malaysia**

By

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The Candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

The trend towards increased traditional medicine utilisation is a global phenomenon. Malaysia is a prime exemplar. However, the regulation of traditional medicine practice there has not kept pace with this trend. Malaysia plans to develop traditional healthcare policies and legislation to integrate traditional medicine into the current formal healthcare system. How this might be most effectively accomplished is the core concern of this thesis.

Currently, the national healthcare policy on traditional medicine is being formulated and implemented, but legislation is not yet in place. The policy challenge is how best to cultivate a standard policy across the various traditional systems. This involves such issues as follow:

- The definition of legal power,
- The framing of rules and regulations, and
- The standardisation of a traditional medicine education system.

In this study, the research questions are as follows:

1. How do India and China regulate traditional medicine practices?
2. What can Malaysia learn from the Indian and Chinese regulatory systems?
3. How can the intention to regulate be justified?
4. What would be the best way to achieve and oversee this regulatory system?

To answer these questions, a comparative public policy analysis is conducted on traditional medicine in China and India, both of which have considerable experience in this area. The data is primarily gathered through in-depth interviews of three professional groups; policy makers, academics, and traditional medicine practitioners from the three countries.

Both China and India have well-established traditional medicine systems and considerable legislative and regulatory experience, but have adopted radically

different approaches. In China, traditional medicine has been integrated into the mainstream healthcare system. Indian systems of medicine are practised in parallel to modern medicine. The question arises of which strategy, or which components, Malaysia should adopt.

While traditional medicine is scheduled for integration into Malaysia's mainstream healthcare system, policy does not guarantee equality with modern medicine. Moreover, the policy of one country may not be suitable for another country. Malaysia could recast the models of China and India, and establish a comprehensive policy on traditional medicine. Integrating traditional medicine into the mainstream healthcare system would be facilitated by an inclusive, consultative and formalised process of professionalisation.

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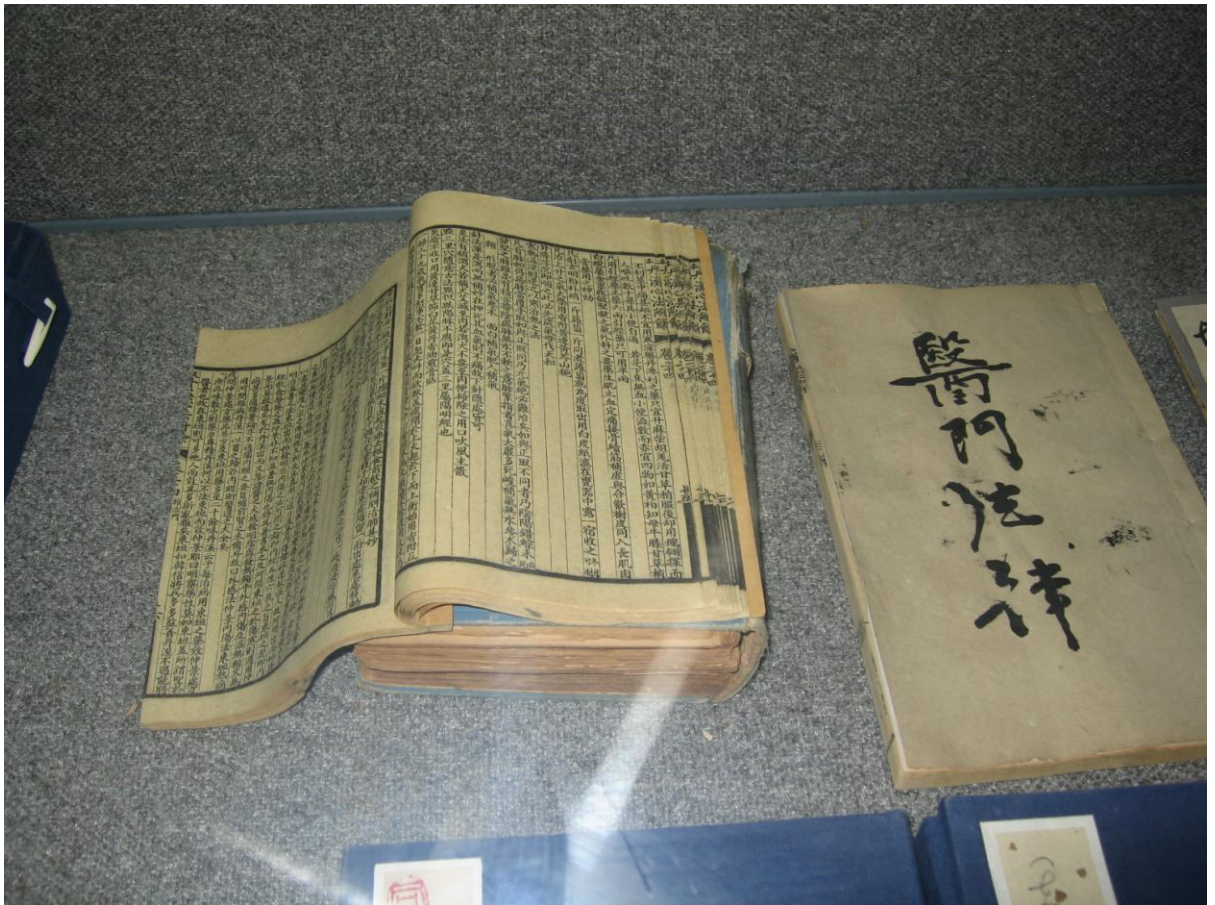
List of Abbreviations

AIAC	All India Ayurvedic Congress
AIDS	Acquired Immune Deficiency Syndrome
AIIMA	All India Integrated Medical Association
ASHA	Accredited Social Health Activists
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BHU	Banaras Hindu University
BTRT	Beijing Tong Ren Tang
BUCM	Beijing University of Chinese Medicine
CACM	China Association of Chinese Medicine
CACMS	China Academy of Chinese Medical Sciences
CAM	Complementary and Alternative Medicine
CBD	Convention on Biological Diversity
CBIATC	China Beijing International Acupuncture Training Centre
CCIM	Central Council of Indian Medicine
CCP	Chinese Communist Party
CCRAS	Central Council of Research in Ayurveda and Siddha
CCRH	Central Council of Research for Homeopathy
CCRUM	Central Council of Research for Unani Medicine
CCRYN	Central Council for Research in Yoga and Naturopathy
CEU	Clinical Epidemiology Unit
CGCM	Consortium for Globalisation of Chinese Medicine
CMDA	Chinese Medical Doctors' Association
CME	Continued Medical Education
CNHC	Complementary and Natural Healthcare Council
COHRED	Council on Health Research for Development
CPD	Continued Professional Development
CRIS	Central Research Institute for Siddha
CSIR	Council for Scientific and Industrial
CTCM	Chinese Traditional Medicine Association

CUP	Cambridge University Press
EQD	Examination to Determine the Qualifications of Doctors
EQLD	Examination to Determine the Qualifications of Licensed Doctors
FCPAAM	Federation of Chinese Physicians and Acupuncturists Associations of Malaysia
FCPMDAM	Federation of Chinese Physicians and Medicine-Dealers Associations of Malaysia
FICCI	Federation of Indian Chambers of Commerce and Industry
FRLHT	Foundation for Revitalisation of Local Health Tradition
GAMH	Guang An Men Hospital
GAU	Gujarat Ayurvedic University
GCP	Good Clinical Practice
GDPH	Guangdong Provincial Hospital of Traditional Chinese Medicine
GLOBinMED	Global Information Hub on Integrated Medicine
GUCM	Guangzhou University of Chinese Medicine
HAKMS	Hakim Ajmal Khan Memorial Society
HMRC	Herbal Medicine Research Centre
HIV	Human Immunodeficiency Virus
HQ	Headquarters
ICMR	Indian Council of Medical Research
IMCC	Indian Medicine Central Council
IMR	Institute for Medical Research, Malaysia
INSTAR	International Network for Sustainable Technological Applications and Registration
INTRACOM	International Traditional and Complementary Conferences
IPR	Intellectual Property Rights
ISM	Indian Systems of Medicine
JATCM	Johor Academic of Traditional Chinese Medicine
KBH	Kepala Batas Hospital
KLATCM	Kuala Lumpur Academy of Traditional Chinese Medicine
LHMC	Lady Hardinge Medical College and Associated Hospitals

MAH	Maharishi Ayurveda Hospital
MATIM	Malaysian Association of Traditional Indian Medicine
MBBS	Bachelor of Medicine and Bachelor of Surgery
MCMA	Malaysian Chinese Medical Associations
MCOPS	Manipal College of Pharmaceutical Sciences
MCUT	Malaysian Council of Umbrella Bodies in Traditional and Complementary Medicine
MMC	Malaysian Medical Council
MOH	Ministry of Health
MOH & FW	Ministry of Health and Family Welfare
MOU	Memoranda of Understanding
MPHM	Malaysian Council for Homeopathic Medicine
MQA	Malaysian Qualifications Agency
MSCT	Malaysian Society for Complementary Therapies
MyIPO	Intellectual Property Corporation of Malaysia
NGOs	Non-governmental Organisations
NIA	National Institute of Ayurveda in Jaipur
NIF	National Innovation Foundation of India
NIS	National Institute of Siddha Medicine
NIUM	National Institute of Unani Medicine
NRHM	National Rural Health Mission
NUCM	Nanjing University of Chinese Medicine
OPD	Out-patient Department
OUP	Oxford University Press
PRC	People's Republic of China
PUTRAMAS	Federation of Traditional Malay Medicine of Malaysia
RCT	Randomised Controlled Clinical Trials
RGUHS	Rajiv Gandhi University of Health Sciences
RMB	Renminbi
RML	Dr. Ram Manohar Lohia Hospital
RMP	Registered Medical Practitioners

SARS	Severe Acute Respiratory Syndrome
SATCM	State Administration of Traditional Chinese Medicine
SJIMH	Sri Jayachamarajeudrax Institute of Indian Medicine Hospital
SMC	Siddha Medical College in Chennai
SMLCAA	Siddha Medical Literature Centre Alumni Association
SPV	Special Purpose Vehicle
SRISTI	Sustainable Technologies and Institutions
SSCASRH	Sri Sri College of Ayurvedic Science & Research Hospital
SUCM	Shanghai University of Chinese Medicine
TC	Tibbia College
TCM	Traditional Chinese Medicine
T&CM	Traditional and Complementary Medicine
TCAM	Traditional and Complementary/Alternative Medicine
TCMC	Traditional Chinese Medicine College in North Malaya
TCMIM	Traditional Chinese Medical Institute Malaysia
TM	Traditional Medicine
THETA	Traditional and Modern Health Practitioners Together Against AIDS
TKDL	Traditional Knowledge Digital Library
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TSGA	Tamil Nadu Siddha Graduates Association
TSH	Tung Shin Hospital
TUCM	Tianjin University of Chinese Medicine
UK	United Kingdom
USPTO	United States Patent and Trademark Office
WFCMS	World Federation of Chinese Medicine Societies
WHA	World Health Assembly
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization



Classical literature of Chinese medicine has documented the rules and regulations of the practice of traditional Chinese medicine. (Photo courtesy of C.S.Goh)

Chapter 1

INTRODUCTION

Human interaction is dominated by rules, customs, practices, values and regulations.
Doris Schroeder, 2010¹

1.1 Background

The universal usage of traditional knowledge and skills to address the variety of health needs exists across cultures. Today, a large number of medicinal plants have found their way into the modern scientific pharmacopoeia.

Across cultures, Traditional Medicine (TM) centers on integrating the emotional, physical, mental and spiritual aspects of being, aiming to restore a state of systemic balance between the individual and nature. D.C. Jayasuriya and Shanti Jayasuriya define the practice of TM as “covering consultative, diagnostic, and care procedures that make exclusive use of traditional methods.”² This definition is based on the notion that disease and its treatment are individualised, in that they vary from one system to another, from one community to another, and from one individual to another. Today, a large population in developing countries use culturally familiar traditional medicine, ranging from 60% or so in China to more than 80% of the populace in Africa.³

There is a growing international consensus among health policy makers that traditional knowledge and practices can be integrated into the mainstream healthcare system. The policy rhetoric in defense of this emphasizes equitable development and sustainable consumption.⁴ In other words, healthcare integration

¹ Schroeder, D., “Traditional Knowledge, Indigenous Communities and Ethical Values,” in *Traditional Knowledge in Policy and Practice: Approaches to Development and Human Well-being*, ed. S.M. Subramanian, and B. Pisupati (United Nations University Press, 2010), 97-129, 97.

² Jayasuriya, D.C., and S. Jayasuriya, “Legislation and Regulation of Traditional Systems of Medicine – systems, practitioners and herbal products,” in *Traditional Medicine in Asia*, ed. R.R. Chaudhury, and U.M. Rafei (WHO, 2002), 195-208, 204.

³ World Health Organization, *WHO TM Strategy 2002-2005* (WHO, 2002), 1.

⁴ *Ibid.*, 7-18.

is encouraged to improve healthcare accessibility. Over a period of several decades, the TM systems of China, the Republic of Korea, and Vietnam, among others in Asia, have been integrated into the national healthcare system. From the side of the World Health Organization as well as from national governments, there is now a global push to recognise, protect, and regulate traditional medical knowledge, training and practice.

Many countries are beginning to develop policy and legislation to regulate TM. In the past decade, India and China have built up among the most rigorous and far-reaching policies, legislation and regulation for TM in Asia, including regulation of products, practitioners and practices. There are legislations such as the Indian Medicine Central Council Act 1970 (IMCC Act), and the Law on Licensed Doctors of the People's Republic of China 1998, both of which are concerned with monitoring traditional practitioners and practices, but not the products. Legislation concerned with monitoring traditional medical products include the Indian Drug and Cosmetic Act 1940; Dangerous Drug Act 2000; India's 2005 Patent Act; Drug Control Law of The People's Republic of China 2001; and Regulation of People's Republic of China on Traditional Chinese Medicines 2003.

Malaysia is one country planning to develop similar policies and legislation and this is the main focus of this doctoral research. In 2001, a national policy was launched to ensure public safety when using traditional and complementary practices and products, and to facilitate the integration of the above system of medicine into the current healthcare system.⁵ In 2002, a working committee was formed to draft a bill to regulate traditional and complementary medicine (T&CM).⁶

The development of any legislative framework naturally moves alongside national policy and support for policy objectives or intended outcomes. Consequently, two

⁵ Ministry of Health, *National Policy on Traditional/Complementary Medicine, Malaysia*, 1st ed. (Ministry of Health Malaysia, 2001), 6.

⁶ T&CM Unit, *Concept Paper on Regulating Traditional and Complementary Medicine* (T&CM Unit, 2002). (unpublished)

major issues in developing legal mechanisms in Malaysia with regard to T&CM are to ensure: (i) the safety of the public and (ii) access to healthcare services of its choice. As elsewhere, the Malaysian health authorities have the responsibility to protect people from being harmed by the use of herbal remedies or 'decoctions'.⁷ However, quality control of 'herbal medicines' is not the only strategy to ensure public safety.⁸ The training and competence of TM practitioners also plays a significant role. That is to say, the development of education and regulatory structures such as licensing and registration of institutionally qualified TM practitioners can protect the public against the possibility of substandard and fraudulent traditional medical practices.

Malaysian health authorities plan to integrate the systems of TM into the mainstream healthcare system to allow both modern and traditional systems to complement each other. A 2004 nation-wide community survey conducted by the Herbal Medicine Research Centre (HMRC) reveals that 69.4% of the Malaysian population has used TM in their life-time, with 55.6% having used TM in the past 12 months.⁹ In Malaysia, modern medicine remains the mainstream or official system of medicine used.¹⁰ With the integration of both systems of medicine, the public will have access to quality healthcare service through making an informed choice, made possible only if effective channels of communication and understanding of related information exist among all parties involved: TM practitioner, allopathic physician, and patient. It is hoped by Government that with the necessary legal and ethical structures in place, both the Malaysian Ministry of

⁷ "Decoctions is the extraction of the water-soluble substances of a drug or medicinal plants by boiling or liquor containing the concentrated essence of a substance, produced as a result of heating or boiling" (origin Latin, from *decoquere* 'boil down'). Anderson, S. *et al.*, eds., *Collins English Dictionary* (HarperCollins, 2006), 433.

⁸ "Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products that contain active ingredients parts of plants, or other plant materials, or combinations thereof." WHO, *WHO Traditional Medicine Strategy 2002-2005* (WHO, 2002), 1.

⁹ Tahir, A. *et al.*, "The Utilisation of Traditional & Complementary Medicine in the Malaysian Population: A Community Based Survey," *Journal of Health Management* (September 2006): 76.

¹⁰ Medicine is the science that concerns with the disease prevention and curing. Modern medicine involves the application of health science, biomedical research, and medical technology in disease management. See Hensyl, W.R., *Stedman's Medical Dictionary*, 25th ed. (Williams & Wilkins, 1990), 931.

Health and TM practitioner-associations will be able to work hand-in-hand to make the traditional healthcare service part and parcel of the mainstream Malaysian healthcare system.

As evidenced by the survey, many people rely on TM for their basic healthcare needs by reason of trust in TM practitioners. Apart from its widespread role in managing common ailments, there may be potential for TM to contribute to the integrated management of epidemics. For example, in the Acquired Immune Deficiency Syndrome (AIDS) crisis in Africa, there is a possibility for partnership between modern and traditional healthcare approaches to effectively combat HIV/AIDS, given the availability of traditional healthcare services and the reliance of the local population on these services.¹¹ Traditional health practitioners often make excellent community educators in delivering crucial AIDS prevention messages. For example, through personal testimonies, stories, song, dance, drama and proverbs, the usage of condoms as well as the elimination of behaviour involving risk, such as the sharing of razor blades, can be demonstrated.¹² Moreover, traditional health practitioners have been reported to provide psychological and palliative treatment for people with HIV/AIDS, and using plants to treat symptoms such as pneumonia and herpes zoster.¹³

Understanding the significance of the role of TM, especially following the Beijing Declaration of 1991¹⁴ and 61st World Health Assembly (WHA) in 2008,¹⁵ the World

¹¹ Bodeker, G. *et al.*, "HIV/AIDS: Traditional Systems of Health Care in the Management of a Global Epidemic," *Journal of Alternative and Complementary Medicine* 12(6) (2006): 563.

¹² Joint United Nations Programme on HIV/AIDS, *Ancient Remedies, New Disease: Involving Traditional Healers in Increasing Access to AIDS Care and Prevention in East Africa* (UNAIDS, 2002).

¹³ Fink, S., "International Efforts Spotlight Traditional, Complementary, and Alternative Medicine," *American Journal of Public Health* 92(11) (2002): 1737.

¹⁴ Liu, B.Y., "The Role of Traditional Medicines and Practices in the National Health Care System," (paper presented at the WIPO Asian Regional Seminar on Intellectual Property Issues in the Field of Traditional Medicines, New Delhi, October 7-9, 1998).

¹⁵ This meeting of the Intergovernmental Working Group aims to address the inequality in the healthcare access in developing countries. Through the designed 'Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property', innovation is promoted, human capacity is established, access to medicine is improved, and resources are reallocated. See "Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property,"

Health Organization (WHO) adopted the “Beijing Declaration” on 8th November 2008 at the meeting of the WHO Congress on Traditional Medicine in Beijing.¹⁶ In accordance with the national requirement and relevant legislation, the Declaration emphasises respecting and promoting TM, formulating policy on TM, encouraging integrated medicine, establishing international collaboration especially in research and innovation development, professionalising TM and continuing medical education, and teaming of the allopathic and traditional professional groups. In short, the Declaration aims to promote safe and high quality TM, and integrate TM into the mainstream healthcare system globally.

1.2 History

A brief history of the evolution of traditional Indian and Chinese medicine is appropriate within the scope of this thesis. The systems of traditional Indian and Chinese medicine remain the most ancient yet living systems of medicine. Both of these systems of medicine have a “sound philosophical, experiential and experimental basis”.¹⁷ In accordance with Ayurveda,¹⁸ all objects in the universe including human beings are made up of the five basic elements (*Panchamahabhutas*), namely earth (*prithvi*), air (*vayu*), fire (*teja*), water (*aap*) and space (*akasha*). The normal balance of the bodily elements can be disturbed by specific waste products of digested food known as humours (*doshas*) - air (*Vata*), fire (*Pitta*), and water (*Kapha*).¹⁹ Imbalance of the bodily elements or the *doshas*

Resolution WHA 61.21, http://apps.who.int/gb/ebwha/pdf_files/A61/A61_R21-en.pdf (accessed October 29, 2009).

¹⁶ See “Beijing Declaration,” http://www.wpro.who.int/china/sites/hsd/beijing_declaration.htm (accessed June 2, 2009).

¹⁷ Patwardhan, B. *et al.*, “Ayurveda and Traditional Chinese Medicine: A Comparative Overview,” *Evidence-Based Complementary and Alternative Medicine* 4(2) (2005): 465.

¹⁸ [Http://indianmedicine.nic.in/welcome.html](http://indianmedicine.nic.in/welcome.html) (accessed April 4, 2007). The three indigenous systems in India – Ayurveda, Siddha and Unani – have a close similarity in their principles and doctrines, both fundamental and applied. Ayurveda is the most popular indigenous system in Indian society.

¹⁹ Vagbhatta, *Ashtanga Hridaya* 1.6. *Ashtanga Hridaya* is one of the compilations which contain the original and complete knowledge of Ayurveda and has remained as a source of reference in the teachings of Ayurveda over the last two thousands years together with *Suśruta Samhita* and *Caraka Samhita*.

produces disease. Harmonisation of these three *doshas* is mainly via diet, herbal decoction, purification therapies such as panchakarma, and exercise.

In comparison with traditional Indian medicine or Indian systems of medicine (ISM), traditional Chinese medicine (TCM)²⁰ considers humans to be at the centre of the universe, which is composed of wood (木), fire (火), earth (土), metal (金), and water (水).²¹ These five elements (五行) are regarded as systematically related in a cyclical manner. The movement of the universe gives rise to *yin* (阴) (passive or receding aspect of nature) and *yang* (阳) (active or advancing aspect of nature). The four bodily humours (essence, qi, blood and body fluid) and internal organ systems (藏府) play an important role in balancing the *yin* and *yang* in the human body.²² Proper formation, maintenance and circulation of these energies are essential for health. When the two energies fall out of harmony, disease develops. This holistic basis is considered a conducive approach to healing the human body.

The basic concept of TM is to view the human body as a holistic entity with an inseparable relationship with nature as a direct healing source. Moreover, the applied skills of medicine arise out of the accumulation of the practitioners' experiences based on successive disease treatments of many centuries, for example, acupuncture. Indian literature²³ confirms that the ISM began in India with the Vedic Aryans during the 18th–5th centuries B.C.E. Meanwhile, date inscriptions

²⁰ The term 'traditional Chinese medicine' is an international terminology which has been employed by the World Health Organization. As one of the member of WHO, Malaysia also uses the term 'TCM' to differentiate traditional system of medicine in China from the other traditional systems of medicine.

²¹ Chinese wordings for certain data gathered from China will be inserted in bracket following the translated or interpreted English version, especially specific terminologies or phrases. This will facilitate a better understanding for those who could read Chinese.

²² Liu, Y.C., *The Essential Book of Traditional Chinese Medicine*, ed. K. Vian and P. Eckman, trans. T.Y. Fang and L.D. Chen (Columbia University Press, 1988), 1: 66-93.

²³ Zysk, K.G., *Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery* (Oxford University Press, 1991); Filliozat, J., *The Classical Doctrine of Indian Medicine: Its Origins and its Greek Parallels* (Munshiram Manoharlal Oriental Booksellers & Publishers, 1964); Dick Van der Meij, ed., *India and Beyond: Aspects of Literature, Meaning, Ritual and Thought* (Kegan Paul International, 1997); and Frawley, D., *Ayurvedic Healing: A Comprehensive Guide* (Motilal Banarsidass, 1997).

found on bones and tortoise shells (甲骨文) reveal that TCM originated from the Shang dynasty (商朝 18th-12th centuries B.C.E.) over 3,500 years ago.²⁴ It could have been earlier but pre-historic evidence may have been lost prior to the invention of writing.

Western medicine was brought to India from the 16th century onwards with colonial rule.²⁵ The ISM was the mainstream medicine in India prior to the introduction of modern medicine. In the colonial period, due to lack of political, social and economic support and encouragement, the use of ISM was suppressed.²⁶ The Indian medical curriculum was eventually replaced by modern medical science. After Independence in 1947, the government acknowledged the benefits of ISM. In particular, after decades of committee failure to reach policy agreement, a political solution occurred in the 1960s after Pandit Shiv Sharma was elected as president of the All-India Ayurvedic Congress (AIAC), and Morarji Desai as traditional-oriented Prime Minister.²⁷ Sharma was elected to the Lok Sabha (India's Lower House of Parliament), and from this legislative platform he was able to introduce legislation to formalise the Indian Systems of Medicine. Regulatory councils for the education and practice of ISM were established under the IMCC Act 1970, marking a formal recognition of ISM in India. After the Declaration of Alma-Ata at the International Conference on Primary Health Care in 1978, the Indian Government realised that incorporation of ISM into modern medicine was a necessary strategy to achieve the widely-promoted WHO Primary Health Care target of 'Health for All' by 2000.²⁸ Ultimately, in 2003, with the support of the Indian Government, the AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha

²⁴ Unschuld, P.U., *Medicine in China: A History of Ideas* (University of California Press, 1985), 17. The first reliable historical dynasty in China is the Shang dynasty. The Shang Empire is the first Chinese dynasty to leave traces of therapeutic activities.

²⁵ Patterson, T.J.S., "The Relationship of Indian and European Practitioners of Medicine from the Sixteenth Century," in *Studies on Indian Medical History*, ed. G.J. Meulenbeld & D. Wujastyk (Motilal Banarsidass, 2001), 5: 111-120.

²⁶ Pioreschi, P., *A History of Medicine: Primitive and Ancient Medicine*, 2nd ed. (Horatius Press, 1996), 1: 253.

²⁷ Bodeker, G., "A Framework for Cost-Benefit Analysis of Traditional Medicine and Conventional Medicine," in *Traditional Medicine in Asia*, ed. R.R. Chaudhury and U.M. Rafei (WHO, 2002), 169.

²⁸ Lavekar, G.S., and S.K. Sharma, "Republic of India," in *WHO Global Atlas of Traditional, Complementary and Alternative Medicine: Text Volume*, ed. G. Bodeker et al. (WHO, 2005), 89.

and Homeopathy) department was established to prepare a good educational standard and research institute in the various ISMs.²⁹ This indicates that with the achievement of political power, a policy promoting a 'parallel model', in which modern medicine and ISM would be autonomous of each other and independently self-regulating, was formulated within the Indian healthcare systems. This policy allowed TM practitioners to set their own rules and regulations as well as a standard educational and training system to professionalise and develop ISM. This meant that regulation of TM practitioners came under the immediate administration of the AYUSH department composed of experts in the particular systems of medicine, while the government acted as the official watchdog, minus interference.

Similarly in China, Western medicine was introduced in the late 19th and early 20th centuries.³⁰ With this development, modern medical colleges were established while traditional medical schools were neglected and eventually demolished. TM practitioners faced a further threat especially after the Central Government passed a Bill "to ban TM in order to clear the way for developing medical work" in 1929.³¹ After the founding of the People's Republic of China (PRC) in 1949, the government revived and developed TCM when they realised its significant role in public healthcare.³² Allopathic doctors were encouraged to study TCM since the government wanted to incorporate both systems of medicine. Integration of both systems was clearly declared in the Constitution of the People's Republic of China 1982 which stated that the State should "develop Modern Medical Science and Traditional Chinese Medicine".³³ This ultimately led to the establishment of an independent Department of the State Administration of Traditional Chinese Medicine (SATCM) in 1988 to make policies and draw up laws and regulations. In its historical context, the process of integrating these two systems of medicine was

²⁹ [Http://www.indianmedicine.nic.in/html/ismh/objectives.htm](http://www.indianmedicine.nic.in/html/ismh/objectives.htm) (accessed April 8, 2007).

³⁰ Wang, Z.G., P. Chen, and P.P. Xie, *History and Development of Traditional Chinese Medicine*, ed. X.C. Xing (Science Press, 1999), 258.

³¹ Xie, Z.F., "Harmonisation of Traditional and Modern Medicine," in *Traditional Medicine in Asia*, ed. R.R. Chaudhury and U.M. Rafei (WHO, 2002), 118.

³² Liu, B.Y. *et al.*, "People's of Republic of China," in *WHO Global Atlas of Traditional, Complementary and Alternative Medicine: Text Volume*, ed. G. Bodeker *et al.* (WHO, 2005), 187.

³³ The Constitution of the People's Republic of China, 1982, Article 21.

guided by health officials trained in modern medicine in China. Integration of TCM and modern medicine also helped to overcome the shortage of funds in the healthcare system during economic reform, since 1980.³⁴

1.3 Origins of ISM and TCM in Malaysia

ISM reached Kedah (referred to as *Kadaram* in ancient Indian literatures), a small Malay Kingdom in the Malay Peninsula (today known as Peninsular Malaysia) via the existing trade routes, around the first century C.E.³⁵ Kedah was a home-port for Indian spice traders in the then Malay Peninsula. This is supported by evidence of fragments of Sanskrit inscription about a safe voyage on a slab, found by Captain James Low in the mid-nineteenth century.³⁶ Moreover, ancient Indian influences on the Malay Peninsula were illustrated by the archaeological findings of ancient temples with Vedic architecture in Southern Kedah.³⁷ The early influence of Indian traders and their knowledge and culture seem to have had a great impact on Malay culture, for example, beliefs in spirits of nature in the treatment of illness.³⁸

Similarly, the Malay Peninsula was used as a stop-off point to India since the first century C.E. by Chinese traders during their trading voyages, and Buddhist Chinese Monks who wished to pursue their religious studies in India.³⁹ They were attracted by the Malay Peninsula's rich sources of natural Southeast Asian products such as gold, spices and sandalwood which had medicinal value. In 1409, following Admiral Zheng He's third voyage to the Indian Ocean, some members of his delegation, including some TCM practitioners, settled in Melaka in the Malay

³⁴ Liu, X.Z., & Y. Yi, *the Health Sector in China Policy and Institutional Review*, <http://siteresources.worldbank.org/INTEAPREGTOPHEANUT/Resources/502734-1129734318233/policyandinstitutionalreview-final.pdf> (accessed March 11, 2010).

³⁵ Zain, S., A History of the Malay Peninsula, <http://www.sabrizain.org/malaya/early.htm> (accessed November 28, 2007).

³⁶ Ibid.

³⁷ Bodeker, G., eds., *Health and Beauty from the Rainforest: Malaysian Traditions of Ramuan* (Didier Millet, 2009), 132.

³⁸ Zain, *op. cit.*

³⁹ Bodeker, G., eds., *op. cit.*, 152-156.

Peninsula. In this way certain Chinese traditional practices were brought to the Malay Peninsula. Subsequently, the number of migrants from China to Malaya increased gradually. In particular, in the 1600s when tin mining was one of the well-known industries in Malaya.⁴⁰ Particularly in Kedah, Perak and Selangor, there were many tin-bearing types of granites. During that period tin was a very popular commodity with the Chinese and Europeans. Hence, there was a massive influx of workers from China to work the mines. The tough life in the mines led the workers into using opium as their basic medical care and for relief of pain. In the 1870s, a Chinese gentleman, Eu Kong Pai, decided to provide TCM care for these tin-mine workers to help them overcome their unhealthy dependency habit. Following that, he set up a Chinese medicine shop in Perak and called it Eu Yan Sang (*yu ren sheng* 余仁生).⁴¹ It was also the first Chinese medicine shop in Malaysia.

In the contemporary context, TM practitioners in Malaysia have yet to receive official or legislative recognition, as there is no specific legislation to regulate them and their practices directly. There is, however, a draft of a Traditional and Complementary Medicine Bill currently under review by the Ministry of Health (MOH), to be passed as law subsequent to parliamentary approval. TM in Malaysia has been under a certain level of voluntary self-regulation. The Health authorities require all TM practitioners to be registered with the relevant self-regulated practitioner-associations. The traditional practitioners have articulated their desire for freedom to manage their practice through a policy act developed and monitored by the traditional sector, like that of in India. However, presently, a different scenario is in place, one in which the Malaysian health authorities prefer to control and regulate the practice of TM and its practitioners, with the aim of integrating traditional systems into the current national healthcare system.

⁴⁰ "Tin Mining in Caves," <http://www.cavesofmalaysia.com/photopage5.htm> (accessed November 28, 2007).

⁴¹ "Eu Yan Sang: History and Milestones," <http://www.euyansang.com.my/webpage/history.html> (accessed November, 2007).

1.4 Problem Statement

I have mentioned that the Malaysian Government is in the process of formulating a legislative framework for TM to ensure public safety and access to healthcare services of its choice. In addressing this substantive formalisation of policy, I wish to examine the following four fundamental questions:

1. How do India and China regulate traditional medicine practices?
2. What can Malaysia learn from the Indian and Chinese regulatory system?
3. How can the intention to regulate be justified?
4. What could be the best way to achieve and oversee this regulatory system?

1.5 Objectives of the Study

Within the context of the problems stated above, this study has two interconnected objectives. The first and principal objective of this study is to investigate and evaluate how India and China regulate the practice of TM. In addressing this question, the benefits, detriments and consequences of regulating TM practitioners and their practices will be outlined through an analytic literary review together with an examination of the results of surveys conducted in India, China and Malaysia. For this purpose, the theoretical framework of this study—professionalisation - will be identified and introduced. Professionalisation of an occupation is subject to the laws in the country and related policy decisions of the political party in power. Professionalisation is “a process by which an organised occupation, usually but not always by virtue of making a claim to special esoteric competence and to concern for the quality of its work and its benefits to society, obtains the exclusive right to perform a particular kind of work, control training for and access to it, and control the right of determining and evaluating the way the work is performed.”⁴² Would professionalisation of TM help standardise its practice and facilitate its official recognition? It is felt that the findings of this study will

⁴² Vollmer, H.M., and D.L. Mills, eds., *Professionalisation* (Prentice-Hall, 1966).

provide a clearer perspective of the consequences of professionalisation in regulating the practice of TM.

The second objective is to determine and compare the existing models of integrating TM into mainstream healthcare in India and China. The principles underpinning their country policy approaches and subsequent outcomes will be examined for implications in drawing up a comprehensive regulatory policy for Malaysia. A comparative analysis of the said approaches as practised by its larger regional neighbours will help to highlight both the risks and opportunities in Malaysia's plans for professional regulatory measures.

In addition, while the two case study countries of China and India have laws and regulations for TM practice, Malaysia does not have any such statutory regulations to date. Malaysia is predominantly policy-based in its regulation. Even though China and India have taken the route of law and regulation, the discussion in this study will centre on policy analysis since Malaysia is only policy-based at this point in time. Since the T&CM Bill is still pending parliamentary approval, content details of the drafted Bill must remain confidential until the Act is promulgated. The Malaysian premise, therefore, pre-empts the discussion of any regulatory measures in relation to those found in China and India, especially since it lacks context for a comparative analysis of codes, judicial decisions, doctrinal and scholarly writings. This study then, necessarily, intends to consider if, in the light of the Chinese and Indian experience, it is possible to cultivate a comprehensive healthcare policy across the TM systems in Malaysia - as strongly recommended by WHO - while waiting for the Bill to be gazetted.⁴³

⁴³ WHO, *Development of National Policy on Traditional Medicine: A Report of the Workshop on Development of National Policy on Traditional Medicine, 11-15 October 1999, Beijing, China* (WHO/Western Pacific Region, 2000), 5.

1.6 Scope and Limitations

It is important to state at the outset that given the constraints, the decided focus of this thesis is on TM practice, not on products. This means that rules governing herbal medicines will not be explored. Rather, a comparative analysis of the regulation of TM practitioners and their practices is the priority of this research. This focus is necessary because research into this area remains scant, to date. A major part of available research has concerned itself with clinical aspects such as efficacy and safety of herbal medicines.⁴⁴ However, the relevance of the close and complex relationship between TM practitioners and the use of herbal medicines cannot be ignored.

Malaysia is a multi-racial and multi-cultural developing country with three modes of traditional medicine – Indian, Chinese and Malay (including medicine of indigenous communities known as Orang Asli) – in use with other complementary therapies such as chiropractic, osteopathy, naturopathy, Western herbal medicine, homeopathy, and Western massage therapies. However, the scope of this study will be limited to the Indian and Chinese traditions; the rationale being that these two systems of medicine already have established logically and philosophically sound approaches and their parent countries have a recent history of incorporating these traditions into national healthcare.

Additionally, India and China make good models for study because like Malaysia they are developing countries, with a sound historical background of traditional medicine practice. Moreover, through policy and legislation the two countries have succeeded in incorporating traditional systems of medicine into the national healthcare system, albeit in fundamentally different ways. The experience of India and China can be gainfully examined to serve as a point of reference in assisting another developing Asian country like Malaysia to formulate a legislative

⁴⁴ Bodeker, G., and F. Kronenberg, "A Public Health Agenda for Traditional, Complementary, and Alternative Medicine," *American Journal of Public Health* 92(10) (2002): 1582.

framework in its move towards integration of the traditional and modern systems. It also allows for a more manageable study project in terms of time and resources available.

1.7 Significance of the Study

The present study anticipates that its primary contribution would be to determine whether policy and legal mechanisms could protect the rights of both the public and practitioners. It will also help to establish whether legislation is meant to control or command TM practitioners.

The study expects to address the significant role of each stakeholder in regulating TM in Malaysia. Their participation is also important in the official recognition of TM practice and its status in the country with its incorporation into the mainstream healthcare system.

Finally, the study will provide a regulatory framework and present implications relevant to the Malaysian context of TM regulation and its incorporation into the national healthcare system.

1.8 Organisation of the Thesis

This thesis is developed across eight chapters. Its organisational structure attempts to deliver answers to the research questions formulated in section 1.3. Research findings from a case study of all three countries will form the core of this thesis. The information will be organised in chapters, with chapters four to six assigned to discuss each country respectively while Chapter seven will examine the overall findings of the study. Content details of each chapter are as follows:

Chapter One constitutes the introduction to the thesis.

Chapter Two reviews related literature in the field. It begins by reviewing professional development, and the literature on comparative law and policy studies. Next, it provides an overview of the status of TM globally, especially its policy, regulation, education and training, and its incorporation into modern medicine. This includes literature on protection of TM practices. The review then focuses on the national policies in China and India, and ultimately on the development of TM in Malaysia.

Chapter Three describes a theoretical framework for professionalisation and its conceptualised application to TM practices. This is presented in the form of a flow chart. Definitions of key terminologies specific to this study such as “regulation”, “TM”, “integrated medicine”, and “healthcare policy” are provided for a basic and appropriate understanding and interpretation of individual chapters, as well the thesis as a whole. Data collection methods and analysis are explored and explained. W. Richard Scott’s idea of institutions is used for data analysis for its relevance to this study.⁴⁵ It provides a way of examining complex policy and legislation, and stakeholders’ beliefs, feelings, and interests. All these elements comprise the traditional medical practices in society. They also indicate the importance of political forces and cultures in shaping traditional healthcare organizations over different eras. Finally, validity and reliability of the data findings of the study are examined and discussed.

The next three chapters (**Four-Six**) constitute the body of the thesis: the case-studies of China, India and Malaysia. Each chapter elaborates on the policy and regulations on TM and their impact on the prospects of healthcare system in the respective countries; education and training; the establishment of integrated healthcare hospitals; it also highlights support from the political arena. The issue of formulating legislation and regulation for TM has now become a very topical and pressing issue in Malaysia due to two major factors: (1) consumer protection and (2) prospects of an integrated system of healthcare. These three chapters focus

⁴⁵ Scott, W. R., *Institutions and Organisations: Ideas and Interests*, 3rd ed. (Sage, 2008), 47-91.

and elaborate on the related developments in China, India, and Malaysia. Existing sources of information are expanded upon and backed up with empirical evidence. Visits were made to the two countries for primary and up-to-date data collection. The data includes intellectual property rights (IPR) data which mainly focus on regulatory and professional autonomy issues. The issues involved in the professionalisation of TM are also examined. The chapters conclude with recommendations for Malaysia regarding TM regulatory and training procedures, based on China and India's experience.

Chapter Seven discusses the different regulatory systems in operation in India and China. This information is then assembled for study as a reference point for the Malaysian situation. Each point is then discussed in alignment with the Malaysian situation: policy, regulation, licensure, professional oversight, training, and education. After providing a summary of the Indian and Chinese positions, the Malaysian position, insofar as it exists, is addressed. The chapter concludes by presenting some strengths and limitations of Malaysia's plans in view of the Indian and Chinese experience. It is felt that the experience of the two countries can offer useful knowledge for the development of a comprehensive traditional health policy and regulation specific to Malaysia.

Chapter Eight, the concluding chapter, summarises the findings of the study and presents conclusions drawn from each issue raised earlier. It also suggests directions for further research in the field.



A group of Indian ladies practise yoga in the lifestyle intervention centres in the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy, New Delhi, India. (*Photo courtesy of C.S.Goh*)

Chapter 2

LITERATURE REVIEW

2.1 Introduction

The present study evaluates how India and China regulate TM practices and what Malaysia can learn from the Indian and Chinese regulatory systems. Literature review is a necessary preliminary step to identify the different principles incorporated in the healthcare policies of India and China. A comparative study of the parallel policy practised in India and the integrated policy of China is also included. Subsequently, some structures to be implemented in Malaysia with regard to the development of TM are reviewed. This will provide a better understanding of the current situation of TM in Malaysia.

This literature review constitutes my observations and appraisal of five main areas that are both directly and indirectly relevant to the study. The review is presented under the following five sub-headings: 1. professional development; 2. comparative studies in healthcare policy and law; 3. global overview of TM; 4. Indian and Chinese health policies; and 5. work in the area of T&CM in Malaysia.

2.2 Literature on Professional Development of Traditional Medicine

With the globalisation of traditional medicine (TM) and its increasing popularity, there is a call for professionalisation of TM.

Last describes professionalisation as the process of possessing “autonomy, monopoly, ideology of service, and body of esoteric knowledge” of a service or product.⁴⁶ The recognised profession retains the right to control the content of its

⁴⁶ Last, M., “The Professionalisation of African Medicine: Ambiguities and Definitions” in *The Professionalisation of African Medicine*, ed. Murray Last & G.L. Chavunduka (Manchester University Press, 1986), 1-19, 6.

professional work without any unsolicited interference. It also has a legal monopoly over its defined service provision. Ideally, in the discharge of their professional duties, all professionals are required to practise ethically. Concurring with Last that professionals should be independent and possess specialised knowledge and professional ethics, Xu defines professionalisation as 'a process of social class formation integrating individuals into one profession and various professions into a professional community or a professional class occupying a middling position or strata in Chinese urban society and between state and society at large.'⁴⁷ Medical professionals fall under the middle class category in Chinese urban society, based on their monthly income, and their material and cultural life.⁴⁸

In responding to the above two definitions of professionalisation, Kelner et al. argue that TM practitioners can be professionalised through the organisation of their services, the establishment and organisation of TM training, the accreditation of courses in institutions, and by having on-going discussions with government in the context of the shaping of TM.⁴⁹

With this context, it will be useful now to examine the professional development of TM in China and India as well as the role of World Health Organization (WHO) in professionalisation of traditional medicine.

2.2.1 Professional Development of Traditional Medicine in China

In the 1839-1860 after the protracted Sino-British conflict of the Opium Wars, the treaty of Nanjing in 1842 and the Treaty of Tianjin in 1858, following centuries of a closed-door policy to foreign influence, China was forced to open its doors to

⁴⁷ Xu, X.Q., *Chinese Professionals and the Republican State: The Rise of Professional Associations in Shanghai 1912-1937* (CUP, 2001), 7.

⁴⁸ *Ibid.*, 50-68.

⁴⁹ Kelner, M., et al., "The Role of the State in the Social Inclusion of Complementary and Alternative Medical Occupations," *Complementary Therapies in Medicine* 12(2-3) (2004): 86-87.

Westerners.⁵⁰ One outcome of this was exposure to Western medicine which, in the longer term, resulted in a significant impact on China's medical education. As Ma comments, modernity in China's medical education followed the adoption of Western knowledge and technology as a means of survival.⁵¹ Chinese medical practitioners take this approach to protect themselves and sustain the Chinese system in China without realising that "the primary purpose of Christian missionaries in China was to convert the Chinese to Christianity, not to develop modern education for them."⁵²

The establishment of medical schools for a systematic Western medical education to overcome the human resource deficiencies in public health was one of the strategies of missionary medicine.⁵³ Medical improvement was decidedly necessary to ensure improved health of the population. However, without careful study and appreciation of Chinese medicine (CM) and culture, the Western medical missionaries considered the practice of CM to be both inferior to Western medicine and based on superstition. Medicine in imperial China was largely influenced by Confucian ideologies and ritual practice, for example, medicine in Menghe.⁵⁴ Ritual practice was therapy of the first resort for the majority of Chinese prior to healthcare reorganisation in the 1950s. Despite decades of effort on the part of Western medical missionaries, missionary medicine was not adopted by the Chinese until the outbreak of pneumonic plague in Manchuria in 1910-1911.⁵⁵ This was because Chinese medical practitioners disagreed with grouping health

⁵⁰ Schoppa, R.K., *The Columbia Guide to Modern Chinese History* (Columbia University Press, 2000), 16.

⁵¹ Ma, Q., "The Rockefeller Foundation and Modern Medical Education in China, 1915-1951" (PhD diss, Case Western Reserve University, 1995), 25.

⁵² *Ibid.*, 21.

⁵³ Cheung, Y.W., *Missionary Medicine in China: A Study of Two Canadian Protestant Missions in China before 1937* (University Press of America, 1988), 4.

⁵⁴ Scheid, V., "Restructuring the Field of Chinese Medicine: A Study of the Menghe and Ding Scholarly Currents, 1600-2000, Part 1," *EASTM22* (2004): 10-68, 19.

⁵⁵ Wu, L.T., *Plague Fighter: The Autobiography of a Modern Chinese Physician* (W. Heffner and Sons, 1959).

and Christian religion together.⁵⁶ The competition between the Western and Chinese medical professional groups encouraged medical professionalism in China. Details are given below.

In the republican era, there was a distinct adaption of technological advances for strengthening China militarily and technologically, and acceptance of biomedicine. The Rockefeller Foundation, active in supporting medical development in China, set up the China Medical Board for developing a comprehensive medical system throughout China.⁵⁷ It sponsored Chinese students for their medical studies in the United States and established the Peking Union Medical College in 1921.⁵⁸ The graduates eventually became the leaders in the Ministry of Health and handled the administrative work of the China's medical education and public health system. Rockefeller's dominant biomedical approach and its ignorance of CM and China's cultural background and socio-economic conditions contributed to the failure of the China Rural Health Programme.⁵⁹

In a study on the development of medical professional associations in the republican era, Xu has explored the state-society interaction in Shanghai.⁶⁰ Their associations helped improve the practice of CM and united its practitioners to fight for a professional standing and legitimacy of CM as part of the national heritage. In 1926, the health authorities in Shanghai which comprised mainly Western medical doctors, issued and implemented regulations and examinations for all Chinese medical practitioners at the local level. All Chinese medical practitioners were required to conform to these regulations. However, CM practitioners resented the

⁵⁶ Yip, K., "Science, Medicine, and Public Health in Twentieth Century China Health and Society in China: Public Health Education for the Community, 1912-1937," *Social Science and Medicine* 16 (1982), 1197-1205, 1200.

⁵⁷ Rockefeller Foundation, *International Health Board Report 1917* (Rockefeller Archive Center, 1917), 223.

⁵⁸ Ma, Q., "The Rockefeller Foundation and Modern Medical Education in China, 1915-1951" (PhD diss, Case Western Reserve University, 1995), 1.

⁵⁹ Yip, K., "Science, Medicine, and Public Health in Twentieth Century China Health and Society in China: Public Health Education for the Community, 1912-1937," *Social Science and Medicine* 16 (1982), 1197-1205, 1203.

⁶⁰ Xu, X.Q., *Chinese Professionals and the Republican State: The Rise of Professional Associations in Shanghai 1912-1937* (CUP, 2001).

Beijing government's failure to formulate formal policy for Chinese medical practice and their attempt to abolish CM. This was widely perceived as resulting from the influence and dominance of foreign powers.

Subsequently, in 1929 a national body known as *Kuo-i Kuan* (国医馆) was organised by groups of TM practitioners opposed to the Health Minister's (Dr Yu YunXiu) policy decision to abolish old-style medicine, and they demanded official recognition of CM. CM finally gained legal recognition in 1937. Xu concludes that in seeking formalisation of Chinese medical education, CM practitioners became influenced by the Western medical education system in the course of China's modernisation. Holding a similar view, Scheid comments that CM is modernised and has undergone a total reform.⁶¹ He indicates that in the process of 'modernising' Chinese medicine, the Health Ministry's "efforts ranged across a wide spectrum from assimilation of certain Western ideas to Chinese medicine to the use of biomedical knowledge to instigate total reform of Chinese medicine."⁶²

Despite the cultural conflict between CM and Western medicine, there was integration of the two professions under the Chinese Communist Party (CCP) in the twentieth-century due to the shortage of adequately trained doctors and to rural healthcare inequity.⁶³ Moreover, the availability of Western medical resources was limited during the Civil War. Mao comments that the Ministry of Health paid attention on urban elites instead of rural population, and focussed only on curative rather than preventive medicine.⁶⁴ CM was promoted by Chinese medical practitioners trained in Western medicine based on Mao's 'New Democracy' policy.⁶⁵ This approach promoted the use of scientific technology in CM research,

⁶¹ Scheid, V., "Shaping of Chinese Medicine: Two Cases from Contemporary China," in *Innovation in Chinese Medicine*, ed. E. Hsu (CUP, 2001), 370.

⁶² *Ibid.*, 370-371.

⁶³ Lampton, D.M., *The Politics of Medicine in China: The Policy Process, 1949-1977* (Westview Press, 1977).

⁶⁴ Sidel, V.W., *Serve the People: Observations on Medicine in the People's Republic of China* (Jr. Foundation, 1973), 28.

⁶⁵ Mao's 'New Democracy' policy: new (free from superstition and feudalism), science (seeking truth knowledge from facts), and unity (unity of the theoretical and practical medical knowledge,

in the training of more allopathic doctors, in the re-education of Chinese medical practitioners and training of community health workers, to meet the demands of the large population. Without a common consensus, coercion and pressure were applied in healthcare integration, with, for example, allopathic doctors forced to engage in CM studies.⁶⁶

There was also a process of what might be considered as epistemological re-invention. For example, the linkage made by Zhu Lian, a Western trained medical specialist between traditional acupuncture points and anatomy and physiology resulted in the invention of new acupuncture practices.⁶⁷ In addition, militaristic notions and governing principles of CCP were applied in describing the body, and explaining health and disease. Under the ongoing military struggle in wartime, Zhu Lian proceeded to divide the human body into 'sections', 'division', and 'lines'. Acupuncture points were located at the 'lines' which were represented as resembling the front lines of an army. She added ten 'extra meridional points' to the original channel system of acupuncture points and this resulted in 370 acupuncture points. Taylor points out that the human being was not considered as a single entity under Mao's policy. In contrast to the Chinese medical principle of a holistic approach in disease treatment and health maintenance, Mao's Policy was expedient - formulated in accordance with the political and economic needs of China at that moment.

Under Mao's revolutionary plan CM was instrumental in the creation of a new medical system. Scheid has argued that hegemonic biomedical models of efficacy and bureaucratic health policies have restricted the position and function of CM.⁶⁸

and criticism, education, and remoulding of the old style intellectuals and doctors in the countryside). Taylor, K., *Chinese Medicine in Early Communist China, 1945-63: A Medicine of Revolution* (RoutledgeCurzon, 2005), 15.

⁶⁶ Rosenthal, M., "Political Process and the Integration Traditional and Western Medicine in the People's Republic of China," *Social Science and Medicine* (15A): 599-613.

⁶⁷ Taylor, *op. cit.*, 17-24.

⁶⁸ Scheid, V., *Chinese Medicine in Contemporary China: Plurality and Synthesis* (Duke University Press, 2002).

Scheid argues that CM in contemporary China, following major historical changes, could be considered as the 'invented tradition' of the twentieth-century.⁶⁹

Despite the rhetoric of reform and modernization, the Chinese health ministry failed to implement Mao's policy through 'practical' ideology that involves the policy-makers, policy translators and implementers, and workers (doctors) in a proper sequence.⁷⁰ One example of this is the case of Dr He Cheng, Deputy Director of the Ministry of Health. He Cheng, an allopathic doctor, planned and implemented government policy for the synthesis of CM with Western medicine, based on his personal style without working with a community of experts in the field. In order to formulate a new unified medicine under biomedicine's hegemony, He Cheng suggested the establishment of institutes, and enforcement of laws to professionalise CM. As a result, Chinese medical practitioners were required to attend a three to six months course in Schools for the Further Education of Chinese Medical Practitioners and then sit for a new medical licensing examination of mainly Western medical content. A majority of Chinese medical practitioners failed this examination. Nevertheless, most still continued their practice illegally.

The response was not encouraging, as Croizier remarks, "scattered provincial figures suggest that well under 25 percent of the traditional physicians had taken such courses by late 1954."⁷¹ He Cheng's policies reduced the number of Chinese medical practitioners instead of increasing them to overcome healthcare manpower shortage and financial constraints, and to ensure social stability. His intention was to control the Chinese medical profession and substitute it with Western medicine practice.

⁶⁹ See Hobsbawm, E., "Introduction: Inventing Traditions," in *The Invention of Tradition*, ed. E. Hobsbawm & T. Ranger (Cambridge: Cambridge University Press, 1983), 1-14.

⁷⁰ Schurmann, F., *Ideology and Organization in Communist China* (University of California, 1968), 68-73.

⁷¹ Croizier, R.C., *Traditional Medicine in Modern China: Science, Nationalism, and the Tensions of Cultural Change* (Harvard University Press, 1968), 266.

In order to regulate medical education with financial and manpower resources mobilisation in the Chinese society, a new Chinese medical policy was implemented in 1955.⁷² Under this policy, the profile of CM was raised. Large modern hospitals began to accept intern-ships from Chinese medical practitioners, there was a rehabilitation of the Chinese herbal industry, a change from the term CM to 'Traditional Chinese Medicine' (TCM), and the establishment of CM hospitals reflected the standards of Western medicine and the Research Academy of TCM. Following that, apprenticeship was readopted and four Academies of TCM were set up in 1956 in Beijing, Shanghai, Guangzhou, and Chengdu, to further improve TCM. A general curriculum together with a standardised set of textbooks based on a comprehensive theory of CM, were produced. An integration of Chinese and Western medicines was affirmed in 1958. Croizier however, argues that "the synthesis of two medical systems created more a parallel system of medical treatment in China's medical institutions than the desired 'combined therapy'"⁷³ He further comments that synthesis was taking place only at the level of practice, but not in theory. This meant that efforts to standardise the practice of TCM without establishing the certainty of its value was again an attempt to control the practitioners' knowledge and practices.

In the context of medical modernisation, Sivin comments that standardisation of TCM made its theory less coherent because "bits and pieces of modern medicine are merely being patched onto the traditional structure."⁷⁴ Moreover, by 'uniting with Western medicine', the strategy was to single out the effective elements of ancient Chinese healing and discard the rest.⁷⁵ Commenting on the change that had occurred in the concepts and practices of TCM in China over the imperialism, Republican, and Communist eras, Sivin emphasises that "the standards of

⁷² Taylor, K., *Chinese Medicine in Early Communist China, 1945-63: A Medicine of Revolution* (RoutledgeCurzon, 2005), 63-108.

⁷³ Croizier, R.C., "The Ideology of Medical Revivalism in Modern China," in *Asian Medical Systems: A Comparative Study*, ed. C. Leslie (Berkeley: University of California Press, 1976), 341-355, 349.

⁷⁴ Sivin, N., *Traditional Medicine in Contemporary China* (University of Michigan, 1987), 198.

⁷⁵ Roemer, M.I., *Health Care Systems in World Perspective* (Health Administration Press, 1976), 87.

qualification and conditions of work are set by career policy-makers, not doctors.”⁷⁶ However, the integration of traditional and modern medical knowledge had yet to occur since “no syncretic explanation has been adopted consistently.”⁷⁷ Hence, Sivin argues that TCM had never been a profession in Last’s sense because TCM physicians had never been professionally autonomous either in traditional or modern China. Regulation of traditional medical practice in contemporary China continues to be imposed from above rather than negotiated between professions and the state.

2.2.2 Professional Development of Traditional Medicine in India

Between 700-1000 B.C., an Ayurvedic school was established in India.⁷⁸ The Charaka-Samhita and Sushruta-Samhita are among the core authentic books of Ayurvedic medicine and surgery in Ayurveda.

Western medicine was introduced into India with the arrival of the Portuguese in the 16th century, and the British in the 19th century. Following the Portuguese occupation in Goa, the Portuguese colonial administration had already been exposed to Ayurvedic medicine in 1510. At the initial stage, due to the scarcity of Portuguese physicians in Goa, Ayurvedic practitioners were respected and consulted especially on tropical disease management.⁷⁹ However, under pressure from Portuguese-trained physicians in early seventeenth century, Ayurvedic practitioners were requested to sit and pass a qualifying examination in European medicine before they were allowed to continue their practice. This discrimination led to the downfall of Ayurveda in Goa.

⁷⁶ Sivin, N., *op.cit.*, 23-24.

⁷⁷ *Ibid.*, 115.

⁷⁸ Dwivedi, M.L., “The Historical Background of and Introduction to Ayurveda,” in *Realms of Ayurveda: Scientific Excursions by nineteen Scholars*, ed. P.S. Sharma (New Delhi: Arnold-Heinemann, 1979), 86-94, 87.

⁷⁹ DeFigueiredo, J.M., “Ayurvedic Medicine in Goa according to European Sources in the Sixteenth and Seventeenth Centuries,” *Bull. Hist. Med* 58 (1984):225-235.

During the British colonial period, due to lack of political, social and economic support and encouragement, the practice of Ayurveda was suppressed. Particularly, a long-running debate between two intellectual camps in England – the Orientalists and the Anglicists - influenced colonial attitudes towards Ayurveda.

The Orientalist group, taking a position of indigenous cultural preservation, insisted on maintaining Indian cultural traditions in medical education and utilising Indian languages as the medium of instruction.

By contrast, the Anglicists favoured introducing Western education with English as the medium of instruction. Indian culture and medical systems were criticised by Anglicists as being obsolete, irrational and superstitious. Ultimately, the debate was put to rest in 1835 by Macaulay's Parliamentary Minute on educational policy with the argument that "the European culture should provide the curriculum of schools and colleges."⁸⁰ Following this, the existing schools of Ayurveda were replaced by Western medical school to facilitate standardisation of the students' recruitment criteria, period of training, medium of instruction and examination system. This development led to further deterioration of Ayurvedic knowledge and practices in India and a polarization between Ayurvedic and modern medicine.

The establishment of national medical schools and universities with the introduction of the English educational system and exclusion of the traditional Indian medical system, resulted in deep resentment on the part of the Ayurvedic community. Over time, this manifested as a political revivalist movement resulting in the formation of a formal political alliance and professionalization process.⁸¹

⁸⁰ Jeffery, R., *The Politics of Health in India* (University of California Press, 1988), 52.

⁸¹ The medical revivalism is mainly of Ayurveda, and only to a lesser extent of Unani. Leslie, C., "The Ambiguities of Medical Revivalism in Modern India," in *Asian Medical Systems: A Comparative Study*, ed. C. Leslie (Berkeley: University of California Press, 1976), 356-367, 360. The revival of village medicine (folk medicine) is not addressed here as this research mainly focuses on the codified stream of the Indian tradition.

During the early 1920's Ayurvedic practitioners collaborated with the Independence Movement's political party, the Indian National Congress (NIC) to develop and promote ISM. They worked to modernise ISM and encouraged the incorporation of modern scientific technology into experiments and research in ISM. Charles Leslie has taken the position that Ayurveda was professionalised by adopting the new knowledge and practices from Western medicine, and utilising modern science and technology.⁸² State Boards, Faculties and Councils on Indian Medicine were established to regulate Ayurveda education. The first Ayurvedic faculty was set up in Banaras Hindu University in 1927. The Board of Indian Medicine was constituted in 1939 to look into ISM education and training, system of examination and funding. A government committee, the Chopra Committee, chaired by the eminent British-trained surgeon, Sir RN Chopra, was established in 1946 to consider policy requirements for ISM. Key agenda items included integration of traditional and Western systems of medicine, and development of standards of medical education and practices.

The organisation of regional medical associations for the registration of practitioners of ISM was another step towards medical professionalisation. The first Ayurvedic society, Shri Gulabkunverba Ayurvedic Society, was founded in Jamnagar in 1940.⁸³ These groups of practitioners fought for governmental recognition and support for research on medicinal plants, and establishment of Ayurvedic colleges, hospitals, and dispensaries.

Stepan claims that these attempts to achieve state recognition of and support for ISM had finally begun to gain ground.⁸⁴ After independence in 1947, acknowledging the need of Ayurveda to meet the high demand of professional

⁸² Khan, S., "Systems of Medicine and Nationalist Discourse in India: Towards "New Horizons" in Medical Anthropology and History." *Social Science & Medicine* 62 (2006): 2786-2797, 2789.

⁸³ Dwivedi, M.L., "The Historical Background of and Introduction to Ayurveda," in *Realms of Ayurveda: Scientific Excursions by nineteen Scholars*, ed. P.S. Sharma (New Delhi: Arnold-Heinemann, 1979), 86-94, 89.

⁸⁴ Stepan, J., "Patterns of Legislation Concerning Traditional Medicine," in *Traditional Medicine and Health Care Coverage: A Reader for Health Administrators and Practitioners*, ed. R.H. Bannerman, J. Burton, and W.C. Ch'en (Geneva: World Health Organization, 1983), 290-313, 302.

care in rural areas, the Indian Government paid more attention to ISM as a potential source of rural health care delivery.

One solid commitment was the establishment of Gujarat Ayurveda University, which was exclusively devoted to Ayurvedic studies and research. This university offered a five-and-a half-year undergraduate course, a three-year post-graduate course, research and doctoral degree courses. It had an examination system and a teaching methodology. This was a substantial step in the evolution of Ayurveda from the *guru-sisya* (master-disciple system) that had characterised Ayurvedic education historically and reflected a move by the Ayurvedic fraternity to adopt mainstream (i.e. Westernised) models of education.

Finally, after a lengthy political process, during which the President of the All India Ayurveda Congress stood for and was elected to the lower house of Parliament, the Indian Medicine Central Council Act was enacted in 1970. As a result, the Central Council of Indian Medicine was established to register practitioners of ISM, regulate education and practice, and cultivate a research culture. By 1976, the Central Council had established a standardised pure Ayurvedic curriculum throughout India. Elements of science (Physics, Chemistry and Biology) were included in a one year pre-Ayurvedic course.

Until the beginning of the twentieth century, classical medical knowledge transmission, as noted, was mainly via an intimate master-student relationship (*guru-sisya* relationship), following an initiation ceremony (*upanayana*).⁸⁵ The student was considered as a member of the master's family. The master taught and explained the classic texts verbally to the student, and the student had to memorise, understand, analyse and apply the knowledge. The medical training took at least eight years. However, the exact duration of apprenticeship remained

⁸⁵ Zimmer, H.R., *Hindu Medicine* (Johns Hopkins University Press, 1948), 76.

flexible as it was a culture of learning based around mastery rather than around length of training.⁸⁶

Following the Western medical model of the British colonial era, practitioners of ISM received institutionalised medical education, joined medical professional associations, prescribed commercially manufactured drugs, worked in governmental health agencies and hospitals, and wrote and published articles in medical journals.⁸⁷ This resulted in the emergence of Ayurveda practitioners who had some knowledge of Western medicine in the first half and middle of the 20th century in India. That is to say, modern medical knowledge such as basic science, modern diagnostic techniques, and disease treatments had been incorporated into the curriculum of medical colleges of this kind. Given the commitment to pure (*shuddha*) Ayurveda by one segment of the Ayurvedic community, the modernization of Ayurvedic education ultimately resulted in a split of ISM educational systems into two streams: the ‘integrated’ and ‘pure’ (*shuddha*) Ayurveda training courses.

Ultimately, it came to be believed within Ayurvedic circles that institutionalised medical education had degraded the quality of education in Ayurveda instead of improving it. Many serious treatises on Ayurveda in the fields of medicine and surgery had been ignored or omitted in the integrated ISM courses. Ultimately, this resulted in a loss of heritage cultural knowledge. Shankar highlights this loss, “Although institutionalisation was intended to improve the quality of medical education, this has not happened.... An unbroken tradition of more than 3,000 years is thus declining”⁸⁸ The clear implication is that once a traditional medical system is formally recognised and incorporated into the dominant institutionalised educational system, the traditional system is in imminent risk of being shaped by the hegemony of the dominant ideology of biomedicine

⁸⁶ Shankar, D., “Contemporary History,” in *Challenging the Indian Medical Heritage*, ed. D. Shankar, and P.M. Unnikrishnan (New Delhi: Foundation Books, 2004), 76-92, 79.

⁸⁷ Leslie, C., “The Ambiguities of Medical Revivalism in Modern India,” in *Asian Medical Systems: A Comparative Study*, ed. C. Leslie (Berkeley: University of California Press, 1976), 356-367, 358.

⁸⁸ Shankar, D., *op.cit.*, 76.

Tracing the history of the classical school of Ayurveda and its curriculum and comparing this with the current medical educational system, Leslie contends that “by professionalising indigenous medicine ... they shaped careers for themselves, transformed the learned practice of traditional-culture medicine into a blend of popular culture and scientific medicine, and created within the pluralistic Indian medical system a dual structure of professional medical institutions.”⁸⁹ He adds that “indigenous and cosmopolitan medicines are not officially integrated in India as they are in China a state-sponsored hierarchy of medical institutions.”⁹⁰ Holding the same view as Leslie, Shankar argues that “the adoption of the integrated syllabus until 1962 – which was more a mixture than a creative synthesis – and of the formal, institution-based teaching methods destroyed the traditional system of teaching.”⁹¹ Even after 30 years of research in ISM by the Indian Council of Medical Research (ICMR), ISM practitioners are still uncertain about how and what aspects of ISM can be integrated with Western medicine.

With regard to the professionalisation of ISM, Shankar – now Advisor on Ayurveda to India’s National Planning Commission - expresses his view that “the Indian Allopathic community supported by health policymakers has continued to play the colonial role in discrediting ISM.”⁹² That is to say, ISM has never been a profession in Last’s sense because ISM practitioners have never been professionally autonomous either in pre-independence or post-independence India. The ISM professions are not allowed to determine and control the content of their professional work without being interfered with or criticised by the allopathic profession and government. Regulation of Indian traditional medicine is still under the hegemonic influence of biomedicine, via the Indian government, and is a continuation of the hegemony of biomedicine over ISM initiated by the British in India’s pre-independence era.

⁸⁹ Leslie, C., *op.cit.*, 364.

⁹⁰ Leslie, C., “Pluralism and Integration in the Indian and Chinese Medical Systems,” in *Medicine in Chinese Cultures*, ed. A. Kleinman et al. (DHEW Publication No. NIH 75-653, 1976), 408.

⁹¹ Shankar, D., “Contemporary History,” in *Challenging the Indian Medical Heritage*, ed. D. Shankar, and P.M. Unnikrishnan (New Delhi: Foundation Books, 2004), 76-92, 91.

⁹² *Ibid.*, 90.

2.2.3 WHO on Professional Development

Following the 1978 Alma Ata conference on Primary Health Care to promote 'Health for All', WHO advocated training for both modern and traditional medical practitioners. Driven by the objective to ensure the availability of safe, affordable and easy accessible holistic healthcare for all, traditional medical practitioners were identified as available local manpower, to be retrained and mobilised within primary healthcare.

After China joined the WHO in 1973, the Chinese model on integrated medicine was adopted by WHO under the Chairmanship of Dr. Ch'en Wen-Chieh, WHO's Assistant Director General.⁹³ China was selected as a model because of the availability of widespread healthcare provision, and a reduction in its morbidity and mortality rates. Following that, a network of 'collaborating centres' (universities and research institutes) were established to develop and promote TM.⁹⁴

The professionalisation of TM began with Asian medical systems, especially TCM in China and ISM in India. WHO took the view that, "China and India have developed TM and trained their various categories of health personnel with considerable success."⁹⁵ However, while recognising India officially, in reality it was the Chinese model of integration that WHO favoured, a policy enduring to the present. To this date, seven WHO Collaborating Centres for research in traditional medicine have been set up in China, but none in India.⁹⁶

WHO has officially promoted the usage and development of Ayurveda since the mid 1970's. This interest is a natural outgrowth of the fact that Bangladesh, India, Nepal and Sri Lanka have all incorporated Ayurvedic medical services into their

⁹³ WHO, "The Promotion and Development of Traditional Medicine," in *Technical Report Series 622* (Geneva, 1978), 8.

⁹⁴ Akerele, O., "The WHO Traditional Medicine Programme: Policy and Implementation," *International Traditional Medicine Newsletter*, University of Chicago, 1(1) (April 1985).

⁹⁵ WHO, *op.cit.*, 28.

⁹⁶ WHO, WHO Collaborating Centre for traditional medicine, <http://www.who.int/medicines/areas/traditional/collaborates/en/index.html> (accessed Jan 19, 2011).

national health programs. In India, training of Ayurveda has centred on questions of educational method and curriculum content. India adopts the parallel model (i.e. separate education systems, priorities and curricula for Ayurvedic and allopathic medicine) since “the integrated approach to Ayurveda medical education has been abandoned as a failure,” after twenty-five years of experience.⁹⁷

In 1986, training in TM was given particular emphasis especially regarding the provision of integrated medical education to both categories of medical professionals, training of lecturers, and development of standard methodology for traditional medical education.⁹⁸ WHO’s reliance on a modern scientific framework for TM training, is documented in the report on curricula: “even the most thorough and institutionalised system is still in need of modern scientific explanations.”⁹⁹ The report contains samples of traditional medical curricula from China, Japan, Korea, Fiji, Philippines, and Papua New Guinea.

In a *New England Journal of Medicine* article, published at the height of the primary healthcare movement, Blendon asked “Can China’s healthcare be transplanted without China’s economic policies?”¹⁰⁰ He explained that China’s centrally directed economic policies emphasised medical technology and outpatient treatment over hospital-based medical services, rationing and hidden sales taxes, large scale labour-intensive public-works projects, and geographic mobility restriction. He argued that the Chinese healthcare system “is not, as some have written, a separable phenomenon – something that could be transported across international borders as could be done with a new vaccine or surgical procedure.”¹⁰¹

⁹⁷ Tancredi, D., “The Ambiguities Medical Practice in Modernising Urban India,” (PhD diss, Harvard University, 1984).

⁹⁸ WHO, “The Selection and Use of Traditional Remedies in Primary Health Care,” in *Report of an Inter-Regional Workshop* (Bangkok, 1985), 24.

⁹⁹ WHO, *Report of the Regional Workshop on Training in Traditional Medicine* (Manila, 1986), 33.

¹⁰⁰ Blendon, J.R., “Can China’s Health Care be Transplanted without China’s Economic Policies?” *The New England Journal of Medicine* 300 (26)(1979): 1453-1458.

¹⁰¹ *Ibid.*, 1458.

2.2.4 Summary

In the case of China, Croizier has argued that “the powerful solvent of modern science threatened to dissolve the theoretical basis of TCM and leave an assortment of remedies and procedures that might be of considerable adaptive value in providing public healthcare, but would hardly constitute an integral medical system.”¹⁰²

The Cultural Revolution’s focus continued a pre-Revolutionary push for the traditional medical system in China to move towards an integrated system with modern medicine, with the result being that contemporary TCM is considered – certainly by influential Western scholars - to be a new hybridised form of TCM. As integration in China was overseen by groups of modern trained practitioners, there was inevitably a high possibility of losing certain basic concepts of TCM from training. A prominent example of reductionism was the “new acupuncture theory”, in which the need to learn all 365 acupuncture points was dismissed and a newly simplified form with less than half the original number of points was substituted.¹⁰³

In India, the colonial influence on TM came much earlier than in China – starting in fact with some early Mughal suppression of Ayurveda, but gaining momentum under the Portuguese and then reaching full hegemonic suppression under the British. Ultimately, as part of India’s wider Independence Movement, through the efforts of the Ayurvedic professional association, The All India Ayurveda Congress, together with a growing political support base, continuing professional resistance from the field of modern medicine has met with counter-resistance and policy change from the Ayurvedic profession.

¹⁰² Croizier, R., “Revivalism in Modern China,” in *Asian Medical Systems*, ed. C. Leslie (University of California Press, 1977), 351.

¹⁰³ Chao, P., “Let Chairman Mao’s Philosophical Thinking Take Command of Acupuncture Therapy,” *People’s Daily*, Sept 17, 1970.

The modernization of Ayurvedic education does not seem to have improved the quality of medical education. Put simply, Ayurveda faces the fate of being reinvented as a result of its 'biomedicalised' curriculum content, through which India has adopted modern medical concepts in conceptualising and conducting research on herbal preparations and other Ayurvedic therapies.

The outgrowth of classical Ayurveda and introduction of standardisation of modern medicine have resulted in two structures of professional medical institutions, as indicated by Leslie.

Internationally, WHO's policy on professionalisation has reinforced the trend of TM being led by modern medicine training and practice in both China and India. Particularly, WHO has taken the Chinese experience as the primary reference point in international health planning for the development of integrating traditional and modern medicine in other member countries, especially in the field of primary healthcare.

The language of professionalisation emphasises helping traditional practitioners move towards an agreeable professional standard, and ensuring sufficient numbers of qualified traditional practitioners by establishing TM training institutes or colleges, and obtaining official recognition. In reality, however, the process of professional development of TM in China and India reveals that, "professional legitimacy is principally a political decision, ..." ¹⁰⁴ In both China and India, professionalism is being used as a means to control and modify the training and clinical practice of traditional practitioners – in a direction reflecting the priorities and concepts of biomedicine.

¹⁰⁴ Kelner, M., et al., "The Role of the State in the Social Inclusion of Complementary and Alternative Medical Occupations," *Complementary Therapies in Medicine* 12(2-3) (2004): 80, 84.

2.3 Comparative Studies in Policy and Law

This section reviews relevant literature on how China and India address healthcare problems through their systems of TM regulation.

2.3.1 Comparative Healthcare Policy

Policy making is affected by many factors such as political and non-governmental sector influences, the medical profession and public opinion, and international issues. Therefore, a national and international policy comparison based on case study is proposed. Peters takes the view that a comparative analysis of policy might test and complement the shortcomings of the normative political theory, and help to solve the problems of the government.¹⁰⁵ It also allows several assumptions to be drawn and further researched, based on the study of the similarities and differences amongst the nations. Blank acknowledges that comparative policy analysis could also demonstrate common healthcare problems across countries and possible solutions.¹⁰⁶ This could enable technology transfer and globalisation. Holding the same view, Øvretveit expresses that comparative health policies are a better illustration of the cultural similarities and differences among various countries, and enable the authorities concerned to adopt ideas and customise them according to their requirements.¹⁰⁷ Harrop believes that a comparative study of the healthcare policy will allow for a better understanding of policy in any particular country, and identify the determining factors that cause its success and failure.¹⁰⁸

Blank and Burau argue that comparative healthcare policy could provide several policy options and allow the demonstration of various experiences from different

¹⁰⁵ Peters, B. G., *Comparative Politics: Theory and Methods* (Macmillan, 1998).

¹⁰⁶ Blank, R. H., *New Zealand Health Policy: A Comparative Study* (OUP, 1994), 6.

¹⁰⁷ Øvretveit, J., *Comparative and Cross-Cultural Health Research: A Practical Guide* (Radcliffe Medical Press, 1998), 15.

¹⁰⁸ Harrop, M., "Introduction," in *Power and Policy in Liberal Democracies*, ed. M. Harrop (CUP, 1992), 1-19, 3.

countries based on their respective healthcare policies.¹⁰⁹ They realise that policy work in a particular country may not be applicable in another country. However, a comparative study could illustrate how different territories address some common issues. Hence, a comparative approach through examining and analysing the healthcare systems and medical professions in the respective nations is deemed acceptable. Globally, as both of them state, the main objective of health policy is to ensure equity in accessibility, good quality and efficiency of healthcare services, and respecting patients' options. The access comprises both financing access through restructuring the healthcare budget, and geographical access through the reallocating of skilled medical personnel and medical facilities. Until today, there is still uncertainty about what comprises the definite criteria of quality medicine. However, some mention that it depends on the availability and quantity of medical equipment and medical specialists.¹¹⁰ As for patients, a good quality healthcare system is a system which is well supported financially, respects patients' choices, and allows easy accessibility to advanced medical technology. Similarly, all healthcare providers highlight the significance of autonomy in healthcare service provision to ensure quality. It is suggested that the quality of medical professionals in healthcare services provision be evaluated systematically by peer review and medical audits. They conclude that healthcare policy varies in accordance with the political will, and specific place and period.

Gauld has compared the health policy of eight countries in the Asia-Pacific region, namely China, South Korea, Taiwan, Australia, Japan, Singapore, Hong Kong, and New Zealand; and followed this with a comparative study.¹¹¹ The comparisons and contrasts are carried out across several areas: influence of history of health policy, health system organisation, public health, and rationing and demand management. All the countries have their own health history and developmental patterns, and certain countries such as Korea and Taiwan have a more recent

¹⁰⁹ Blank, R.H., and V. Burau, *Comparative Health Policy*, 2nd ed. (Palgrave Macmillan, 2007), 6.

¹¹⁰ McClellan, M., and D. Kessler, "A Global Analysis of Technological Change in Health Care: The Case of Heart Attacks," *Health Affairs* 18(3) (1999): 250-255.

¹¹¹ Gauld, R., "Conclusion," in *Comparative Health Policy in the Asia-Pacific*, ed. R. Gauld (Open University Press, 2005), 225-243.

history of health policy reforms. Under the organisation of the health system, Gauld looks into the regulations, funding, and healthcare provision. Under normal circumstances, the MOH will act as the regulator of the health system, covering both the public and private sectors. Funding of health systems varies amongst the regions. It could be insurance-based (Japan, Australia, Singapore, Korea, and Taiwan) or tax-based funding (Hong Kong and New Zealand). In China, the healthcare funding sources are a mixture of private insurance, central and local government funding, and employer-based insurance schemes. The allocation for funds is never adequate. Generally, primary-level medical care is taken care of by the private sector. Moreover, traditional oriental medicine service is available, especially in China where integrated medicine is promoted. In Australia, Hong Kong, New Zealand, and Singapore, the hospital services are mainly under the public sector. In comparison, the hospital services in Korea, Japan and Taiwan are provided by the private sector. Integration of primary and secondary levels of medical care is attempted in Australia, New Zealand, Singapore and Hong Kong. Quality control of service provision has started to capture the attention of policy makers. Different countries have different public health priorities. For example, New Zealand focusses on health inequalities reduction with a centralised public health infrastructure. Rationing and demand management is a challenging issue in health policy. With the exception of China, all the seven countries studied have different approaches: a rationing policy in New Zealand and Hong Kong; cost containment techniques in Australia; restricted accessibility in Singapore; and easy accessibility to a full range of complementary services in Japan, Korea, and Taiwan. The text concludes with a short discussion on whether it is possible to construct an Asia-Pacific health policy model and the advantages of a comparative study.

Along with globalisation, China and India are experiencing a rapid growth in economic development and urbanisation. However, they have different political regimes and national policies. For example, China's one child policy to restrict population growth.

A comparative study on healthcare in the above two countries was conducted by Dummer and Ian compared within the framework of the epidemiological transition model.¹¹² In China, the fertility and mortality rates are lower, with a considerably higher life expectancy when compared to India. Population in India is threatened by infectious and parasitic diseases because of poor environmental hygiene. Both countries have worked hard to combat respiratory diseases and HIV/AIDS to improve the health status of their population.

China emphasises preventive medicine, whereas India remains focussed on curative or therapeutic medicine. India has yet to develop its public health infrastructure. In spite of the rapid economic growth, the disproportionate level of healthcare availability between rural and urban areas and between the rich and poor, has increased in both countries, especially in India. The reasons for this are inadequate trained personnel and lack of well-equipped facilities, and an imbalance in health expenditure.

Even though both countries have adopted a hierarchical system of provision, there is the 'three tier' model in China and rural India, and the 'two tier' model in urban India. Lately, government funding for healthcare in both countries has been reduced, and yet the Indian Government has attempted to provide basic healthcare to its large population of urban slum dwellers, whilst China is trying to re-establish universal rural health insurance. In conclusion, the authors felt that both China and India have changed rapidly in many aspects such as economic and healthcare as globalisation impacts upon them, but inequalities in healthcare between rural and urban areas still exist, and health outcomes have yet to be improved.

¹¹² Dummer, T.J.B., and G.C. Ian, "Health in China and India: A Cross-Country Comparison in a Context of Rapid Globalisation," *Social Science and Medicine* 67 (2008): 590-605.

Hibbard *et al.* emphasise the important role of consumers in the process of healthcare policy planning and healthcare quality assurance.¹¹³ Consumers can only make an informed quality choice (low cost and improved health outcomes) with comprehensive information. The question is how many of the consumers have the skill to process and understand the present complex information on healthcare. In this survey, the authors use ‘health literacy skill, numeracy skill, and patient activation’ to assess the comprehension level of 303 participants on the comparative healthcare performance reports and their application in decision-making. 55% of the participants have education beyond high school.

These findings indicate that among the three predictors of comprehension, numeracy skills have overtaken health literacy and patient activation on understanding and making informed quality choices. However, patient activation is emphasised especially for those with low literacy and numeracy skills. Their active participation will help them to understand and use comparative information better since they realise the consequences of their own choices for their health. Moreover, in certain situations, patient activation is required to balance cost effectiveness and quality. Variation occurs in the motivation levels of the users, but not at the level of their skills. Hence, the article sums up that in the contemporary context, many real-life choices depend on all the above three predictors. A competent healthcare consumer can make an informed quality choice only after the provided healthcare information has been understood.

2.3.2 Comparative Law

De Cruz defines ‘comparative law’ as the “systematic study of particular legal traditions and legal rules on a comparative basis.”¹¹⁴ He feels that a common framework for comparison is lacking. There are five categories of comparative law

¹¹³ Hibbard, J.H., et al., “Consumer Competencies and the Use of Comparative Quality Information: It Isn’t Just About Literacy,” *Medical Care Research and Review* 64(4) (2007): 379-394.

¹¹⁴ De Cruz, P., *Comparative Law in a Changing World*, 3rd ed. (Routledge-Cavendish, 2007), 3.

studies: studying the similarities and differences between the national system and foreign systems; examining the mode of handling a particular legal challenge by various systems; investigating the causal relationship between different systems of law; comparing the levels of different legal systems; and exploring their historical development. Comparative law plays significant roles in academics and law reformation, acting as a backbone to legal rules and concepts, understanding legal rules, and unifying and harmonising laws. De Cruz points out the challenges of comparative law. They are linguistic and terminological barriers; cultural differences between legal systems; absence of defined criteria for the selection of objects of study; problems in identifying comparable factors; the tendency to maintain a common legal pattern of development; the high possibility of imposing the researcher's own legal conceptions of the selected legal systems for comparison; and the exclusion of extra-legal rules. After taking all the challenges into consideration, he draws out an eight-step action plan relevant to the comparative law methods, which are identifying and stating the topic, determining the subject matter for comparison, deciding the sources of law, compiling the materials, organising the collected materials, mapping out the possible answers and doing a comparison, analysing critically, and outlining a comparative framework.

De Cruz focusses on the comparison of the fundamental approaches, methodology, and ideology of civil law systems (Roman law) from France and Germany, with the English common law systems (case-based law). France and Germany are both very different in their historical development, juristic style,¹¹⁵ ideologies and legal traditions,¹¹⁶ but they have common characteristics in problem-solving and law-making, therefore they serve as models of the civil law

¹¹⁵ The juristic style (style of a legal system) includes "the system's history, mode of thought in legal matters, distinctive institutions, sources of law and legal ideology." See Zweigert, K., & H. Kötz, *An Introduction to Comparative Law*, 3rd ed. (Clarendon, 1998), 68-73.

¹¹⁶ Legal tradition is "not a set of rules within a particular jurisdiction, but a set of historically conditioned attitudes to the role of law in a particular society, its characteristic mode of legal thought, and its legal sources and basic ideology." Ideology means "political or economic doctrines or religious belief." De Cruz, P., *op.cit.*, 27 & 42.

'parent legal family'.¹¹⁷ He continues to demonstrate the similarities and differences of selected substantive areas of law within common law and civil law systems. He also introduces the historical development and concepts of civil and common law, and offers a clear, selective comparative overview of key topics, such as contract, tort, sale of goods and company law. He concludes with the positive view that there is a high possibility of integration of all the legal systems in the near future.

Jansen states that comparative law discloses the similarities and differences of various cultural and social phenomena.¹¹⁸ It is regarded as a methodology to acquire knowledge of a foreign legal system. He stresses that it is a challenge to understand the historical development (economic, political, moral and cultural background) and context of a foreign legal system individually, and translate it into one's own language so as to achieve social goals. During the comparison, the common features of historical development can be illustrated based on mutual influence, and not on parallel evolution. However, it is limited by the distinguishing features of the societies. In the article, comparative linguistics is taken into consideration as one of the comparative methods since language is essential to the interpretation of the legal doctrines. Unfortunately, the degree of similarity between the two languages such as their grammatical structures is not always parallel to their biological origin or culture. Next, comparative religion is implied in a descriptive manner and based on the scholar's understanding of the relevant religion. Finally, comparative politics and international social sciences are proposed, but this is limited by the undefined political groups and theories, and the complicated and unreliable social data. Jansen concludes by claiming that comparative law itself cannot determine that a particular legal system is superior to another.

¹¹⁷ The parent legal families might also be known as major legal systems including common law, civil law, and socialist legal groupings. See *Ibid.*, 3.

¹¹⁸ Jansen, N., "Comparative Law and Comparative Knowledge," in *Oxford Handbook of Comparative Law*, ed. M. Reimann, and Z. Reinhard (OUP, 2006), 305-338.

2.3.3 W. Richard Scott in Comparative Studies

The studies of comparative health policy have demonstrated that healthcare practices are shaped by a set of cultural and historical forces. In order to facilitate the comparative study of the health policy and legislation of TM in China and India over the century, an analytical framework - Scott's (2008) institutional framework - has been identified.

In Scott's view, "institutions are comprised of regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life."¹¹⁹

Scott's concept of institutions reviews the solutions for multiple problems encountered by an individual organisation, and emphasises how individual preferences and behavior are being affected. Here, cultural values of the organisations - knowledge sharing, credibility, and social acceptability – have been highlighted in organisational processes. Practical problems arise along the ongoing change or disorganisation of the organizational and societal structures and processes over time, such as political party formation, public opinion, and public pressures.

Scott proposes the usage of normative frameworks and rule systems in guiding, constraining, and empowering social and political behavior. Cultural beliefs, which are taken for granted, have reinforced the existing practices in stable social systems. In other words, both governmental and non-governmental forces are involved in the shaping of organizations.

All the characteristics of the three elements of institutions are summarised in table 2.1 below.

¹¹⁹ Scott, W.R., *Institutions and Organisations: Ideas and Interests*, 3rd ed. (Sage, 2008), 48.

Table 2.1: Three Pillars of Institutions¹²⁰

Features	Pillar	Regulative	Normative	Cultural-Cognitive
Basis of compliance	of	Expedience	Social obligation	Taken-for-grantedness, Shared understanding
Basis of order		Regulative rules	Binding expectations	Constitutive schema
Mechanisms		Coercion	Normative	Mimetic
Logic		Instrumentality	Appropriateness	Orthodoxy
Indicators		Rules, Laws, Sanctions	Certification, Accreditation	Common beliefs, Shared logics of action, Isomorphism
Affect		Fear Guilt / Innocence	Shame / Honor	Certainty / Confusion
Basis of legitimacy		Legally sanctioned	Morally governed	Comprehensible, Recognisable, Culturally supported

Many social processes take a long time period, therefore Scott would focus on causes and outcomes in his analysis of all social institutional or organisational processes.

Scott's framework emphasizes that institutional effects are diffused through a field of organizations via three mechanisms: coercive, normative, and mimetic mechanisms.

They link organisations into the governance systems of their respective field level. Moreover, these relational ties allow ideas to move, fuse and blend with local knowledge. The framework further emphasizes structural isomorphism (similarity) within the same organisational field as an important consequence of both competitive and institutional processes. Scott concludes that all organizations are

¹²⁰ This table is extracted from the text, *Institutions and Organisations: Ideas and Interests*. See Ibid., 51.

shaped by both technical and institutional pressures (political and social pressures). There is a connection between institutional arguments and the organizational structure and behavior. In organisational field analysis, these days more emphasis is placed on the cognitive element rather than on regulative and normative frameworks.

2.3.4 Summary

Understandably, comprehensive health policy is a necessity for equity in accessibility, good quality and efficiency of healthcare services. However, till today there is an absence of comprehensive healthcare worldwide. Comparative analysis of health policy of various countries allows for a shared experience, for example, in health system organisation and funding. Each country has its own health policy as 'one size does not fit all'. Stakeholders have a significant role in planning and implementing health policy in their respective countries to ensure good quality healthcare.

Comparative law is reviewed in view of a close relationship of the legal systems of the various countries with their culture respectively. This provides a better understanding of the particular country's political background and the common features of historical development among those countries. However, the limitations of comparative law may impede a reliable social and political data analysis.

For a clear picture on data obtained and its inter-relatedness, a comparative approach in policy and law (limited data) is used in this study. The analytical framework chosen is from Scott's Institutions since health policy and legislation are shaped by political and cultural forces. Moreover, it allows an establishment of relational ties amongst all the organisations in a society.

2.4 Global Overview

Following the studies of the comparative healthcare policy and law, it is helpful to have a global overview on the policy, regulation, training, practice, and legal protection of TM, prior to focusing on the traditional healthcare policy in China and India.

2.4.1 Policy and Regulation

In the contemporary context, many countries still do not have an official national policy document or legislation to oversee TM practice, as shown in the Table 2.2. It is most likely due to the difficulty in targeting the gaps, for example, governmental recognition and proper usage of TM, and the knowledge of TM protection in those countries. Hence, the WHO's two-volume *Global Atlas of Traditional, Complementary and Alternative Medicine*, which maps and addresses the gaps, is worth mentioning. The *Global Atlas* reviews the current status of traditional and complementary/alternative medicine (TCAM) globally, in terms of policy, regulation, education, research, practices and utilisation. The first volume¹²¹ provides a visual representation of the global overview of the current status of TCAM through maps, figures and tables. The global map clearly illustrates the utilisation and popularity of TCAM among the six WHO regions. A limited number of countries (58 of the 212 surveyed countries) provide public financing, as out-of-pocket payment is the most common financing mechanism for TCAM treatments.

¹²¹ Ong, C.K., et al., eds., *WHO Global Atlas of Traditional, Complementary and Alternative Medicine: Map Volume* (WHO, 2005).

Table 2.2: Regulatory issues on TCAM

WHO Region (Country in each of the regions)	Policy & Regulation on TCAM		Education with and without Regulation		Legal Recognition of TCAM Practitioners by Therapy	
	With	Without	With	Without	ISM	TCM
African Region	Majority	Algeria, & Western Sahara	Mali, Senegal, Guinea, Sierra Leone, Ghana, Congo, Equatorial Guinea, Kenya, Tanzania, Zambia, South Africa, &Lesotho	Burkina Faso, Liberia, Cameroon, Uganda, Rwanda, Madagasc ar, & Malawi	Only in Mauritius	Ghana, Botswana, Mauritius, & Lesotho
Region of the Americas	Majority	Guyana, French Guiana, Paraguay, Uruguay, Belize, El Salvador, Haiti, & Puerto Rico	Majority	Honduras & Nicaragua	No	Canada, United States of America, Guatemala, Honduras, Nicaragua, Ecuador, Peru, & Chile
European Region	Majority	Turkey, Israel, & Republic of Moldova	Majority such as the United Kingdom, Russian Federation , Kazakhsta n, & Ukraine etc	Latvia, Poland, Czech Republic, Romania, Croatia, Bosnia, Spain, Portugal, Georgia, Armenia, & Israel	Only in Hungary	Belgium, Netherlands , Hungary, & Ukraine
Eastern Mediterranean Region	Majority	Afghanista n & Qatar	Pakistan, Iran, Somalia, & United Arab Emirates	-	Only in Pakistan, Egypt, & United Arab Emirates	Egypt, Saudi Arabia, & Pakistan
South-East Asia Region	South Asia Countries	East Asia Countries	Majority	Maldives	India, Sri Lanka, Nepal, Banglades h & Myanmar	DPR Korea, Myanmar, Thailand, & Indonesia

Western Region	Pacific	Majority	Marshall Islands, Tuvalu, Tonga, & Niue	China, Mongolia, Republic of Korea, Japan, Vanuatu, Australia, & New Zealand	Malaysia & Lao PDR	No	China, Japan, Viet Nam, Philippines, Australia, & New Zealand
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The second¹²² volume summarises the background of the health sector; regulatory structure; education; research and development; and patterns of use of T&CM in countries from the six WHO regions. It elaborates that in developing countries such as India and Sri Lanka, TM has been incorporated into the public health sector. This is because TM is affordable and accessible. The global text acknowledges that voluntary self-regulation of TCAM has been attempted by non-governmental TCAM professional associations. The editors note that the issue of insufficiency of data is still a drawback with this documentary material. They explain that “what is lacking is a detailed understanding of the differing patterns of use according to disease, income, gender, age, geography and culture.”¹²³ That is to say, the studies are not population-based, and that a different methodology is applied in assessing the utilisation of TCAM.

The WHO has taken the initiative to collaborate with countries to look into the regulatory structure of TM. For example, the report *Legal Status of Traditional Medicine and Complementary/Alternative Medicine* provides a worldwide review on the legal status of TCAM so as to facilitate the establishment of legal frameworks through sharing experiences among these countries.¹²⁴ A majority of the TCAM providers are traditional health practitioners since they greatly outnumber allopathic doctors except practitioners in the Region of the Americas, who are mainly of the allopathic medical fraternity. Countries in the Region of the Americas and European Region adopt monopoly on the practice of medicine with

¹²² Bodeker, G., et al., eds., *WHO Global Atlas of Traditional, Complementary and Alternative Medicine: Text Volume* (WHO, 2005).

¹²³ *Ibid.*, 14.

¹²⁴ WHO, *Legal Status of Traditional and Complementary/Alternative Medicine: A Worldwide Review* (WHO, 2001).

the reason that allopathic doctors' expertise is required to establish an exact diagnosis. Countries from other WHO regions agree with having an official registry of TM practitioners on the basis of equal treatment for TM and modern medicine. If possible, the government should bring TM associations under one umbrella organisation so as to license and register TM practitioners prior to the availability of legislation. In short, the report documents the background information and regulatory situation of TM in the 123 WHO Member States. This provides the researcher with substantial information to make a comparative study on the policies of traditional healthcare.

In addition to a comparative study on the policy, the development of national TM policy requires establishing an information campaign and advisory committee; identifying a government body for TM; conducting a systematic review; organising workshops; obtaining financial and political support; developing an action plan; and implementing, evaluating and monitoring national policy.¹²⁵

With regards to the evaluation of traditional health policy, Bodeker suggests the utilisation of the Council on Health Research for Development (COHRED) framework, namely "equity, ethics, governance, financing, knowledge production, knowledge management and utilisation, capacity management, and the research environment".¹²⁶ This framework allows the exchange and sharing of experiences among the countries, and establishment of good policy. The author highlights that the option for the usage of either TM or modern medicine is dependent on the availability, accessibility, and affordability of, familiarity with, and trust in the system. Holding the same view, China's health authorities mention that neglecting the easily accessible and affordable healthcare system results in failure to offer

¹²⁵ WHO, *Development of National Policy on Traditional Medicine: A Report of the Workshop on Development of National Policy on Traditional Medicine, 11-15 October 1999, Beijing, China* (WHO/Western Pacific Region, 2000).

¹²⁶ Bodeker, G., "Integrating Traditional and Complementary Medicine into National Health Care: Learning from the International Experience," in *Herbal and Traditional Medicine: Molecular Aspects of Health*, ed., L. Packer, C.N. Ong, and B. Halliwell (Marcel Dekker, 2004), 1-31.

good health service.¹²⁷ Political and financial supports are required to ensure that medical service is equitably distributed in a society. Underfunding and uneven resource allocations still exist in many countries such as Nigeria and India. Informed consent and benefit sharing are highly recommended so as to take care of the ethical issues involving clinical research on human subjects and IPR protection respectively. Bodeker further emphasises that rules and regulations should not restrict the development of TM. Regulation should be drafted to help TM systems and practice, for example, the New Zealand government allows the registration and practice of Maori traditional healers. Research plays an important role in producing good clinical outcomes and offering good TM services to the public. Bodeker concludes that a policy is needed to ensure a uniform standard of TM practices nationally. A collaboration including both the national and international experts should be formed in developing the TM policy. Then the research into TM will reach both the national and international levels.

Similarly, the House of Lords Select Committee on Science and Technology recommends the professional development and regulation on CAM.¹²⁸ In a recent news article, Donnelly discloses that the concerned authorities have taken serious steps to impose strict regulations on herbalists and acupuncturists to prohibit malpractices and misuse of herbal medicines in the UK.¹²⁹ The report shows that the number of herbalists who work in the UK is approximately 2,000. Under the proposals for the regulation, the young generation of traditional practitioners should be degree holders, and the old generation must be experienced and knowledgeable. All of them are required to pass the English paper. Professor Michael Pittilo, chairman of the steering group, states that it is important for the

¹²⁷ Liu, T., "China's Health Challenges: Cannot Be Solved in a Day," *British Medical Journal* 333 (2006): 365.

¹²⁸ Mills, S.Y., "Regulation in Complementary and Alternative Medicine," *British Medical Journal* 322(7279) (2001): 158-160. See also House of Lords Select Committee on Science and Technology, *Complementary and Alternative Medicine: Session 1999-2000, 6th Report* (Stationery Office, 2000).

¹²⁹ Donnelly, L., "Herbalists to Face Strict Regulations," Telegraph News Web site, <http://www.telegraph.co.uk/news/uknews/2130511/Herbalists-to-face-strict-regulations.html> (accessed June 16, 2008).

concerned authorities to take action quickly so as to protect public health and enable the accessibility of safe herbal medicine. However, Pittilo argues that TM should not be regulated because regulation implies a formal recognition of the practice despite limited scientific evidence. Professor David Colquhoun, a pharmacologist at University College London, concurs with Pittilo that such a regulation proposal “will endanger lives, not protect them, because it acts as an endorsement of medicines that in many cases don’t work, and in others are very dangerous.”¹³⁰

In response to the frequent utilisation of TCM (88%), the Singaporean Parliament passed the TCM Practitioners Act in the year 2000.¹³¹ This is to register TCM practitioners, ensure and maintain their professional standards. Patients can access TCM services in government hospitals and nursing homes. Similarly, the South African Government has determined to regulate traditional practitioners after coming to the knowledge that more than two thirds of the population utilise the traditional healthcare service in their communities.¹³² Traditional practitioners were officially recognised in South Africa after the Traditional Health Practitioner Act, 2004 (Act No. 35 of 2004) was promulgated. Subsequently, the New South Wales Department of Health, Australia drafts a code of conduct for unregistered health professionals, known as the NSW Public Health Amendment Regulation 2008.¹³³ Unregistered health professionals include practitioners who are not required to be registered under the Medical Practice Act 1992 and registered health practitioners who provide health services that are unrelated to their registration. This regulation has been finalised and commenced on August 1st, 2008.¹³⁴

¹³⁰ Ibid.

¹³¹ Lee, T.L., “Complementary and Alternative Medicine, and Traditional Chinese Medicine: Time for Critical Engagement,” *Annals Academy of Medicine* 35(11) (2006): 749-752.

¹³² Sidley, P., “South Africa to Regulate Healers,” *British Medical Journal* 329(7469) (2004): 758.

¹³³ Ministry of Health, NSW Public Health (General) Amendment Regulation 2008.

¹³⁴ On the debate about the NSW Public Health (General) Amendment Regulation 2008, see the “Legislation Review Digests”, <http://www.parliament.nsw.gov.au/prod/parliament/committee.nsf/V3ListDigests?open&vwCurr=V3LRCDigestsByReg> (accessed October 16, 2008).

2.4.2 Training

A strong national policy would enable the development of an infrastructure such as education and training of practitioners in TM. Bodeker et al.'s paper on training outlines both the informal and formal training of traditional health workers in the countries within the six WHO regions.¹³⁵ Informal training, training without uniform standards, for TCAM includes community recognised TCAM training and allopathic recognised public health training. This training varies between communities and regions, for example in Cameroon, Afghanistan, and Latin America. The teachers are experienced elderly women or men in the community, and hence mainly respond to local demands. In comparison, almost all the countries in South-East Asia Region have informal TCAM training at the national level. With regard to the public health training programmes, they are composed of training involving the management of good intra-partum and post-partum care, and global epidemics such as HIV/AIDS or tuberculosis. The training programmes with HIV/AIDS focus are evident in the African countries, Brazil, and Nepal. These activities could enhance the knowledge of TCAM practitioners and improve their relationship with the allopathic fraternity groups.

Bodeker et al. acknowledge that formal training stands for uniform standard training and offers recognised degrees and certificates. These training courses could be run by the government or private organisations in established colleges, institutions, or universities. They are for both TCAM practitioners and allopathic fraternity groups or medical students. The courses for allopathic fraternity groups could be short or long courses. There is a great variation in the nature of TCAM training programmes for allopathic professional groups with their different objectives ranging from understanding basic knowledge of TCAM to incorporating it into the mainstream healthcare system. Table 2.3 illustrates the number of

¹³⁵ Bodeker, G. et al., "Training" in *Traditional, Complementary and Alternative Medicine: Policy and Public Health Perspectives*, ed. G. Bodeker, and G. Burford (Imperial College Press, 2007), 61-81.

countries which allow allopathic fraternity groups to provide TCAM services, with or without training or relevant qualifications.

Table 2.3: Clusters of allopathic fraternity groups entitled to provide TCAM in countries in WHO regions

Category		Number of country of which TCAM is		
		Prohibited from practising	Allowed to practise by unqualified personnel	Only allowed to practise by qualified personnel
Allopathic Physicians		8 (Bolivia, Indonesia, Portugal)	38 (Australia, Belgium, Denmark, France, Japan, the Netherlands, Qatar, the United Kingdom, and the United States)	42 (India, Pakistan, China, Brazil, Singapore, Vietnam, Saudi Arabia, the United Arab Emirates, Hungary, and Iceland)
Nursing Profession		46 (the USA, Brazil, France, Japan, Indonesia, & Venezuela)	8 (the United Kingdom, Australia, Germany, the Netherlands, and Norway)	14 (China, Cyprus, Hungary, Iceland, India, and the United Arab Emirates)
Allied Health Professions	Physiotherapists	46	10 (Australia, Belgium, the Netherlands, Norway, Switzerland, and the United Kingdom)	8 (India, Hungary, and Iceland)
	Pharmacists	29	11 (Ireland, Malta, the United Kingdom, Norway, and the Netherlands)	11
	Midwives	46	8 (Ireland, Malta, the United Kingdom, Norway, and the Netherlands)	9

Owen et al. argue that the incorporation of CAM in medical education will allow two systems of medicine to complement each other.¹³⁶ CAM can be introduced into undergraduate or postgraduate medical education - for example, the special

¹³⁶ Owen, D.K., et al., "Can Doctors Respond to Patients' Increasing Interest in Complementary and Alternative Medicine?" *British Medical Journal* 322 (2001): 154-158.

CAM modules for third year medical students at the University of Southampton. Then, students will become familiarised with CAM and understand its potential benefits and limitations. Allopathic doctors will be satisfied if they could increase their clinical knowledge in CAM and respond to their patients' interests. Moreover, only trained, registered doctors are allowed to practise CAM. The pertinent point is to bridge the gap in doctor-patient communication and enhance the patients' care in the near future. Additionally, the contact of CAM practitioners with the medical schools could help the professional development of training in CAM. Nevertheless, CAM courses for medical students and allopathic doctors in training are special modules incorporating superficial theoretical knowledge without clinically-based information. Another challenge to integrated teaching is the absence of a general consensus on the core curriculum. They conclude that integrated teaching is good provided the concerned issues are addressed properly.

Peoples-Lee ¹³⁷ presents a cross-sectional study recording the attitudes, perceptions, knowledge, and use of CAM among the participants. Recruited participants are 780 students in 157 faculties in medicine. This self-administered survey reports that 95% of the respondents give a positive feedback on whether all healthcare professionals should have knowledge on the most common CAM therapies so as to be able to address patients' concerns. However, only 26.1% of them have knowledge of CAM. Overall, 83% of the respondents agree and support the introduction and establishment of CAM education in medical schools. With these supportive statistical results, Peoples-Lee comments that all healthcare professionals should equip themselves so as to meet the public's demands.

2.4.3 Integrated Medicine

Integrated healthcare systems are not universally present. TCAM is integrated into the national healthcare systems of Cuba and in some clinics or hospitals in

¹³⁷ Peoples-Lee, D., "Is There A Need for Complementary and Alternative Medicine Education? Comparing the Views of Students and Faculty in Various Healthcare Professions" (PhD diss, Temple University, 2004).

Canada, Guatemala, Mexico, Nicaragua, Panama, Peru, Suriname, and USA in the Region of the Americas; Kuwait in the Eastern Mediterranean Regions since 1978; and China, Viet Nam, and Republic of Korea in the Western Pacific Region.

Rees and Weil take the view that integrated medicine focuses on health and healing rather than disease and treatment.¹³⁸ It treats patients in a holistic approach, and is patient-centred. Patients participate in the process of treatment such as dietary modification and regular exercise. In the integrated medicine, self discipline plays a significant role in the process of healing. As such, this could minimise the dependence on the expensive, less effective and harmful technological intervention. Integration of both modern medicine and TM could improve chronic disease management,¹³⁹ enhance the efficacy of cancer management,¹⁴⁰ and improve the quality of care in managing the HIV/AIDS epidemics.¹⁴¹ Integrated medicine also allows healthcare equity in which patients could access their choice of healthcare service. It is beneficial to have an efficient “human interaction” to minimise linguistic barriers.¹⁴²

Understanding the advantages of integration, Letendre notes the Canadian Government’s attempts to integrate TM into mainstream healthcare system in order to meet the health needs of Canada’s Aboriginal population.¹⁴³ The health status of the Canadian Aboriginal population is not at a satisfactory level. He also observes the contradictions in integration. There is the requirement for ‘evidence

¹³⁸ Rees, L., & A. Weil, “Integrated Medicine” in *British Medical Journal* 322 (2001): 119-120.

¹³⁹ Willison, K.D., L. Mitmaker, & G.J. Andrews, “Integrating Complementary and Alternative Medicine with Primary Health Care Through Public Health To Improve Chronic Disease Management,” *Journal of Complementary and Integrative Medicine* 2(1) (2005): 1-23.

¹⁴⁰ Struthers, R., & V.S. Eschiti, “The Experience of Indigenous Traditional Healing and Cancer,” *Integrated Cancer Therapies* 3(1) (2004): 13-23.

¹⁴¹ Kaboru, B.B., et al., “Communities’ Views on Prerequisites for Collaboration between Modern and Traditional Health Sectors in Relation to STI/HIV/AIDS Care in Zambia,” *Health Policy* 78(2-3) (2006): 330-339.

¹⁴² Bhardwaj, M., and D.R.J. Macer, “Policy and Ethical Issues in Applying Medical Biotechnology in Developing Countries,” *Medical Science Monitor* 9(2) (2003): RA 53. See also Green, G., H. Bradby, A. Chan, and M. Lee, ““We Are Not Completely Westernised”: Dual Medical Systems and Pathways to Health Care among Chinese Migrant Women in England,” *Social Science and Medicine* 62(6) (2006): 1498-1509.

¹⁴³ Letendre, A.D., “Aboriginal Traditional Medicine: Where Does It Fit?” *Crossing Boundaries – an Interdisciplinary Journal* 1(2) (2002): 78-87.

based medicine',¹⁴⁴ which conflicts with the fundamental philosophies of TM, and the opposition to basic concepts of prevention and treatment of illness in each of the systems. Undoubtedly, Lee has raised his concern on the necessity of incorporating evidence-based medicine into CAM practice in order to address its safety.¹⁴⁵ Based on the Singapore Medical Council's Ethical Code and Guidelines, in the best interests of the patients joint practice is only allowed with the consent of patients. It has to be executed and followed up by adequately trained allopathic doctors. Moreover, financial support or research in T&CM, and collaboration with the allopathic fraternity in conducting the research, are also essential for successful integration.

Holding the same view, Bodeker et al.¹⁴⁶ and Mbwambo et al.¹⁴⁷ recommend biomedical evaluation of TCAM, social science research, framework for national policy such as decentralisation in the provision of services, and multidisciplinary partnerships involving scientists, traditional healthcare providers, patients, the public, the government, and the NGO community. Therefore, incorporating TCAM into the modern medicine curriculum, professional training, establishing good relationships between traditional practitioners and allopathic doctors, financial support for research in CAM, and ensuring a good manufacturing product in TCAM, are fundamental steps in moving toward integration.

¹⁴⁴ 'Evidence-based medicine' is generally presented in the context of the "hierarchy of evidence". The top of the evidence hierarchy is systematic reviews of randomised controlled trials, followed by individual randomised controlled trials, nonrandomised trials, observational and retrospective studies, case-series, and qualitative research. See Block, K.I., & W.B. Jonas, "'Top of the Hierarchy' Evidence for Integrative medicine: What Are the Best Strategies?" *Integrative Cancer Therapies* 5(4) (2006): 277-281, 277.

¹⁴⁵ Lee, T.L., "Complementary and Alternative Medicine, and Traditional Chinese Medicine: Time for Critical Engagement," *Annals Academy of Medicine* 35(11) (2006): 749-752.

¹⁴⁶ Bodeker, G. et al., "HIV/AIDS: Traditional Systems of Health Care in the Management of A Global Epidemic" in *Traditional, Complementary and Alternative Medicine: Policy and Public Health Perspectives*, ed. G. Bodeker, and G. Burford (Imperial College Press, 2007), 255-293.

¹⁴⁷ Mbwambo, Z.H., R.L.A. Mahunnah, and E.J. Kayombo, "Traditional Health Practitioner and the Scientist: Bridging the Gap in Contemporary Health Research in Tanzania," *Tanzania Health Research Bulletin* 9(2) (2007): 115-120.

2.4.4 Intellectual Property Rights (IPR) and Confidentiality

Nowadays, TM is a subject frequently discussed in the context of IPR. TM formulations are increasingly being patented.¹⁴⁸ However, with respect to practices, these are generally not patentable in most of the countries in the world on account of the commonly applied prohibition on the patenting of “diagnostic, therapeutic and surgical methods for the treatment of humans or animals”, an exclusion permitted by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).¹⁴⁹ Thus, the Malaysia Patent Act, 1983, states that “methods for the treatment of human or animal body by surgery or therapy, and diagnostic methods practised on the human or animal body” are not patentable.¹⁵⁰ The Patent Law of the People’s Republic of China echoes this, stating that patent rights shall not be granted on “methods for the diagnosis or for the treatment of diseases.”¹⁵¹

In contrast, the Convention on Biological Diversity (CBD), 1993, provides rights to knowledge holders to protect their knowledge. The CBD provides that each party shall:

subject to its national legislation, respect, preserve and maintain knowledge, innovations and **practices** of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and **practices** and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and **practices**.¹⁵²

The CBD seeks to protect knowledge, innovations and practices having a long historical or cultural background in the community *if* they are “relevant for the conservation and sustainable use of biological diversity”. However, under TRIPS,

¹⁴⁸ Marinova, D., & M. Raven, “Indigenous Knowledge and Intellectual Property: A Sustainability Agenda,” *Journal of Economic Surveys* 20(4) (2006): 587-605.

¹⁴⁹ TRIPS Agreement, Art 27(3a).

¹⁵⁰ The Malaysia Patent Act 1983 (Incorporating latest amendment – Act A1137/2002), S 13 (1d).

¹⁵¹ The Patent Law of the People’s Republic of China 1984 (Incorporating latest amendment in 2008), Art 25(3).

¹⁵² The Convention on Biological Diversity 1993, Art 8(j).

unless these are patented, they are presumably not owned by anybody and are thus in the public domain. Irrespective of which agreement takes precedence, since the CBD uses the phrase 'subject to national legislation', the obligation on governments is quite a soft one. In November 2001, after reviewing the TRIPS provisions, there was a call for the harmonisation of the CBD and TRIPS in the Doha Ministerial Declaration of the World Trade Organization. The Doha Declaration emphasised the protection of traditional knowledge:

We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 and the work foreseen pursuant to paragraph 12 of this declaration, to examine, inter alia, the relationship between the TRIPS Agreement and the CBD, the protection of traditional knowledge and folklore, and other relevant new developments raised by members pursuant to Article 71.1...¹⁵³

Furthermore, the United Nations Declaration on the Rights of Indigenous Peoples, 2007, also supports the protection of traditional knowledge by declaring:

Indigenous peoples have the right to promote, develop and maintain their institutional structures and their distinctive customs, spirituality, **traditions**, procedures, **practices** and, in the cases where they exist, juridical systems or customs, in accordance with international human rights standards.¹⁵⁴

In other words, traditional practitioners have the right to protect their traditional knowledge, innovations and practices in TM all of which have been transmitted from generation to generation through repeated practice. However, the Doha Declaration is not yet legally binding. Hence, the authorities concerned should think about the most appropriate methods for the protection of TM practices.

Pattinson mentions that in order to gain the trust of patients, healthcare professionals should respect these patients' confidentiality.¹⁵⁵ In his view, medical information could be protected by law such as the common law of confidentiality, the Human Rights Act 1998, and the Data Protection Act, 1998.

¹⁵³ "Ministerial Declaration," http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm (accessed November 14, 2008).

¹⁵⁴ The United Nations Declaration on the Rights of Indigenous Peoples, 2007, Art 24, 31, & 34.

¹⁵⁵ Pattinson, Shaun D., *Medical Law and Ethics* (Sweet & Maxwell, 2006).

The common law of confidentiality emphasises that healthcare professionals who breach such confidentiality will be found to be negligent unless it is proven that the disclosure is in the public interest. In order to be confidential, the information must not be in the “public domain” and be “useless”,¹⁵⁶ or must belong to the category of “personal and intimate information”.¹⁵⁷

The Human Rights Act protects private interests, for example, Article 8(1) states that “private and family life” should be respected. Pattinson reiterates that in accordance with Articles 8 and 10 of the Human Rights Act, 1998, breach of confidence is interpreted as the “misuse of private information”.¹⁵⁸ However, only “an overriding requirement in the public interest” could justify the disclosure of the confidence in the medical profession.¹⁵⁹

The Data Protection Act 1998 implements Directive 95/46/EC of the European Parliament and of the Council (Privacy Directive). The objective of this Directive is to protect the free flow of personal data between Member States and “the fundamental rights and freedoms of natural persons, and in particular their rights to privacy.”¹⁶⁰ However, Pattinson points out that the Act lacks the conciseness of the Directive. He explains that there are eight data protection principles in establishing standards to handle data: all personal data must be processed only according to legal requirements, the access and utilisation of data should be limited to legal purposes, only relevant personal data should be allowed to be processed, accurate and up-to-date data is required, data must be kept for no longer than is necessary for such purposes, data is allowed to be processed with consent of the data subject, the subject of the data could be compensated if there are detrimental results because of the data disclosure, and the data subject has the right to correct inaccurate information after applying to the courts to do so. The

¹⁵⁶ *AG v Guardian Newspapers (No.2)* [1990] 1 A.C. 109, 282.

¹⁵⁷ *Stephens v Avery* [1988] Ch. 449 (where information relating to sexual conduct of a lesbian nature was held to be confidential information).

¹⁵⁸ *Campbell v MGN* [2004] UKHL 22, para.17.

¹⁵⁹ *Pretty v UK* (2002) 25 E.H.R.R. 371, 406.

¹⁶⁰ Kuner, Christopher, *European Data Protection Law: Corporate Compliance and Regulation*, 2nd ed. (OUP, 2007), 346.

Data Protection Act and the law of confidentiality can be seen as complementary because certain personal files and their contents and exposure may not fall under the jurisdiction of the Act, and the act of processing such information may not indicate wrongful use either. Based on the principle of respecting individual privacy, the Human Rights Act 1998 could link together, both the law of confidentiality and the Data Protection Act.

In his article on protecting traditional knowledge and practices in India, Kaushik explains that Indian traditional knowledge cannot be protected by IPR completely because of its being the knowledge of oral tradition and in public domain.¹⁶¹ He offers several suggestions: documentation of traditional knowledge by means of a Traditional Knowledge Digital Library (TKDL) to check biopiracy through preventing improper patent claims, and tracing the relevant creators;¹⁶² an innovation registration system, for example, village-specific Community Biodiversity Registers for local communities who hold the knowledge; and the development of a *sui generis* (idea of its own kind) legal protection system. These suggestions are further emphasised in the subsequent paragraphs by Gupta.

In responding to traditional knowledge challenges, Gupta takes the view that India is just at the initial stage of building awareness of the inestimable value of indigenous inventions, such as effective agricultural techniques and plants of medicinal or nutritional value, through computerised network kiosks and media, and of the importance of documentation of traditional knowledge.¹⁶³ For example, the Honey Bee Network was established in 1988-1989 to protect traditional knowledge and practices at the grassroots level, and extend them to the international level through conferences, websites, and collaboration with other

¹⁶¹ Kaushik, A., "Protecting Traditional Knowledge, Innovations and Practices: The India Experience," in *Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions*, ed. Sophia Twarog & Promila Kapoor (United Nations, 2004): 85-90.

¹⁶² Department of Indian Systems of Medicine & Homeopathy, National Institute of Science Communication And Information Resources, & Controlled General of Patents, Designs and Trade Marks, *Traditional Knowledge Digital Library: User Manual* (NISCAIR Press, 2003).

¹⁶³ Gupta, A. K., "From Sink to Source: The Honey Bee Network Documents Indigenous Knowledge and Innovation in India," in *Innovations: Technology, Governance, Globalisation* 1(3) (2006): 49-66.

countries. This network aims to ensure that consented inventors have profit from participating in the network activity. Moreover, inventors will not be stressed unnecessarily with an unfamiliar language, e.g. in the case of Tamil-speakers who do not know any English. In the network, farmers, scientists, researchers, and other experts have worked as a team, and ultimately this partnership has been formalised into the National Innovation Foundation of India (NIF) in 2000. In the course of travelling and data gathering, researchers learn about local experimental techniques, and farmers may improve their innovations with scientific input. Moreover, informal learning among children on creative farming techniques is promoted.

However, the author does not agree to the use of modern science to evaluate local practices. The founding of the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) in 1993, has resulted in an institutionalised extension of the Honey Bee Network. SRISTI protects the IPRs of local community members through the International Network for Sustainable Technological Applications and Registration (INSTAR). Registration permits the local knowledge in any village of a country to be protected and shared nationally and internationally. In order to protect the holders' rights, the particular local knowledge or practices must have a title. However, the medicinal value of plants and agricultural knowledge, which is old and common in the community, is often considered 'prior art', and may be modified from generation to generation.¹⁶⁴ In concluding the article, Gupta suggests the reform of IPR systems to address the challenges, through the application of scientific information technology, the establishment of venture capital, provision of privileges for local innovations, and reconsideration of the role of international organisations (in knowledge conservation) such as United Nations agencies.

¹⁶⁴ 'Prior art' is known to be 'information that is already known to the public and therefore knowledge that cannot be patented'. *Ibid.*, 57.

In his qualified support of Gupta's article, Dutfield highlights Gupta's denial that "knowledge wealth necessarily goes hand in hand with material wealth, and that innovation cannot thrive in the midst of mass poverty".¹⁶⁵ Rural people in developing countries who possess useful local knowledge in health or agriculture should disseminate and exchange their valuable knowledge nationally and internationally to minimise its under-utilisation. The holders of the knowledge could be benefited and the local knowledge could be developed further with proper institutional support. Since the 1990s, many international organisations such as the World Bank have identified the significant role of local knowledge in sustainable rural development programmes. Dutfield emphasises that many plants have medicinal value but their therapeutic value may not have been made known. Moreover, the usage and effectiveness of these medicinal plants must incorporate elements of the culture and beliefs of a particular community. Agreeing with Gupta, he says that in the agricultural field, many farmers do experiment on and further improve their traditional cultivation systems to overcome daily challenges in a hostile environment. However, Gupta's work focuses on the 'individual' instead of the 'community'. From the conclusion of the above article, the author notes a deficiency in institutional support such as financial insufficiency, inefficiency of policymakers in looking into the sharing benefits, insecurity for the inventors on knowledge sharing, and inaccessibility to knowledge networking. He argues that Gupta has neglected the factor of multidisciplinary involvement in knowledge sharing; and this has a high possibility of increasing the risk of databases being misused. Dutfield also points out that Gupta avoids discussing the issue of IPRs versus public domain while encouraging local knowledge sharing and dissemination. Doubt is also raised about how poor rural communities in India can afford the costly process of patenting in the United States as endorsed by Gupta, and then enforcing these patents. Additionally, the local knowledge in health or agriculture from a developing country may not be appropriate for a developed

¹⁶⁵ Dutfield, G., "Promoting Local Innovation as a Development Strategy - Innovations Case Discussion: The Honey Bee Network," *Innovations: Technology, Governance, Globalisation* 1(3) (2006): 67-77, 70.

country. Overall, Dutfield agrees with Gupta's idea of supporting local innovations and encouraging local knowledge sharing and dissemination.

Currently, there is a controversy over the patenting of classical Indian health practice. *The Times* has reported the Indian authorities' strong opposition to 150 granted patents relating to Yoga in the United States.¹⁶⁶ Verghese Samuel, joint secretary of the MOH Department for Yoga and other traditional practices in India, argues: "how can you patent yoga – something that has been in the public domain for thousands of years?"¹⁶⁷ Indian authorities are very disappointed by the trademark granted to Bikram Choudhury, for his so called 'hot yoga' performed in a steam room at a temperature of 40.5°C. The authorities want to protect and conserve the original principle of yoga since it has been practised in India for more than 5000 years. Moreover, it is part of a traditional Indian system of life-style. It deals with body, mind and consciousness of oneself. Presently used by multitude of people world over, this concept, it is argued, is not a fit object or item for profit making.

Regarding the protection of TCM from IPR in China, a concept of 'new traditional knowledge' was raised by Liu.¹⁶⁸ Traditional knowledge that is newly developed presently could be a process or product expressed in a local or common language. It is different from general traditional knowledge, which has been in the public domain. Liu highlights that along with the development of systems of TCM in China, new knowledge has been created such as the introduction of new plants from other countries, and application of modern chemistry, biology and pathology in TCM research and clinical practices, which is synonymous with the modernisation of TCM. Moreover, there are family medical knowledge and skills that have yet to be disclosed or discovered. The State Intellectual Property Office's 1985-2001 report shows approximately 1,000 applications of TCM patents

¹⁶⁶ "American Attempt to Patent Yoga Puts Indians in a Twist," *The Times*, May 31, 2007.

¹⁶⁷ Ibid.

¹⁶⁸ Liu, Y.L., "IPR Protection for New Traditional Knowledge: With a Case Study of TCM," *European Intellectual Property Review* 25(4) (2003): 194-199.

annually. Patent is granted based on the criteria of novelty and inventiveness of the Patent Law of China 1984, Art 22(1). The granted patent can be for new preparation techniques, therapeutic value, prescription and administration of TCM, and extraction of main TCM elements. The author concludes that protection of new traditional knowledge by IPR is possible once its criteria have been met.

There is limited information on IPR related to TM practice in Malaysia. Malaysia is a member of the WTO, and accordingly is bound to the provisions of the WTO's Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS). The Intellectual Property Corporation of Malaysia (IPCM or MyIPO) was established in 2003.¹⁶⁹ It is located under the Ministry of Domestic Trade & Consumer Affairs with the objectives of providing information on intellectual property, especially to the public, and enforcing the various intellectual property laws, including the Patent Act 1983 (Act 291) which contains no explicit provisions on traditional, medicine, knowledge or practices.

IPR may not relate directly to the nature of this study. However, in the course of integration of two systems of medicine and their regulation, the legal protection of genuine traditional practitioners and their practices should be taken into consideration. This is particularly so in the development of new diagnostic and treatment device attributed to integrated practice. As highlighted by the former Director of Global Intellectual Property Issues Division and Life Sciences Programme of WIPO, Antony Taubman, while many countries exclude methods of medical treatment from patentability on policy grounds, this does not extend to formulas, devices, and manufacturing processes that may be linked with TM practices.¹⁷⁰

¹⁶⁹ See "Protecting Innovation – Advancing Competitiveness" <http://www.myipo.gov.my> (accessed August 22, 2008).

¹⁷⁰ Taubman, A., e-mail message to author, March 2, 2009.

2.4.5 Summary

Unsurprisingly, a global overview illustrates that the majority of TCAM providers are traditional health professionals. In view of public safety, WHO recommends the development of national policy in all member countries. WHO suggests establishment of an official registry for TCAM practitioners, education and training infrastructures and programmes, and umbrella TM organisation in the respective country.

There is controversy concerning the regulation of TCAM. Groups against regulating TCAM argue that regulating means recognising TCAM formally and they note that TCAM is not grounded in a base of scientific evidence. Groups which favour regulation claim that with regulation, only qualified TCAM practitioners can practise; that is, only TCAM practitioners who have undergone formal education and training are recognised.

This raises a question about the optimal policy direction for those countries that still depend on informally trained TCAM providers. What should be their path to traditional health sector development? Moreover, insufficient financial support and strong political constraints are known to have retarded the provision of TM training.

WHO now promotes integrated medicine practice and education. Integrated medicine is generally defined as holistic patient-centred medicine with minimal drug dependence, effective in chronic diseases management, improves quality of life, and promotes a mutual understanding among allopathic doctors and TM practitioners.¹⁷¹ The popular debate on integrated medicine focuses around (a) the topic of limited scientific evidence especially and (b) challenges in integrating the fundamental principles of TM and those of modern medicine.

¹⁷¹ See <http://www.imconsortium.org>.

Finally, the legal debate concerning protection of TM practices has been taken into consideration in the literature review. TM products and practices are generally not patentable as many exist as common knowledge in the public domain, thus constituting *prior art* and negating the requirement for novelty which patent protection requires. International instruments such as the Convention on Biological Diversity do offer a framework for protection, but while still un-reconciled with TRIPS, no formal protection or enforcement system exists internationally for the IPR protection of TM knowledge.

2.5 Literature on Traditional Medicine Policies in China and India

In this section, the comparative approach is used to highlight the differences and similarities between China and India in their healthcare systems, and the education and training systems of traditional practitioners. Subsequently, their experiences are drawn upon as a reference for Malaysia in formulating its own policies and regulations on TM.

2.5.1 The National Healthcare System

Some recent studies¹⁷² take the view that the traditional Chinese system of medicine is now completely integrated into the national healthcare system in China. Patwardhan et al comment that China has succeeded in integrating TCM into modern medicine on a scientific evidence-based approach.¹⁷³ However, Fan argues that integrated medicine in mainland China is dominated by modern medicine in the aspects of education, research, practice, and the pharmaceutical sector.¹⁷⁴ In the aspect of regulation, the government uses the standard of modern

¹⁷² Xie, Z.F., "Harmonisation of Traditional and Modern Medicine," in *Traditional Medicine in Asia*, ed. R.R. Chaudhury, and M.R. Uton (WHO, 2002), 115-134.

¹⁷³ Patwardhan, B. et al., "Ayurveda and Traditional Chinese Medicine: A Comparative Overview," *Evidence-Based Complementary and Alternative Medicine* 4(2) (2005): 465-473.

¹⁷⁴ Fan, R.P., and I. Holliday, "Which Medicine? Whose Standard? Critical Reflections on Medical Integration in China," *Journal of Medical Ethics* 33(8) (2007): 454-461.

medicine as a guideline to evaluate TM. Fan argues further that TM should not be evaluated according to the standards of modern medicine.

In contrast to China's integrated model of TM development, India has adopted the parallel model of health system in which both the modern and traditional systems of medicine have independent roles within the national healthcare system. Mudur explains that the majority of allopathic doctors prefer a parallel system to avoid confusion and 'quackery'.¹⁷⁵ They agree with the idea of introducing the curriculum of TM into undergraduate modern medicine, but do not accept the suggestion to allow allopathic physicians to practise ISM and vice-versa.

In the contemporary context, modern medicine still fails to provide adequate healthcare services in India, especially to rural areas.¹⁷⁶ Under the *National Policy on Indian Systems of Medicine and Homeopathy 2002*, ISM practitioners have been employed to overcome the shortage of allopathic doctors at the primary health care level as a majority of villagers still believe in TM and its practices.¹⁷⁷

With regard to India's National Policy on ISM, Helen Sheehan highlights the necessity of reviewing the healthcare policy, and ensuring the credentials of practitioners and quality of care to patients.¹⁷⁸ Following the establishment of the central government ministry for the ISM and increased number of qualified practitioners, legislation against illegal practices has been implemented. However, it seems that the ethical issue of licensing, certification and other regulatory measures regarding medical practitioners and their practices are not being addressed by the concerned authorities. In the poor rural areas, private and

¹⁷⁵ Mudur, G., "Indian Doctors Decry Proposal to Teach Traditional Medicine," *British Medical Journal* 323 (2001): 1090.

¹⁷⁶ Dalal, A.K., "Integrating Traditional Services within Primary Health Care," *Journal of Health Management* 7(2) (2005): 249-262.

¹⁷⁷ *National Policy on Indian Systems of Medicine and Homeopathy – 2002*, http://www.whoindia.org/LinkFiles/AYUSH_NPolicy-ISM&H-Homeopathy.pdf (accessed February 4, 2008).

¹⁷⁸ Sheehan, H. "Medical Pluralism in India: Patient Choice or No Other Options?" *Indian Journal of Medical Ethics* 6(3) (2009): 138-141.

unqualified practitioners are in high demand due to unavailability of qualified practitioners. In comparison, urban patients turn to traditional practice because of dissatisfaction with modern medical care. Sheehan presumes that well-planned clinical guidelines may ensure a proper patient management and care, and points out that the reputation of the allopathic doctors and qualified traditional practitioners is undermined by unqualified practitioners. She also mentions that the limited choices for the poor have resulted in 'forced pluralism', whereby the healthcare providers are dominated by informal providers with lower clinical competency levels. They are spiritual and traditional healers, shopkeepers selling tonics and tablets, traditional birth attendants, and registered medical practitioners. The author concludes the article by calling for mandatory policy reviewing, and proper formulating of regulation and enforcement.

2.5.2 Education and Training System

In the contemporary context, although India is a country with a long history of well established formal education and training in TM, training for traditional practitioners still happens on an **informal** basis in certain rural areas. Ayyanar and Ignacimuthu explore how Kani Tribes from Kouthalai of the Tirunelveli Hills, Tamil Nadu, commonly begin their training from childhood as assistants to their parents or relatives who are known as healers.¹⁷⁹ They are allowed to give treatment after several years of apprenticeship, with recognition from their community. However, these groups of practitioners, of which there are estimated to be 2 million or more throughout India, are not recognised by the Indian Government. The government will only register and recognise institutionally qualified traditional practitioners.

An informal training related to household and community health practices has been initiated by an NGO called Foundation for Revitalisation of Local Health

¹⁷⁹ Ayyanar, M., and S. Ignacimuthu, "Traditional Knowledge of Kani Tribals in Kouthalai of Tirunelveli Hills, Tamil Nadu, India," *Journal of Ethnopharmacology* 102(2) (2005): 247.

Tradition (FRLHT).¹⁸⁰ This would ensure a provision of proper primary healthcare services among the rural and tribal communities where accessibility to modern medicine is very difficult even these days. To facilitate this, FRLHT has established several district level resource centres and kitchen herbal gardens in the southern part of India. Well developed networking and well organised workshops allow knowledge exchange. The FRLHT's training programme is mainly based on real life experiences.¹⁸¹ The lectures provide an explanation on the local health traditions and methods of documentation.

Under the IMCC Act 1970, undergraduate traditional medical students have to undergo five and a half years of formal education and training to become a qualified practitioner. And postgraduate courses are of three years' duration. Traditional medical students have to receive one year training in bioscience: biology, chemistry and physics, prior to taking up the ISM course. Upgrading courses are available such as courses in panchakarma. The *Guidelines on Basic Training and Safety in Panchakarma* indicates that Ayurvedic practitioners have to undergo six months training in order to practise independently and extend their services.¹⁸²

Similarly, China also has well-established formal TM education and training. The duration of training is five years for an undergraduate course, 3 years for master and doctoral degrees. There are approximately 47 universities and colleges of TCM in China, and a system of examination to determine the qualifications of traditional practitioners.¹⁸³ An examination system to assess traditional practitioners who have undergone informal training, such as through

¹⁸⁰ See "Documentation, Research, Assessments, and Training Related to Household and Community Health Practices," <http://www.frlht.org.in/html/docu.htm> (accessed August 23, 2008).

¹⁸¹ See "Foundation for Revitalisation of Local Health Tradition," <http://www.doccentre.net/Trg/FRLHT-apr14-16-03.htm> (accessed August 23, 2008).

¹⁸² Department of AYUSH, *Guidelines on Basic Training and Safety in Panchakarma* (CCRAS, 2008).

¹⁸³ See *China Health Statistics Yearbook 2009*, <http://www.moh.gov.cn/publicfiles/business/htmlfiles/zwgkzt/ptjnj/200908/42635.htm> (accessed March 28, 2010).

apprenticeship is also available. The modes of Chinese medical knowledge transmission during the apprenticeship are held to be 'secret' and 'personal'.¹⁸⁴

In accordance with the 'Temporary Regulation for the Examination on Apprenticeship in Traditional Medicine and Proof of Suitability to Be a Doctor', those who have obtained professional titles before the implementation of the Regulation are exempted from the examination.¹⁸⁵ The rest who have learned their traditional knowledge through the apprenticeship have to sit for the examination. On passing the examination, they obtain a Certificate of Special Qualification granted by the respective Provincial Administration of TCM and are recognised as qualified doctors.

2.5.3 Summary

In summary, the literature review explores the contemporary healthcare systems in China and India. While China has adopted the integrated system, India has adopted a parallel system. In practice, however, such distinctions contain many examples of the other and it is not a clean-cut separation of policy styles.

Fan comments that the practice of integrated medicine in China is dominated by modern medicine. In India, allopathic doctors do not favour integrated medicine practice. However, ISM needs to be a parallel practice with modern medicine to meet the high demand from rural areas. However, there are currently calls from within India for Indian authorities to review the national policy on ISM.

With regard to education and training, both countries have standardised curricula. However, informal education, training related to household and community health

¹⁸⁴ Hsu, E., *The Transmission of Chinese Medicine* (Cambridge University Press: 1999), 21-57 & 88-104.

¹⁸⁵ "Temporary Regulation for the Examination on Apprenticeship in Traditional Medicine and Proof of Suitability to Be a Doctor," in *Collections of Laws, Regulations and Documents on Traditional Chinese Medicine*, ed. Daning Li et al. (Department of International Cooperation SATCM, 2005), 129-133.

practices, still exists in India. The literature reviewed so far compares two quite different systems of healthcare provision.

We now turn to a comparison with the work done in Malaysia.

2.6 *The Malaysian Experience*

Based on a nation-wide community survey published in 2004, the HMRC in Malaysia reported that 69.4% of the Malaysian population had used TM in their life-time and 55.6% had used TM in the past 12 months.¹⁸⁶ According to Health Ministry Director-General Tan Sri Dr Ismail Merican, the estimated expenditure on T&CM in Malaysia by 2020 was US\$300mil (MYR960mil).¹⁸⁷ In an earlier newspaper article, Dr Ismail Merican stated that “the Government will ensure that all plans to integrate T&CM are carried out carefully. This includes giving due consideration to the safety and medico-legal aspects, religious sensitivities and local cultures.”¹⁸⁸

The traditional healthcare system of Malaysia still resides with the private sector which is funded by NGOs or out-of-pocket payments. Malaysia is a multicultural country, comprising different systems of TM, such as those of indigenous groups, Malays, Chinese, and Indians. With the existence of different medical systems in the country, there is a possibility of these systems either competing with, or complementing, one another. This is one of the key issues that the Malaysian MOH would like to address. Malaysia hopes to integrate all these traditions so that they can complement each other.¹⁸⁹

¹⁸⁶ Tahir, A. *et al.*, “The Utilisation of Traditional & Complementary Medicine in the Malaysian Population: A Community Based Survey,” *Journal of Health Management* (September 2006): 76.

¹⁸⁷ Edwards, A., “Practising Integrative Medicine,” *The Star*, July 27, 2008.

¹⁸⁸ Freeda Cruz, A., “Going Traditional with Treatment” *New Sunday Times*, August 12, 2007.

¹⁸⁹ In the Malaysian context, ‘complement’ would be known as the usage or application of one or the other modalities in the treatment of a patients.

Malaysia began building the supporting infrastructures for TM in the 1990s.¹⁹⁰ Units of T&CM were formed in 1996. A standing committee was appointed in 1998 to advise and assist the MOH on policies and strategies for monitoring T&CM. T&CM Umbrella Bodies were set up in 1999 to regulate TM practitioners in the country.¹⁹¹ These bodies would register their own relevant modality of practitioners, and would assist to develop standardised training programmes, guidelines, and code of ethics. The HMRC was established in 2000 to focus on scientific evidence for the efficacy and safety of herbal products. HMRC is based in the Institute for Medical Research (IMR). This development indicated a move towards integration. The Health Minister (then) Datuk Chua Jui Ming commented, “TM has gained public acceptance because of its effectiveness.” This meant that TM would be allowed to be incorporated into mainstream healthcare system soon.¹⁹²

The *National Policy on Traditional/Complementary Medicine* and regulations for T&CM practices were launched in 2001.¹⁹³ In January 2004, the T&CM Division was established to look into the standardisation of training programmes and accreditation of training centres.

In response to public demand, three public hospitals, namely Kepala Batas Hospital (KBH) in Penang, Putrajaya Hospital in the Federal Territory, and Sultan Ismail Hospital in Johor, were chosen to facilitate the pilot projects for integrating TM practices into the mainstream healthcare system. Based on their strategic location and being the key mainstream hospitals of the states, these three hospitals in the northern, central and southern part of Malaysia were selected as the forerunners of integration of TM into the Malaysian mainstream healthcare.

¹⁹⁰ Loganathan, M. et al., eds. *Traditional and Complementary Medicine Division Bulletin*, September–December, 2006.

¹⁹¹ The T&CM Umbrella Bodies are “national bodies that are registered with the Registrar of Societies, and appointed by the MOH to accredit the curriculum and training institutions, register and self-regulate TCAM practitioners through the compliance of standard codes of practice and conduct of identified modalities”. T&CM Division, *National Policy on Traditional/Complementary Medicine, Malaysia*, 2nd ed. (T&CM Division, 2007), 4.

¹⁹² *New Straits Times*, March 18, 1997.

¹⁹³ *Ibid.*, 23.

The first T&CM Unit in a government hospital, KBH, was launched by the then Prime Minister of Malaysia, YAB Dato' Seri Abdullah Haji Ahmad Badawi on October 26, 2007.¹⁹⁴ Three modalities of T&CM are offered – traditional Malay massage, acupuncture, and herbal preparations. The first two modalities mainly focus on the management of post-stroke and chronic pain, whereas herbal preparation is as an adjuvant treatment for cancer patients. In order to expand T&CM services, MOH has decided to establish two T&CM units annually in different states of Malaysia respectively. Eight T&CM units were established in Malaysia by the end of 2010.¹⁹⁵

Clearly, Malaysia has taken a significant step towards integrated medicine. Unfortunately, this development was countered with the announcement on July 9, 2004 by the Health Minister Datuk Dr Chua Soi Lek that Umbrella Bodies were to be disbanded.¹⁹⁶ The main reason for disbanding of the five Umbrella Bodies: Federation of Chinese Physicians and Medicine-Dealers Associations of Malaysia (FCPMDAM), the Federation of Traditional Malay Medicine of Malaysia (PUTRAMAS), Malaysian Association of Traditional Indian Medicine (MATIM), the Malaysian Council for Homeopathic Medicine (MPHM), and the Malaysian Society for Complementary Therapies (MSCT), was because one of the Umbrella Bodies (FCPMDAM) had misused the MOH's logo in their official documents. In addition, many complaints had been lodged against these bodies for conducting courses without accreditation. Hence, the Health Minister proposed that the Umbrella Bodies be composed of more than five groups. In particular, it was argued that TCM should not be led by the medicine dealers.¹⁹⁷ Dr Ismail Merican further noted, "Some of the present representatives are not ethical and at times rather high-

¹⁹⁴ T&CM Division, *Annual Report 2007* (T&CM Division, 2007), 24-25.

¹⁹⁵ T&CM Division, *Annual Report 2010* (T&CM Division, 2010), 5.

¹⁹⁶ "Five Umbrella Bodies Disqualified as the Representatives of Genuine Traditional and Complementary Medicine Practitioners," *Sin Chew Daily*, July 18, 2004.

¹⁹⁷ "Disbanding the Umbrella Bodies to Correct the Mistakes," *Sin Chew Daily*, August 30, 2004.

handed despite numerous warnings. One of them became rather arrogant and frequently made statements in the press on behalf of the MOH.”¹⁹⁸

One of the TCM practitioners from Klang Valley expressed the view that the health minister's act of disbanding the five Umbrella Bodies was contrary to the ministry's earlier prospect of encouraging and supporting TM practitioners in the country.¹⁹⁹ The July 9, 2004 verdict placed all traditional practitioners in a dilemma. Initially, under the encouragement of the MOH, all TCM practitioners registered with the Chinese Umbrella Body (FCPMDAM). With the disbanding they were left wondering with whom and where they should register. For close to two years, there has been no proper regulation for these practitioners. Does it mean that all TCM practitioners have absolute freedom to practise? Or, does it mean that the MOH will ignore TM practice?

The other four non-TCM Umbrella Bodies felt that it was unfair to disband the five Umbrella Bodies due to the fault of one body. They considered the misuse of MOH's logo as a minor issue. Moreover, the implicated Umbrella Body (FCPMDAM) had given a written apology. Instead of disbanding the five Umbrella Bodies, it was argued that the MOH should have given them a chance to prove their case.

Immediately after the disbanding, the five Umbrella Bodies decided to form the Malaysian Council of Umbrella Bodies in Traditional and Complementary Medicine (MCUT).²⁰⁰ The aim of this council was to address the injustice vetted upon the Umbrella Bodies. Unfortunately, not all council members played an active role and after a period, the Council was dissolved. The Standing Committee under the chairmanship of the Deputy Director-General of Health issued a fresh invitation to

¹⁹⁸ See “Traditional Medicine Groups Lose Official Recognition,” *Medical Tribune* (August 2004), www.medicaltribune.net/dispserchcontent.cfm?pg=1&id=13398 (accessed December 2, 2005).

¹⁹⁹ “Registration of the Traditional Chinese Medicine Practitioners,” *China Press*, December 22, 2004.

²⁰⁰ Minutes of the Pro-Tem Committee Meeting, Malaysian Umbrella Bodies, July 15, 2004, Dynasty Hotel, Kuala Lumpur.

the practitioner bodies to sit in the committee as practitioner associations bound by terms of reference.²⁰¹ The key terms of reference were that practitioner bodies had to work in collaboration with the standing committee, to attend all important meetings, to provide the requested information as and when required by MOH, to support all the conferences of T&CM organised by MOH in collaboration with practitioner associations. In addition they were also requested to keep proper minutes and registry documents, and submit an annual report of all activities to the standing committee.

In Malaysia, there are formal training programmes in TCM. These programmes are run by private institutions and national TCM associations. They are FCPMDAM, FCPAAM, and MCMA. These associations are involved in the regulation of education and training in TM, licensing and curriculum standardisation. They are encouraged to work together as a team to draft sets of questions for the National Qualifying Examination (NQE) in TCM for standardisation of exams and to obtain official recognition.²⁰² Guidelines for the NQE are being drafted and discussed.²⁰³

2.6.1 Training in Traditional and Complementary Medicine

There is currently formal accreditation for TCM courses in Malaysia.²⁰⁴ In 2007, the T&CM Division of the MOH, Malaysian Qualifications Agency (MQA), and Ministry of Higher Education (MoHE) collaborated to draw up standards and criteria for T&CM courses. The government is also considering giving accreditations to several universities in China and India. The Deputy Minister of the MoHE Datuk Ong Tee Kiat announced: “The MOH has recognized the qualifications of three universities in China, and the MoHE will not hesitate in

²⁰¹ Mahmud, N., “Updates on the New Legislation Pertaining to TCM,” <http://64.233.183.104/search?q=cache:IWqL8AQIJKJ:www.bpfk.gov.my/pdfworddownload/Newlegislation%2520TCM2%255B2%255D.ppt+term+of+reference+in+Traditional+and+complementary+medicine+Division+-+Malaysia&hl=en&ct=clnk&cd=1&gl=uk> (accessed November 2, 2008).

²⁰² See “Drafting the Traditional Chinese Medicine’s Examination Questionnaires,” *Sin Chew Daily*, August 12, 2008.

²⁰³ T&CM Division, *Annual Report 2010* (T&CM Division, 2010), 17.

²⁰⁴ T&CM Division, *Annual Report 2008* (T&CM Division, 2008), 19.

assisting MOH to establish a complete module for TM and an accreditation system for evaluating overseas qualification.”²⁰⁵ The three universities are Beijing University of Chinese Medicine, Shanghai University of Chinese Medicine, and Nanjing University of Chinese Medicine. Datuk Liow Tiong Lai states that subsequently the government will consider accepting the Guang Zhou University of Chinese Medicine (GUCM) and Tianjin University of Chinese Medicine (TUCM).²⁰⁶

With regard to the Indian Systems of Medicine (ISM) in Malaysia, Dato’ Dr Dorai Raja, the president of MATIM, states that the Ayurveda syllabus is at the final stage of accreditation after being approved by the MOH.²⁰⁷ Based on the standard requirements for T&CM courses, Dr Raja has drafted the Ayurveda syllabus by customising the Government of India’s curriculum for Ayurveda. In the process, he continues to have an ongoing dialogue with the T&CM Division, MOH over the accreditation of the Ayurveda syllabus. Subsequently, a workshop based on Ayurveda syllabus was conducted by Dr Raja and MATIM. Participants included officials from the MOH, MoHE, MQA, University academics, practitioners and representatives from the industry. The Ayurveda syllabus was finally accepted by the MOH and MQA in April 2008. Following this approval, Dr Raja continued to work on other ISM syllabuses. He has completed the Unani syllabus and presented it to the T&CM Standing Committee.

2.6.2 Professional Regulation

Pending the enactment of the T&CM Act, there exists no specific legislation to regulate TM practitioners and their practices directly. The drafting of the T&CM Bill

²⁰⁵ See “Traditional Chinese Practitioners should Demand for Accreditation,” *Sin Chew Daily*, October 10, 2007.

²⁰⁶ “Two more Universities to be recognised,” *Sin Chew Daily*, November, 6, 2008.

²⁰⁷ Somasundram, D.R., “History of Indian Influence in Malaysia” (paper presented at the Conference on Cooperation in Traditional Medicine with ASEAN Countries, New Delhi, India, November 1, 2008).

has been completed and sent to the Attorney-General's Chambers.²⁰⁸ Currently, T&CM practitioners are required to practise in accordance with the *Code of Ethics and Code of Practice for Traditional and Complementary Medicine Practitioners*.²⁰⁹ The MOH has also requested that they register with government-recognised practitioner bodies, although some practitioners are still reluctant to do so.

In an all inclusive measure, the T&CM Division has proposed online voluntary and free registration.²¹⁰ This is to familiarise all T&CM practitioners with registration procedures to help them to be better prepared to accept it once the Act is implemented and enforced. Likewise, all foreign practitioners also need to register with the T&CM Division and practitioner- bodies prior to obtaining approval to work in Malaysia.²¹¹

In summary, the review above highlights Malaysia's attempts towards integrated medicine practice. It has begun through efforts to establish the infrastructure with the help of experts, a proposal for formal accreditation of T&CM courses, and through preparation of the T&CM Bill to enhance regulatory measures. However, efforts were marred by the controversy over the setting up of the five Umbrella Bodies for regulatory purposes, and later withdrawal of their recognition as representatives of genuine T&CM practitioners.

WHO recommends a well structured healthcare policy together with a formal accredited education system in partnership with the TM professions for the development and support of integrated medicine practice. These perspectives support findings of this study with implications for policy in Malaysia. Those

²⁰⁸ See *the Minute of the Standing Committee of Traditional and Complementary Medicine Bil 1/2008*, April 15, 2008.

²⁰⁹ T&CM Division, *Code of Ethics and Code of Practice for Traditional and Complementary Medicine Practitioners*, 2nd ed. (T&CM Division, 2007).

²¹⁰ See *the Minute of the Standing Committee of Traditional and Complementary Medicine Bil 2/2008*, August 22, 2008.

²¹¹ T&CM Division, *Foreign Practitioner Application Guideline of Traditional and Complementary Medicine* (T&CM Division, 2008).

implications for policy are regulation, education and training, and professional oversight.

2.7 Overall Summary of Literature Review

This literature review was organised into specific categories: professional development, comparative studies in policy and law, global overview, TM policies in India and China, and early stages of policy and regulatory development in Malaysia. Each category has been presented and commented upon in the context of its content and contribution of related materials.

A documented historical review, together with comments by several authors, traced the professional development of traditional medicine systems in China and India. The professionalization of CM resulted in a new hybridised form of CM within a different political and social structure in China. India's experience with the integrated system of traditional medical education and service delivery was found to be a profound failure. Professionalisation of TM is the end product of hegemony of biomedicine. This formed the theoretical framework for the examination of tradition and professionalisation of TM practices in China and India.

Comparative studies on healthcare policy and law disclosed the similarities and differences in the healthcare policies and laws of different nations. While comparative studies show that nations may share their experiences in formulating a policy or establishing a law to complement their shortcomings through comparative studies, limitations are found in the area of healthcare policy and law. For example, a particular policy or law of one nation may not be suitable or applicable to other nations with different political regimes and cultural backgrounds. Scott's concept of institutions is used to analyse the similarities and differences of healthcare system in China and India as it provides a way of examining all elements that comprise the TM practices in society. Based on Scott's concept and analytic arguments, professionalisation of TCM and ISM does occur within an

organisational structure, such as integrated medicine education. The long societal processes and associated problems can be identified, analysed, and highlighted. This could become a reference point in shaping TM practices for other nations.

The work by WHO in developing and evaluating the regulatory structure of TM and promoting integrated medicine has been explored in the global overview. While proponents claim that integrated medicine has many benefits since it is considered a holistic medicine, insufficient scientific evidence to back this claim remains a drawback. TCM and ISM now have a formalised curriculum in their countries of origin and beyond, but informal training continues in certain parts of the world such as India, Cameroon and Latin America.

Following the global overview, the review focuses on the health policies of India and China and their relevance to the Malaysian context. As mentioned earlier, the healthcare system in China is integrated while a parallel system is practised in India whereby candidates must complete a one-year compulsory course in Biology, Chemistry and Physics prior to taking the Ayurvedic course. The review concludes that the incorporation of TM practice into the mainstream healthcare system is only possible with the support of a strong healthcare policy.

Malaysia is moving towards integrated medicine. This move includes the need for accredited and standardised T&CM courses, and official registration of practitioners under the national policy on T&CM. Partnership with recognised practitioner bodies to develop and promote T&CM is highly recommended in the policy.



Validation and revalidation of herbal formulations is a key factor in ensuring proper quality, safety, and efficacy of care. This research laboratory under the Beijing Tong Ren Tang Corporation, China (中国北京同仁堂集团公司) is being established for developing traditional Chinese medicine. (Photo courtesy of C.S.Goh)

Chapter 3

METHODOLOGY

3.1 *Introduction*

As already stated, this study examines how Malaysia's regional neighbours, India and China, achieve their vision for formulating policies, legislation, and regulation for TM, and incorporating TM into mainstream healthcare system.

A comparative analysis of the regulation of traditional medical practitioners and their practices in China and India would enable Malaysia to learn and draw implications from regional experience for its own policy. In the challenge to achieve this research objective, a year of preparation was devoted to studying the history and philosophy of Chinese and Indian medicine.²¹²

This chapter begins with a brief description of the theoretical and conceptual framework to explain the logic behind this study. This is followed by definitions of relevant terminologies, the overall design of the study, data collection approaches and data analysis. Subsequently, validity and reliability of the findings are discussed prior to summing up the chapter.

3.2 *Theoretical and Conceptual framework*

As noted in the literature review, the increase in demand and in the popularity of TM has led to a corresponding regulatory response calling for the professionalisation of TM practitioners. As this thesis is done through a Law School and is policy oriented, this regulatory response focussing on

²¹² In this regard, guidelines obtained from such sources as, the Postgraduate Conference organised by Socio-legal Studies Association from 10 to 11/1/2007 at Bristol, the Workshop on Undertaking Interdisciplinary Research organised by Lancaster University on 31/1/2007, the Course on Research Ethics organised by Law School Lancaster University from 26 to 28/3/2007, and so on have been instrumental in preparing the research methodology for this study.

‘Professionalisation’ has led to the topic of ‘Professionalisation’ serving as the context for the theoretical framework of this study.

Vollmer and Mills view professionalisation as the action of making an occupation professional by a group of people with specialised knowledge and skill, with the support of the authorities concerned about the well-being of society.²¹³ This suggests that the ultimate objective of professionalisation of an occupational group is to serve public interests. Expressing an early British legal view, Lord Macmillan argued:

We call ourselves a learned profession. Let me remind you that we are also a liberal profession. The difference between a trade and a profession is that a trader frankly carries on his business primarily for the sake of pecuniary profit while the members of a profession profess an art, their skill in which they no doubt place at the public service for remuneration, adequate or inadequate, but which is truly an end in itself. The professional man finds his highest rewards in his sense of his mastery of his subject, in the absorbing interest of the pursuit of knowledge for its own sake, and in the contribution which, by reason of his attainments, he can make to the promotion of the general welfare. It is only by the liberality of our learning that we can hope to merit the place in public estimation which we claim and to render to the public the services which they are entitled to expect from us.²¹⁴

With reference to Last’s view on ‘autonomy and monopoly’ of professionalisation, Saks expresses his social closure concept of professionalisation as “the process by which occupational groups are able to regulate market conditions in their favour in face of competition from outsiders by limiting access to a restricted group of eligibles, enabling them effectively to monopolise available opportunities.”²¹⁵ By setting the barriers, the professional groups seek to protect themselves from both internal and external competition.

In a further link-up between the concerns about public interests and Last’s idea of professionalisation, Freidson argues that because professionalisation possesses specialised knowledge, it has to be away from either bureaucratic or market-based

²¹³ Vollmer, H.M., and D.L. Mills, eds., *Professionalisation* (Prentice-Hall, 1966).

²¹⁴ Macmillan, Lord, *Law and Other Things* (Books for Library Press, 1937), 127.

²¹⁵ Saks, M., “Professionalism and Health Care,” in *Sociological Perspectives on Health, Illness and Healthcare*, ed. D. Field, and S. Taylor (Blackwell Science, 1998), 176-191, 176.

strategy that impoverishes the quality of service to the public.²¹⁶ He predicts a rebirth of the professions during which practitioners lose their autonomy and monopoly and just follow a bureaucratic standard of professional elite. He further suggests that professionals establish knowledge, be independent, and maintain their competence in developing and promoting their professions.

Reflecting Freidson's perspective on knowledge generation and application, Bodeker et al. have advanced a framework for the policy analysis of TM – including the professionalization of TM - based on “equity, ethics, sustainability, knowledge generation, knowledge management and utilisation, capacity building, research environment”.²¹⁷

In examining how the practice of TM in China and India is being regulated, this study focuses on:

- the regulation of traditional practitioners and their practices
- training
- knowledge generation and utilisation
- understanding the nature of professionalisation
- the process of legislation for professionalisation

These themes are then related to the research questions of the thesis.

Figure 3.1 below conceptualises the impact of professionalisation on the practice of TM and evaluates the effectiveness of the in-depth interviewing strategy with respect to the data gathered in relation to the implementation of policy and regulation of traditional practitioners. In this conceptualisation, the concern is shaped by the regulation and training. It seeks to know whether with regulation

²¹⁶ Freidson, E., *Professionalism Reborn: Theory, Prophecy, and Policy* (Polity Press, 1994).

²¹⁷ Bodeker, G. et al., “Policy and Public Health Perspectives on Traditional, Complementary and Alternative Medicine: An Overview” in *Traditional, Complementary and Alternative Medicine: Policy and Public Health Perspectives*, ed. G. Bodeker, and G. Burford (Imperial College Press, 2007), 8-38, 19-31.

and standardisation in the education and training, traditional practitioners could move towards professionalisation.

Building on the research questions, several perspectives on regulation and training are explored through three sets of questionnaires for the professional groups, namely (i) policy-makers, (ii) academics and (iii) TM practitioners respectively.²¹⁸

The primary method of data collection consists of in-depth interviews, supported by related literature review. The selection and approach of the in-depth interview is explained below. Data generated through the in-depth interviews and literature review enables us to respond to the research questions.

Data is collected through note-taking and tape recording of the interviews with the participants' consent. This data is then analysed through the comparative study. In this study, institutionalisation is selected to analyse the collected data. Details are found in section 3.5.

Results of the analysis are used to understand the different perspectives on policy and regulation, and the relationship with professionalisation.

²¹⁸ The academics are from tertiary institutions - universities - in China and India. However, academics in Malaysia are only from TCM institutes/colleges. This will be further explained in Chapter 6.

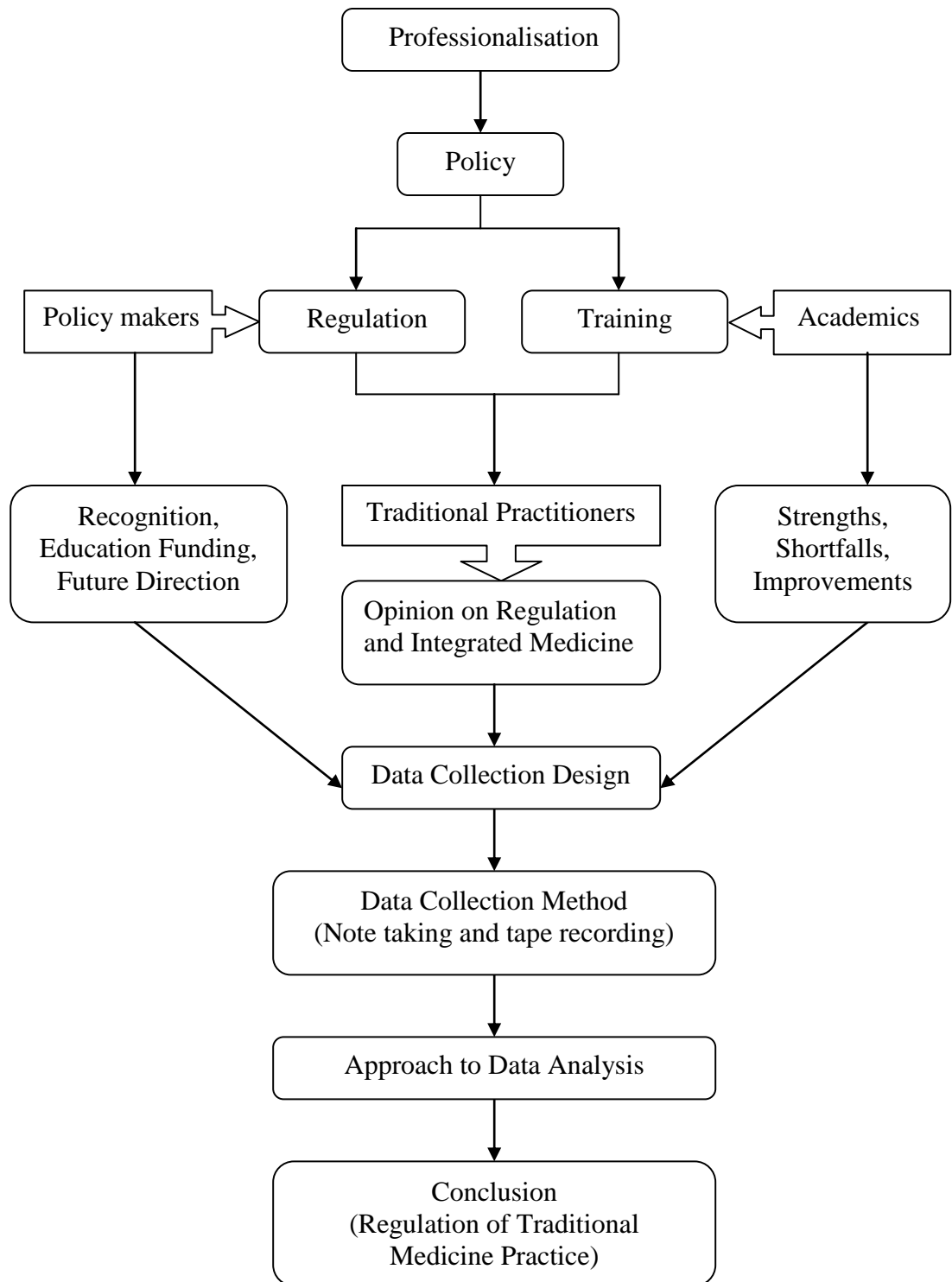


Figure 3.1: Professionalisation in the practice of traditional medicine

3.3 Definition of Terms

In this sub-section, several key terms of this study are interpreted and their use justified. These include: regulation, traditional medicine, integrated medicine, and healthcare policy.

3.3.1 Regulation

Regulation is a controlling system composed of rule-making and standard setting; information-gathering and monitoring as well as audit and evaluation; and behaviour-modification through education and enforcement through sanctions.²¹⁹ Rule-making is an essential element of regulation as governing is based on “a rule, principle or system”.²²⁰ Vincent-Jones states that regulation has the peculiar characteristic of focussing on a specific issue and intending to produce a desired outcome.²²¹ Regulation is pertinent in designing and implementing policy, as well as achieving the objectives of any public policy and meeting citizens’ expectations. Taking a similar position to Vincent-Jones, Nonet and Selznick claim:

Regulation is the process of elaborating and correcting the policies required for the realisation of a legal purpose. Regulation thus conceived is a mechanism for clarifying the public interest. It involves testing alternative strategies for the implementation of mandates and reconstructing those mandates in the light of what is learned.²²²

Apart from acting as a policy instrument via standards, regulation could also be used to restrict behaviour, monitor and promote compliance, and alter taxation at the state level.²²³ In particular, Christensen and Per Laegreid have pointed out the role of regulation in monitoring and promoting compliance by considering

²¹⁹ Hood, C., H. Rothstein and R. Baldwin, *The Government of Risk: Understanding Risk Regulation Regimes* (OUP, 2001), 23-27.

²²⁰ Friedman, L.M., “On Regulation and Legal Process” in *Regulatory Policy and the Social Sciences*, ed. Roger G. Noll (University of California Press, 1985), 111.

²²¹ Vincent-Jones, P., *The New Public Contracting: Regulation, Responsiveness, Relationality* (OUP, 2006), 70.

²²² Nonet, P., and P. Selznick, *Law and Society in Transition: Toward Responsive Law*, 2nd ed. (Amazon, 2001), 108-109.

²²³ Vincent-Jones, P., “Values and Purpose in Government: Central-local Relations in Regulatory Perspective,” *Journal of Law and Society* 29(1) (2002): 27-55, 28.

regulation as “formulating authoritative sets of rules and setting up autonomous public agencies or other mechanisms for monitoring, scrutinising and promoting compliance with these rules.”²²⁴

In the view of Hood et al., it is essential to consider the best approach to changing the behaviour of a person or an organisation without altering the peculiarity of its context.²²⁵ This will ensure the maintenance of the original objective of the standards. Braithwaite stresses that “in general, punishments are more useful to regulators than monetary rewards, informal rewards (praise, letters of recognition) are rather consistently useful in securing compliance.”²²⁶

For Parker and Braithwaite, regulation includes the enforcement of both formal and informal rules.²²⁷ The formal rules are state laws, rules promulgated by international bodies such as the WTO, and constitutional rules of professional associations. They are of the opinion that regulation and governance have a similarity in their functions. The difference between the two is mainly due to the conversion of the government’s attention to a threatened science and technology society instead of focussing on service provision.

Generally, regulation can be implemented via three main types of regulatory mechanisms:

- (i) statutory regulation,
- (ii) common law, and
- (iii) voluntary self-regulation.

²²⁴ Christensen, T., and Per Laegreid, “Agencification and Regulatory Reforms,” in *Autonomy and Regulation: Coping with Agencies in the Modern State*, ed. Tom Christensen, and Per Laegreid (Edward Elgar, 2006), 8-49, 9.

²²⁵ Hood, C., H. Rothstein and R. Baldwin, *The Government of Risk: Understanding Risk Regulation Regimes* (OUP, 2001), 23-27.

²²⁶ Braithwaite, J., “Rewards and Regulation,” *Journal of Law and Society* 29(1) (2002): 12-26, 12.

²²⁷ Parker, C., and J. Braithwaite, “Regulation,” in *Oxford Handbook of Legal Studies*, ed. P. Cane, and M. Tushnet (OUP, 2005), 119-145, 119-120.

In **statutory regulation**, specific statutes are used as a regulatory tool. Bix explains that statutory regulation is the application of the formal choices and decisions of the authorities concerned, based on the analysis of general judicial principles.²²⁸ Common law is made by judges and, in the case of Britain, has evolved since the 11th century.²²⁹ For many centuries, the opinions of judges on a case-by-case basis were gathered and used as legal doctrine through the precedents set by decisions of courts. Self-regulation denotes “a process under which an identifiable group of people ‘control, govern or direct’ their own activities by ‘rules or regulations’.”²³⁰

Here, it is essential to distinguish between statutory and voluntary self-regulation. In statutory self-regulation, the regulatory body is set up by statute - such as a TM professional council which derives its powers from an Act of Parliament.²³¹ It is self-financed through its members’ registration fees. It has the power to control admission to the practice of TM based on the practitioners’ qualifications, determine the standards of conduct and formulate the code of conduct for the profession, and impose sanctions for professional misconduct. Hence, there are various sections in the council’s organisational structure which would deal with the following issues: registration, education and training, and professional ethics and discipline. In short, the government would retain only nominal control, with traditional practitioners permitted to regulate their own affairs in a situation of statutory self-regulation.

By comparison, if professional bodies of TM are voluntarily self-regulated, they could register their members, establish educational standards, and ensure their members practise ethically through codes of conduct or other disciplinary

²²⁸ Bix, B., *Jurisprudence: Theory and Context*, 4th ed. (Sweet & Maxwell, 2006), 133.

²²⁹ Cotterrell, R., *The Politics of Jurisprudence: A Critical Introduction to Legal Philosophy*, 2nd ed. (OUP, 2003), 21.

²³⁰ Hurlburt, W. H., *The Self-Regulation of the Legal Profession in Canada and in England and Wales* (Law Society of Alberta, 2000), 1.

²³¹ National Consumer Council, *Self-Regulation of Professionals in Health Care: Consumer Issues* (NCC, 1999), 9-17.

mechanisms.²³² Moreover, voluntary self-regulation is more flexible and allows matters which require subjective judgement to be addressed in a proper manner. According to the associations' constitutions, executive bodies might be able to carry out disciplinary procedures on practitioners found to have breached codes of practice, but they cannot administer effective sanctions. This indicates that the executive bodies will have limited power over the control of their members in the absence of the statutory backing. For example, TM practitioners with a pattern of seriously deficient behaviour can continue to practise in spite of their being struck off from the register of the professional bodies. To find competent practitioners will be a challenge for consumers. In order to overcome the shortcomings of voluntary self-regulation, the professional bodies might think of establishing recognised training courses, quality assurance evaluating system in training and practice, and a platform for consensus for the future development of TM.

3.3.2 Traditional Medicine

At this point, the term 'traditional medicine' must be defined and explained.

The concept of 'traditional medicine' as formulated by the WHO Regional Office for the Western Pacific was:

Traditional medicine is the knowledge, skills and practices of holistic healthcare, recognised and accepted for its role in the maintenance of health and the treatment of diseases. It is based on indigenous theories, beliefs and experiences that are handed down from generation to generation.²³³

TM is also referred to as:

A diversity of health practices, approaches, knowledge and beliefs incorporating plant, animal and/or mineral-based medicines; spiritual therapies; manual techniques; and

²³² Stone, J., and J. Matthews, *Complementary Medicine and the Law* (OUP, 1996), 131-133.

²³³ Choi, S.H., "WHO Strategy and Activities in Traditional Medicine," *Chinese Medicine* (2009): 19-22, 20. See http://www.meiji-u.ac.jp/bulletin/2009-01/06_Choi.pdf (accessed December 23, 2011).

exercises, applied singly or in combination to maintain well-being, as well as to treat, diagnose, or prevent illness.²³⁴

TM constitutes ancient medical practices of different philosophical backgrounds and cultural origins, which have existed in human societies prior to the emergence of modern medical practices.²³⁵ Many traditional medical systems apply a holistic approach in disease diagnosis and treatment since they believe that the body should be united with emotions, mind and soul or spirit. The treatment in TM is individualised. Due to the difference in the philosophical backgrounds, TM has in most cases been rejected by modern medicine. In Europe, North America and Australia, TM is treated nonetheless as being complementary to modern medicine.

TM therapies can be categorised into medication and non-medication therapies.²³⁶ The medication therapies involve the utilisation of herbs and any materials of herbal origin, with or without animal parts and/or minerals. In comparison, non-medication therapies are not dependent on plants or animal parts; they include acupuncture, manual therapies, and spiritual therapies.

Defining and interpreting TM is since it covers a wide variety of therapies and practices, as well as belief systems, paradigms and underlying philosophies. There are great differences from country to country and even region to region. The practices of TM evolved or were based on certain basic fundamental principles and clinical experiences of the practitioners within communities.

3.3.3 Integrated Medicine

Since this term is of considerable importance to this study, it becomes central to the discussion at this point in the thesis.

²³⁴ WHO, *Legal Status of Traditional and Complementary/Alternative Medicine: A Worldwide Review* (WHO, 2001), 1-2.

²³⁵ WHO, *Regional Strategy for Traditional Medicine in the Western Pacific* (WHO/Western Pacific Region, 2002), 4.

²³⁶ WHO, *WHO Traditional Medicine Strategy 2002-2005* (WHO, 2002), 1.

Coulter interprets integrated medicine as the incorporation of CAM²³⁷ into modern medical education and practices.²³⁸ He holds a similar view to Faass, that “Integrated Medicine is the practising of medicine in a way that selectively incorporates elements of CAM into comprehensive treatment plans alongside solidly orthodox methods of diagnosis and treatment.”²³⁹

Integrated medicine services can be provided by trained allopathic doctors or CAM providers. In order to be successfully integrated, mutual respect and understanding by both professional groups of the efficacy and safety of practices, training modules and financial support for propagation become necessary. The pertinent point being that the patient’s choice must be respected; this is especially so, given that integrated medicine can be created by patients who individually incorporate CAM into their health or treatment plans.

Peters and his colleagues describe integrated medicine as “a system in which mainstream medical care and complementary therapies are integrated together within a practice, institution, etc., each complementing the other.”²⁴⁰ They believe that integration can occur only with collaboration with appropriate treatment following diagnosis (modern technology). They note three approaches for developing integration, namely,

- i) the ‘bolt-on approach’ to address clinical shortcomings of modern medicine;

²³⁷ As will be made clear, what the study focusses on is TCM and ISM. Many of the authors have applied CAM to the interpretation of integrated medicine. The Cochrane Collaboration understands that CAM is “a based domain of healing resource that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health system of a particular society or culture in a given historical period. CAM includes all such practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being. Boundaries within CAM and between the CAM domain and that of the dominant system are not always sharp or fixed.” See Zollman, C., and A. Vickers, “ABC of Complementary Medicine: What is Complementary Medicine?” *British Medical Journal* 319 (1999): 836-838.

²³⁸ Coulter, I., “Integration and Paradigm Clash: The Practical Difficulties of Integrative Medicine,” in *The Mainstreaming of Complementary and Alternative Medicine: Studies in Social Context*, ed. P. Tovey, G. Easthope, and J. Adams (Routledge, 2004), 103-122, 103.

²³⁹ Faass, N., *Integrating Complementary Medicine into Health Systems* (Aspen, 2001), 119.

²⁴⁰ Peters, D., et al., *Integrating Complementary Therapies in Primary Care: A Practical Guide for Health Professionals* (Churchill Livingstone, 2002), 6.

- ii) the ‘integrating-settings approach’ to share ideas about one another’s practices with the collaboration of multi-professionals; and
- iii) the ‘transforming approach’, to create and promote health through a dynamic relationship between CAM and modern medicine.²⁴¹

With regard to the transforming approach, Bell *et al.* consider that there will be true integration with the establishment of a dynamic relationship between CAM and modern medicine, “as it evolves, truly integrative medicine also depends for its philosophical foundation and patient-centred approach on systems of CAM that emphasise healing the person as a whole (for example, TCM, Ayurvedic medicine, and classic homeopathy).”²⁴² They emphasise that CAM therapy added to modern medicine practice is not considered to be integrated medicine.

Holding the same opinion, Rees and Weil define integrated medicine as “viewing patients as whole people with minds and spirits as well as bodies and including these dimensions into diagnosis and treatment.”²⁴³ Broadly speaking, integrated medicine means the incorporation of TM or CAM into all aspects of healthcare, including research, education, clinical practice, pharmacy, and medical insurance, following their official recognition.²⁴⁴

3.3.4 Healthcare Policy

Since the phrase ‘healthcare policy’ is used from throughout this study, its context needs to be established.

Webster's dictionary defines policy as “a definite course or method of action selected (by a government, institution, group, or individual) from among

²⁴¹ *Ibid.*, 76.

²⁴² Bell, I.R., et al., “Integrative Medicine and Systemic Outcomes Research: Issues in the Emergence of a New Model for Primary Healthcare,” *Archives of Internal Medicine* 162(2) (2002): 133-140, 134.

²⁴³ Rees, L., and A. Weil, “Integrated Medicine,” *British Medical Journal* 322 (2001): 119-120, 119.

²⁴⁴ WHO, *WHO Traditional Medicine Strategy 2002-2005* (WHO, 2002), 8-9.

alternatives and in the light of given conditions to guide and usually determine present and future decisions.”²⁴⁵ Taking an almost similar position, Leichter interprets policy as governmental action accompanied by a series of objectives, and based on the concept of “policy decision, policy output, and policy impact”.²⁴⁶ The existence of a policy provides direction and guidance to authorities thereby allowing legislative action to be carried out in keeping with governmental intention. Ultimately, the immediate and long-term outcomes of governmental action need to be examined for both positive and negative consequences. In brief therefore, policy is “not detailed prescriptions but basic perspectives that determine how public purposes are defined and how practical alternatives are perceived.”²⁴⁷

Blank and Burau characterise policy as “general statements of intention, past or present actions in particular areas, or a set of standing rules to guide actions.”²⁴⁸ Subsequently, these authors refer to healthcare policy as “those courses of action taken by governments that deal with the financing, provision or governance of health services.”²⁴⁹ They indicate three categories of healthcare policy:

1. the regulatory,
2. the distributive, and
3. the redistributive.²⁵⁰

Regulatory policy restricts the medical practice of healthcare professionals through licensing and fee schemes.

²⁴⁵ Babcock Gove, Philip, ed. Webster’s Third New International Dictionary of the English Language (G.&C. Merriam, 1961), 1754.

²⁴⁶ Leichter, H. M., *A Comparative Approach to Policy Analysis: Health Care Policy in Four Nations* (CUP, 1979), 6-8.

²⁴⁷ Nonet, P., and P. Selznick, *Law and Society in Transition: Toward Responsive Law*, 2nd ed. (Amazon, 2001), 3.

²⁴⁸ Blank, R.H., and V. Burau, *Comparative Health Policy*, 2nd ed. (Palgrave Macmillan, 2007), 1-2.

²⁴⁹ Healthcare policy is different from health policy. Health policy is a broader term and defined as “those courses of action proposed or taken by governments that affect the health of their populations. It overlaps with economic, social welfare, employment and housing policy, among other areas.” *Ibid.*, 2.

²⁵⁰ *Ibid.*, 3.

Distributive policy deals with medical education and research, national or public health services provision, and health promotions beneficial to the public.

Redistributive policy, by comparison, is based on the needs of a particular segment of society, whereby resources are shifted from healthy to non-healthy populations, for example, general revenues and insurance schemes for the poor. In his earlier text on New Zealand,²⁵¹ Blank refers to these three categories of healthcare policy as ‘order maintenance, public goods provision, and equality assurance,’ respectively.

According to Gauld, healthcare policy plays a significant societal role as the demands for improving the health status of the respective nations has increased globally.²⁵² The health and wellness of the population has an impact on economic and social advancement. Of particular significance is the fact that the healthcare budget is one of the higher allocations in national budgets as health authorities have the responsibility to ensure that their people have easy access to healthcare.

Health policy makers in many countries face a set of challenges which include:

- demographic changes (decreased live births and prolonged life expectancy),
- limited resources,
- poor healthcare quality,
- the reorganisation of the health system, and
- the emergence of new diseases such as H1N1 & the resurgence of known diseases such as dengue.

²⁵¹ Blank, R. H., *New Zealand Health Policy: A Comparative Study* (OUP, 1994).

²⁵² Gauld, R., “Introduction,” in *Comparative Health Policy in the Asia-Pacific*, ed. R. Gauld (Open University Press, 2005), 1-22, 3-6.

3.4 Methodology

In terms of research method, this study relies primarily on (i) the structured in-depth interview methodology to capture the individual lived experience, and (ii) secondarily on the analysis of literature, including documents and published materials.

This section details

- the design of data collection strategy
- sources of data
- data collection method

This section also addresses such issues as

- the venue
- time frame
- financial support
- ethical issues

3.4.1 Data Collection Design

Whilst there is an accelerated change in the development of policy and regulation of TM in China and India, there is very little published material available on the current trends that I would like to study. Only limited research has been conducted on regulatory issues associated with TM practitioners and their practices. Because of this, I decided to conduct a standardised personal interview, modelled on a structured questionnaire implemented by a researcher who is well-versed with the project and procedure.

Through this survey, it was possible to gather highly informative, first hand data.²⁵³ The formulated questionnaire for key policy figures, academics and practitioners in China, India, and Malaysia is illustrated in Appendix I, II, and III respectively.

Interviewing technique was characterised as “straightforward and open”.²⁵⁴ It could be a face-to-face in-depth interview, or a telephone, interview. In this survey, in-depth interview is preferred because it allows “deep” information and knowledge to be sought.²⁵⁵ Particularly, for certain complex questionnaires pertaining to regulation of TM, immediate follow-up and clarification is possible in face-to-face encounters with informants. Moreover, initial interviews strengthened the decision to undertake an in-depth interview in this survey.

I began interviews with key personnel in China, India, and Malaysia while attending the International Conference on Traditional Medicine and Materia Medica in July 2007, in Kuala Lumpur, Malaysia.²⁵⁶ Some valuable information which supports the objectives of this research was obtained. These interviews helped me to determine whom to interview, and what to ask.

Having established a good rapport with respondents after the initial interview, many of the proposed interviewees listed in the Field Study Plan were recommended and introduced to me.

To show sincerity and respect, especially to the policy-makers involved, in-depth interview proved a better option. I wrote an email to the proposed interviewees to prepare them for the coming interview by introducing myself and providing them

²⁵³ Patton, M.Q., *Qualitative Research and Evaluation Methods*, 2nd ed. (Sage, 1990).

²⁵⁴ Gubrium, J.F., and Holstein, J.A., “From the Individual Interview to the Interview Society,” in *Handbook of Interview Research: Context and Method*, ed. J.F. Gubrium, and J.A. Holstein (Sage, 2001), 3.

²⁵⁵ Johnson, J.M., “In-Depth Interviewing” in *Handbook of Interview Research: Context and Method*, ed. J.F. Gubrium, and J.A. Holstein (Sage, 2001), 104.

²⁵⁶ The international conference is 6th International Traditional/Complementary Medicine Conference (INTRACOM), 3rd International Congress on Traditional Medicine & Materia Medica (ICTMMM), and Traditional and Complementary Medicine Exhibition 2007 (TCME), from 17-20 July, 2007, Kuala Lumpur.

the purpose and content of the research. In-depth interview assured me that the respondent was actually the person responsible for making the relevant decisions on regulating and developing TM and that their response is reliable.²⁵⁷

Additionally, with an in-depth interview it is possible to make arrangements for an interpreter for those respondents (few senior and experienced practitioners) with language barriers, whereas this arrangement may prove problematic in the case of a telephone interview. Their experiences and insights are valuable information for this research. Subjects with whom there is a language barrier are normally excluded from telephone interview survey.²⁵⁸

When compared to postal questionnaires, an in-depth interview is more effective in achieving complete participation as postal questionnaires may not be received or may be mislaid or ignored. Additionally, many questions often remain unanswered, answered incompletely or even wrongly answered due to postal question misinterpretation.²⁵⁹ Non-response or low response rate to postal questionnaires reduces the effective sample size and can introduce bias.²⁶⁰ Postal questionnaires may have become an option if I had planned to collect information from large, geographically dispersed populations since it is the most cost-effective way for the data collection.

Nevertheless, there are limitations to in-depth interviews. First, there is a possibility of under-reporting or over-reporting. It varies according to the content of the questions and respondents' characteristics. To discourage these tendencies, I

²⁵⁷ Palmer, J.D. et al., "Answers May Have Reflected Perceived Rather than Actual Management," *British Medical Journal* 313(1996): 296.

²⁵⁸ Ohayon, M.M. et al., "Snoring and Breathing Pauses During Sleep: Telephone Interview Survey of a United Kingdom Population Sample," *British Medical Journal* 314(1997): 860.

²⁵⁹ Montoye, H.J., "Estimation of habitual Physical Activity by Questionnaires and Interview," *The American Journal of Clinical Nutrition* 24(1971): 1113-1118.

²⁶⁰ Armstrong, B.K. et al., *Principles of Exposure measurement in Epidemiology: Monographs in Epidemiology and Biostatistics*, vol 21 (Oxford University Press, 1995), 294-321.

prepared “carefully worded questions” that are less threatening after a thorough discussion with my supervisor.²⁶¹

The respondent is allowed to give a full and uninterrupted answer after a specific structured question is posed. The conversation during the interview is taped with the respondent’s permission and I do not incorporate her ideas into the report. Subsequently, the information is counter-checked by my supervisor. Next, interview results are commented upon as the outcomes of the contingencies of the interview situation, and not, as is usually assumed, the unmediated expressions of respondents’ real opinions.²⁶²

In defence, I would argue that the gathered data in this study is not a mere reflection of the respondents’ perspectives on the interview situation since the respondents are selected professionals who are intelligent and expert in areas relevant to the research. They hold a position or job that involves the daily accumulation and distribution of information on traditional medicine. Based on the standardised questionnaires, respondents shared their lived experiences and insights with me.

In summary, in-depth interview was opted for in order to obtain an accurate reflection of the views and interpretations of legislation from all the respondents. In the development of a legislative framework for traditional Asian practice of medicine, in-depth interviews with multiple informants at each site allow me to gather a wide variety of relevant information about past experiences that cannot be measured directly.

²⁶¹ Adler, P.A., and Adler, P., “The Reluctant Respondent,” in *Handbook of Interview Research: Context and Method*, ed. J.F. Gubrium, and J.A. Holstein (Sage, 2001), 529.

²⁶² Houtkoop-Steenstra, H., *Interaction and the Standardised Survey Interview: The Living Questionnaire* (Cambridge University Press, 2000).

3.4.2 Sources of Data

The survey was selectively conducted in:

- New Delhi, Bangalore and Chennai in India,
- Beijing and Guangzhou in China, and
- Kuala Lumpur, Georgetown and Johor Bharu in Malaysia.

The research is not site specific. In order to approach the key figures in charge of policy making, the headquarters of TM became the primary location for the survey. For example, the department of AYUSH in New Delhi, SATCM in Beijing, and T&CM Division in Kuala Lumpur.

Understandably, the academics and traditional practitioners would be interviewed in the above capital cities of the respective countries. Ayurvedic practitioners practise widely all over India, but Siddha practice is common in Chennai. Hence, Chennai became the second targeted city in the survey. Bangalore was chosen based on the location of the National Unani Institute. In China, TCM is widely practised in Guangdong and the population in this province have great affinity towards TCM. Hence, the stakeholders in Guangzhou were interviewed. In Malaysia, apart from Kuala Lumpur, the interview also focused on Georgetown, one of the cities with high proportion of Chinese community and TCM practitioners, and in Johor Bahru, which had been selected by the Malaysian Ministry of Health as one of the centres for the pilot project of integrated medicine.

The respondents were identified using the snowball method.²⁶³ Some respondents are well-known and recognised experts in this field, recommended by my supervisors and key personnel who I met in an international conference mentioned earlier. Respondents were contacted by email two months before the field work. Early correspondence with the respondents helped to develop a trusting relationship with them. There also was the possibility that certain key persons, who

²⁶³ Babbie, E.R., *The Practice of Social Research* (Wadsworth, 2004).

are the respondents from the MOH or professional associations, may be required for further contact by email or telephone for information clarification or update.

All respondents from the above three study countries have their own expertise in the field of TM.

Firstly, policy-makers familiar with the legal structure of their country were interviewed to elaborate on the regulatory frameworks for TM.

Secondly, academics were interviewed for us to gain an in-depth understanding of the most recent aspects of development and shortcomings in TM education in the universities of the respective countries.

Thirdly, registered traditional practitioners were interviewed to explore their thoughts and feelings with regard to the regulatory system on TM practices.

Allopathic doctors have been excluded from this survey due to financial and time constraints. Moreover, their responses are not within the scope of this study.

Table 3.1 shows the number of policy makers, academics, and traditional practitioners from the three case study countries that participate in the survey. Policy makers are senior officers from the governmental agencies and international non-governmental organisations, and administrator officers from hospital and research institute involved in policy drafting. A majority of the academics are professors from the universities of TM in China and India. A few of them hold important posts such as the director of the education department and examination department for TM, dean of the university, and head of the research institute. In Malaysia, among the fourteen academics, three are principals of the three respective TCM institutes, two are the vice-principals, and the remaining nine respondents are senior lecturers in different institutes.

The registered traditional practitioners are either general practitioners from the medicinal shops, or specialists in different disciplines in hospitals. With regard to practitioners in Malaysia, there are 16 Malaysian Chinese and 11 Malaysian Indians. The number of Indian practitioners who responded to this questionnaire is fewer than the Chinese practitioners because of the language barrier and they also declined the use of interpreters for fear of misinterpretation of their responses. Many of these Chinese practitioners are graduates from the TCM institutes in Malaysia established by members of the practitioner bodies in TCM. A small number of them obtain their qualifications from the universities in China. Similarly, traditional Indian practitioners acquired their traditional medical knowledge handed down from their masters and later travelled to India to extend their knowledge through a diploma course. A few of the Indian practitioners had undergone a full five- year structural training course in India and qualified with bachelor's degrees in ISM. There is no traditional Indian medicine institute in Malaysia, while all TCM institutes have yet to be accredited. All these traditional practitioners practise in private clinics, charity organisations or centres, and private hospitals such as the Tung Shin Hospital (TSH).

Table 3.1: The Total Number of Respondents in China, India, and Malaysia

Respondent Country	Policy Maker	Academic	Traditional Practitioner
China	8	14	31
India	14	15	30
Malaysia	9	14	27

3.4.3 Data Collection Method

A systematic and proper method of data collection included note-taking, tape recording and photo sessions, all with the participants' prior consent. Apart from providing a transcript with a high level of information accuracy, taped recordings allow for an uninterrupted and focussed interviewing process. However, in the event that tape recordings made the respondents feel anxious or inarticulate, I

replaced it with note-taking. To avoid poor quality in recording which would make transcription difficult, the recorder was kept close to the interviewees. Following each interview, I also took due note of any information linked to the literature review or previous interview.

3.4.4 Logistics

Each interview took place at the workplace of the respondents - such as policy-makers' offices, stakeholders' health centres, seminar rooms, workshop centres, conference halls, and lecture halls. Flexibility of venue proved helpful especially for those respondents with a tight work schedule.

Resource issues, especially time management, were given due recognition. A schedule was drawn up to determine the optimal number of days for visits to each country while making allowances for the unexpected. A minimum of one hour requirement was estimated for each meeting or interview. Approximately six months were allocated for data collection with three months set aside for data compilation and analysis.

The designed questionnaires by and large do not include any so-called 'sensitive' material or issues. Particularly, China being a communist country, its people are prohibited from disclosing certain information and commenting on national policy and government. In any case, respondents were given an option on the disclosure of their identity. However, there is a need to identify respondents by their rank in position and status in society to indicate the significance of the information given, especially for information clarification purposes. This is because many of the answers are related to current trends of development in regulation, which have not been documented and are only highlighted and revealed by the position and status of the respondents. However, the respondents were ensured anonymity of their response if they so wished.

In order to ascertain the respondents' request for anonymity and confidentiality of their responses, a coding system was developed and kept separately from the field notes. The coding system using letters as identification instruments neither refers to the respondents' work place nor to their gender. The said respondent is given a code number, and is referred to by that code number. All recordings (if used) and transcripts are similarly referenced by the code number which is only known to me. The file with the linking number is confidential and destroyed after completion of the research. Since the provision of basic information relevant to the study might disclose the identity of the respondents, the risk of respondent disclosure especially with regards to provision of basic data important to the study was minimised by introducing the respondents in groups of the same profession or status. For example:

Table 3.2: Coding System of anonymous respondents

Country	Description		
	Policy-makers	Academics	Practitioners
India	I-M1, I-M2, I-M3	I-A1, I-A2, I-A3	I-P1, I-P2, I-P3
China	C-M1, C-M2, C-M3	C-A1, C-A2, C-A3	C-P1, C-P2, C-P3
Malaysia	M-M1, M-M2, M-M3	M-A1, M-A2, M-A3	M-P1, M-P2, M-P3

During the interview, specific comments are directed to specific stakeholders, with their prior verbal consent obtained before the utilisation of information provided. Participation in the survey is voluntary and stakeholders may withdraw their participation or comments at any time.

3.5 Approaches to Data Analysis

This subsection explores how the qualitative data is managed, organised, and analysed.

3.5.1 Data Management

Field notes were reorganised on a daily basis. At the end of each day, the interview questionnaire needed to be reviewed and revised where necessary. Following that, the transcripts were analysed for important and recurrent themes. This was followed by creating categories that arose from the data after understanding the patterns that brought all the data together. These categories were used to identify the relevant data or particular themes. If any information appeared unclear, a repeat interview was arranged. This included interviewing new respondents yet to be listed in the field study plan. This deeper analysis enabled me to obtain and analyse more focused, extensive, and informative data.

For purposes of analysis, policy-makers' interviews were collected in one file, while the interviews on the lived experience of the academics and practitioners were compiled in two files. During the review process, I made notes, organised the data and sorted them into different piles according to the categories. Duplication of the interview transcripts was required if a particular segment of the information related to more than one theme. All relevant information was identified and extracted and fitted into, or connected with, categories of the literature review that had been drawn up.²⁶⁴ Finally, all information was presented in tables with comparisons provided. A chapter to summarise the collected data was prepared. This facilitated the final stage of explanation and interpretation of the data.

All categories are based on the interview questions and recurring themes identified. Three major themes of this study are:

- (a) Approaches utilised in regulating traditional practice;
- (b) The impact of practitioner contributions to the nation;

²⁶⁴ This process is recommended and described by Marshall and Rossman as the "editing and immersion strategies". See Marshall, C., and Rossman, G.B., *Designing Qualitative Research*, 4th ed. (Sage, 2006), 158.

- (c) Factors and conditions behind the actual success of policy and regulation.

Template examples for the three thematic charts are presented in table 3.3, 3.4, and 3.5.

Table 3.3: Regulating Practice

Theme	Regulating Practice	
Category	Governance Factor	Education
Sub-categories	1 Law 2 Policy 3 Regulation 4 Governing Body 5 Rules of professional Groups	6 Training system (systematic and structural)

Table 3.4: Beneficial Effects

Theme	Beneficial Effects	
Category	Protection	Development
Sub-categories	7 Public 8 Practitioners	9 Education 10 Healthcare System (integrated)

Table 3.5: Providing Support

Theme	Providing Support			
Category	Financial	Academic	Allopathic	Public
Sub-categories	11 Government funded 12 Government supplement 13 Out of pocket 14 NGOs	15 Integrated 16 Strengths 17 Shortfalls 18 Improvement	19 Education 20 Research 21 Cross referral	- Seek help from registered practitioners

3.5.2 Data Classification

Based on the above defined themes and categories, the research is reorganised and classified using an analytical framework by which it demonstrates how best to cultivate a standard policy across the traditional systems of medicine. For its underlying organising idea, the study relies on W. Richard Scott's discussion of three aspects of social institutions; regulative, normative, and cognitive.²⁶⁵

The regulative element of institutions addresses rule-making, monitoring, and sanctioning activities. Individuals may acknowledge the existence of institutionalised rule systems without having to believe the rules are fair, right, or appropriate. For example, as China implements the 'Temporary Regulation for the Examination on Apprenticeship in Traditional Medicine and Proof of Suitability to Be a Doctor' to assess traditional practitioners who have undergone informal training, some apprentices are willing to risk losing their eligibility for practising. On the other hand, some find it expedient to comply with the rules and hence institutionalisation occurs.

The second element of institutions, *the normative*, emphasises the preferred or the desirable standard, then makes a comparison and decides how to modify behaviour and ultimately achieve the appropriate objectives. Normative rules are emphasised because obeying rules is considered to be morally appropriate and legally correct. Particularly, as certain ISM institutes in India believe that traditional medical students can benefit from integrated medical education, and biomedical curriculum is introduced into ISM curriculum. Thus, institutionalisation occurs while an informal obligation is being honoured socially.

Finally, *the cultural-cognitive element* of institutions has considered the development of common scripts and common beliefs as indicators. The common culture, experience, and view are shared within the community. Institutionalisation

²⁶⁵ Scott, W. R., *Institutions and Organisations: Ideas and Interests*, 3rd ed. (Sage, 2008), 47-91.

occurs as individuals adopt the similar belief and take it for granted that a particular method in carrying out the task is the best approach. For example, knowledge of modern medicine is incorporated into local traditions in India and certain African countries, and subsequently the communities are educated to manage the HIV/AIDS epidemics. The communities respect the culture, beliefs and reliance on their traditions.

Application of sociological theory on Scott's formulation can be noted in other earlier studies. Colbeck illustrates how Scott's idea is used to assess institutionalisation of reforms at seven engineering schools in the Pennsylvania State when attention and funding shifted to new projects.²⁶⁶ Interview data shows that none of the schools is certain on the continuation of the curricular reforms after funding ends. Moreover, they have yet to determine which indicators are the strongest predictors of institutionalisation. Next, Livingston and his colleagues analyse their research on four Australian cases studies of urban water management projects and acknowledge that there is a recurring discourse that shaped the project outcome.²⁶⁷ The discourse depends on the institutional base, namely organisational structure, knowledge and value, within the proponent organisation. This project is an institutional change. Therefore, in attempting to introduce decentralised urban water management, looking into the regulatory context and organisational design within which a project is to operate is recommended. The last and not the least, Dolnicar et al. examine the impact of competitive grant funding on public sector non-profit organisations.²⁶⁸ They use institutional theory to explain that public non-profits face coercive, normative, and mimetic pressures, and subsequently lead to changes in organisational culture,

²⁶⁶ Colbeck, C.L., "Assessing Institutionalisation: Indicators of Lasting Reform" (paper presented at the 29th ASEE/IEEE Frontiers in Education Conference, San Juan, Puerto Rico, November 10-13, 1999).

²⁶⁷ Livingston, D., Ashbolt, N., and Colebatch, H., "Querying Institutional Support for Decentralised Urban Water: Four Australian Cases," <http://www.cwwt.unsw.edu.au/ywp2006/papers/YWP%203.14.pdf> (accessed August 20, 2011).

²⁶⁸ Dolnicar, S., Irvine, H.J., and Lazarevski, K., "Mission or Money? Competitive Challenges Facing Public Sector Nonprofit Organisations in an Institutionalised Environment," *International Journal of Nonprofit and Voluntary Sector Marketing* 13 (2008): 107-117.

structures and routines, resulting in the possibility that their mission is compromised.

Several scholars' organising ideas were taken into consideration prior to the decision to apply Scott's principles. Elster's arguing (justice, efficiency, and a principle of representation) and the bargaining principle for both equality and proportionality is mainly applied in organising speech acts and formal institutional arrangements.²⁶⁹ Wang's typology of the organisation of a nation is through exclusion, namely who you are, what you have, where you are, and what you do.²⁷⁰ Institutional exclusion is most suitable to be used in studying human grouping, poverty, and discrimination. Moreover, this organising approach is composed of elements of bias and unfairness. Smith's work on institutional ethnography investigates the relationship between the work of mothers at home and their children's schooling, and how this relationship of ruling shapes their daily activities.²⁷¹ It could be applied in examining the healthcare organisation since it explores the providers' experiences; however, it allows exposure to only a particular corner within the society. Ansell's network institutionalism describes recurrent positive and exchangeable relationships between individual, groups, or organisations.²⁷² The network analytic frameworks of centrality and sub-groups are used to identify prominent individuals and small groups of people within their complicated relationships. These frameworks are mainly descriptive rather than explanatory in nature. Chan's design of economic, political, and cultural approaches on globalisation is a better option as compared to the others.²⁷³

²⁶⁹ Elster, J., "Equal or Proportional? Arguing and Bargaining over the Senate at the Federal Convention," in *Explaining Social Institutions*, ed. J. Knight, and I. Sened (University of Michigan Press, 2001), 145-160, 146-148.

²⁷⁰ Wang, F.L., *Organising Through Division and Exclusion: China's Hukou System* (Stanford University Press, 2005), 9-13.

²⁷¹ Smith, D.E., *The Everyday World as Problematic: A Feminist Sociology* (Open University Press, 1988), 151-179.

²⁷² Ansell, C., "Network Institutionalism," in *Oxford Handbook of Political Institutions*, ed. R.A.W. Rhodes, S.A. Binder, and B.A. Rockman (OUP, 2006), 75-89.

²⁷³ Chan, K.B., "Globalisation, Localisation, and Hybridisation: Their Impact on Our Lives," in *East-West Identities: Globalisation, Localisation, and Hybridisation*, ed. K.B. Chan, J.W. Walls, and D. Hayward (Brill, 2007), 1-19, 2-8.

However, this approach covers a rather bigger picture on global activities and lacks specificity with regard to the changes in the development of TM.

For this comparative study, Scott's idea is adopted since it analyses the process by which a practice, TM, is incorporated into a system of existing practice – modern medicine – in national healthcare system of China and India. It allows comparisons of various aspects to be drawn in a more systematic and organised manner because of its orderly and predictable elements. The common structure of meanings and common purposes could explain and justify human behaviour. This facilitates answering a specific policy-related question and providing recommendations. There is an organisational relationship of TM practice within the state and the nation. For example, how do national policy and regulations regulate the traditional practice? What impact do practitioners have on the nation with regard to the development of TM? How do stakeholders affect the success of the implementation of policies and regulations? It ensures that an action is taken logically according to proper prescriptive rules.

Scott's analysis focuses on causes and outcomes of social organisational process, an approach congruent with the objectives of this study.

A systematic approach enables me to trace the origin of the results from the collected data as it demonstrates clear stages throughout the process of analysis. It also allows me to address certain issues based on the concerns of the stakeholders. The study looks at issues such as regulations, providing support from the stakeholders and the outcome, interests of medical professionals, and professional bodies. Then, the similarities and differences between China and India around these specific issues are outlined and discussed. This will provide part of a frame of reference for discussion of relevant models for Malaysia based on the experience of India and China.

3.6 Validity and Reliability

In order to address the criteria of Lincoln and Guba, viz. “truth-value, applicability, consistency, and neutrality”, I pay attention to the strengths of the data outcomes of this research.²⁷⁴ The reliability of the findings is based on the recurrence of the original data and manner of interpretation. The truth-value can be achieved only if the research design and context provide an accurate description and interpretation of human experience. In this study, I emphasise the truth-value by having a continuous discussion with my supervisor, for example, on the approach that has led to a particular conclusion. The findings of this research are useful to others who would like to look into the regulation of the practices of TM in other parts of the world or even the practices of complementary medicine. It allows other researchers to generalise their own ideas through the findings and conclusions of this study. The validation of data and findings is done through analysis and cross-checking with other sources, including ‘respondent validation’.²⁷⁵ This helps to ensure that data findings are supported by adequate evidence. In this way, a consistent finding is gained through repetition under the same methodology. Finally, it is important to ensure the results are free from bias. To ensure neutrality, an audit of the data collection and analytic method is carried out.²⁷⁶

3.7 Summary

A limited research study with regard to regulatory issues associated with TM practitioners and their practices is identified. It is based on the theoretical framework of professionalisation. This study does not build on, or attest to, the theory of professionalisation. Rather, findings of the comparison of the TM

²⁷⁴ Lincoln, Y.S., and Guba, E.G., “Paradigmatic controversies, contradictions, and emerging confluences” in *The SAGE Handbook of Qualitative Research*, ed. N.K. Denzin, and Y.S. Lincoln, 2nd ed. (Sage, 2000), 163-188.

²⁷⁵ ‘Respondent validation’ involves “taking research evidence back to the research participants (or to a group with the same experience or characteristics) to see if the meaning or interpretation assigned is confirmed by those who contributed to it in the first place.” See Lewis, J., and J., Ritchie, “Generalising from Qualitative Research,” in *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, ed. J. Ritchie, and J. Lewis (Sage, 2003), 263-286, 276.

²⁷⁶ Richards, L., *Handling Qualitative Data: A Practical Guide* (Sage, 2005), 22.

healthcare policy and regulations between China and India are evaluated and analysed according to the theoretical framework. In other words, this theoretical framework is brought into the equation while analysing the findings and drawing the conclusions of this study.

Due to a shortage of published documents and materials on current trends, empirical work is essential to fill the gap. In this study, in-depth interview is the main data-gathering tool, as has been long established in qualitative research. A personal interview is often used to get the kind of data a researcher needs to develop insights into dynamically evolving policy processes and priorities. In-depth interview has its advantages and limitations, but proper planning and preparation can minimise the limitations. After gathering the information, data is organised and analysed according to Scott's theory. Throughout the process, the validity and reliability of the data gathered is emphasised.



A patient receives moxibustion at an acupuncture clinic in the Guangdong Provincial Hospital of Traditional Chinese Medicine, China. (*Photo courtesy of C.S.Goh*)

Chapter 4

ANALYSIS OF THE FINDINGS IN CHINA

4.1 Introduction

This chapter compiles and analyses information gathered from in-depth interviews and documents from China, and also from published articles. The findings are provided below in sections 4.2, 4.3, and 4.4 respectively, based on Scott's formulation: legal-regulatory institutions, formal-organisational institutions, and cognitive institutions.

Subsequently, the advice to Malaysia in moving towards an integrated healthcare system is examined prior to summing up the analysis on the data collected in China. Here, it is essential to highlight that due to under-development of IPR on TM practices in China as well as in India and Malaysia, IPR is omitted from the analysis of the findings in the three mentioned countries.

4.2 Legal Regulations

This section discloses governance that mainly focuses on the formulation of policies and regulations and their implementation, and the establishment of the governing body.

In China, the Law on Licensed Doctors of the People's Republic of China (中华人民共和国执业医师法) was adopted on June 26, 1998 and implemented on May 1, 1999.²⁷⁷ The former leader of SATCM, Beijing, explains that the Bill was drafted by the Health Ministry together with the legislative department (C-M1). The content of the Bill is discussed among the SATCM and other Divisions in the MOH based on

²⁷⁷ "Law on Licensed Doctors of the People's Republic of China" in *Collections of Laws, Regulations and Documents on Traditional Chinese Medicine*, ed. Daning Li et al. (Department of International Cooperation SATCM, 2005), 105-113, 105.

the recommendations of the national policy on TCM, known as *Chinese Communist Party's Policy on Traditional Chinese Medicine* (党的中医药政策). Following that, an agreement over the draft has to be obtained from the National People's Congress (人民代表大会/人大) prior to the Minister's announcement, before the Act is finally adopted. He acknowledges that Yun Nan was the first province to adopt the Law.²⁷⁸

All the eight policy makers realise that the highest authority in the administration of the Law is the State Council of the People's Republic of China (PRC). The officer from the Guangdong Provincial Hospital of TCM (GDPH) says, "...it has the authority to adopt and announce certain rules and regulations related to the Law" (C-M4). As one of the senior officers from SATCM, Beijing, explains that the State Council is the highest body that makes policies, sets standards for TCM education and national examination system, and defines the standard of TCM practice (C-M6). SATCM then assumes the responsibility for implementation and enforcement. According to a senior officer from the SATCM in Guangdong province, every province has a SATCM department to look after the affairs of the TCM practitioners in their own provinces (C-M3). Hence, there is devolution of authority from the headquarters of SATCM to the provincial levels. He explains that the provincial SATCM has the power to register the qualified TCM practitioners and issue practising licenses (doctors' licenses); guide and supervise the assessment of the professional levels and ethics of the practitioners, and the examinations for the practitioners; suspend the practice and withdraw or revoke the license for medical practice; and formulate training programmes for continued professional development (CPD). He also stresses that each provincial SATCM is required to submit the name list of their registered TCM practitioners to the State Council.

Members of SATCM comprise both TCM practitioners and allopathic doctors because TCM in China is regulated by two groups of professionals. 14 out of 31 respondents from the TCM practitioners' group are happy to have the allopathic

²⁷⁸ The Law will be used to replace the Law on Licensed Doctors of PRC in this thesis.

professionals manage the administrative section of TCM. These allopathic personnel have acquired TCM knowledge and can interact with TCM practitioners. In comparison, 12 out of 31 respondents preferred experienced TCM practitioners to handle and manage their profession. They feel that the majority of the allopathic officers have only a superficial knowledge of TCM and should not be TCM regulators. A general TCM practitioner expressed her frustration that many of the allopathic officers only wished to promote themselves and become popular (C-P8), but neglected the development of TCM. The remaining five respondents feel that both the TCM and allopathic professional groups should work as a team in regulating TCM.

All the respondents from the policy makers' group also realise that the content of the Law mainly deals with the medical professionals' registration and practice, assessment and training, and research development. A senior officer from SATCM, Beijing, stresses that the Law governs both the allopathic doctors and TM practitioners since China has an integrated healthcare system (C-M5). Based on Article 1 of the Law, he states that the main objectives in regulating TCM practitioners are to develop human capital, professionalise TCM practitioners, and protect the rights of TCM practitioners and public safety. Other respondents from the policy makers' group agree with the fact that the Law can ensure public safety by distinguishing between qualified and bogus practitioners. A former leader of SATCM, Beijing, takes the view that since China is a country with rules and regulations, legislation and regulation therefore, is a must for TCM practitioners to ensure standardised qualifications and discipline in practice (C-M1).

One of the TCM practitioners who agrees to being regulated, notes that TCM practitioners who studied the 'Four Chinese Classics of Medicine' (四大经典) are both ethically and lawfully bound by the TCM rules and regulations as documented in the *San Han Lun* (伤寒论: 法典) (C-P15).²⁷⁹ Similarly, the other 30 respondents

²⁷⁹ The Four Chinese Classics of Medicine are the *Jin Gui Yao Lue*, *San Han Lun*, *Huang-di nei-ching* and *Shen Nong Ben Cao Jing*.

from the TCM practitioners' group agree that TCM should be standardised and placed on the same platform as modern medicine. 50% of the respondents pointed out that with the existence of regulations, TCM practitioners' reputation will not be tarnished. As one of the TCM practitioners from Guangzhou put it, in this way TCM will be respected and TCM practitioners will not be considered as 'bogus practitioners' (C-P1). There were 69,233 licensed TCM practitioners in 2008.²⁸⁰

All TCM practitioners indicated that there is a decrease in unregistered TCM practitioners and illegal practice although the exact figure remains uncertain since no survey has been conducted. A TCM practitioner disclosed that unregistered TCM practitioners are those who originated from China and have undergone 'Family Education' (家传教育)²⁸¹ or 'Apprenticeship Education'/'Shi Dai Tu' (师承教育/师带徒制) (C-P5).²⁸² An acupuncturist from the CBIATC says that another group of unregistered TCM practitioners constitute the migrants from Hong Kong (C-P9). In Hong Kong, they are qualified TCM practitioners. They refuse to take the examination that would determine the qualifications of licensed doctors (EQLD, 执业医师资格考试) in China.²⁸³ Without passing the said examination, they are not allowed to register or practise.

Five out of the thirty-one TCM practitioners highlighted that any existing illegal practices are mainly due to a weakness in enforcement. One practitioner even stressed that slackness in higher level regulations, including even corruption in the department concerned, has resulted in inefficient enforcement teams (C-P25). Another practitioner suggested that enforcement teams should conduct regular

²⁸⁰ *China Health Statistics Yearbook 2009*, <http://www.moh.gov.cn/publicfiles/business/htmlfiles/zwgkzt/ptjnj/200908/42635.htm> (accessed March 28, 2010).

²⁸¹ Family education occurs in a family where several generations are TCM practitioners. The elder generation will pass down their family specialty to the younger generation of TCM practitioners. In this manner, the particular school of thought and specialty of this family could be passed on from generation to generation.

²⁸² Apprenticeship education is the education method where master practitioners passed on their specialty to their students.

²⁸³ In Hong Kong, all the TCM practitioners have to be re-evaluated and re-registered after a certain period of practice. Practice certificates are re-issued only after the re-registration.

inspections at the borders of provinces and rural areas to arrest unqualified practitioners (C-P13). Next, the continued existence of unregistered TCM practitioners is due to the misuse of power by the authorities concerned and resistance to sit for the national qualification examination. A respondent points out that some of the powerful officers misuse the system and allow unqualified practitioners, whose forebears may be well-known senior TCM practitioners, to call themselves consultants or professors without being evaluated (C-P17). On the other hand, another respondent explained that TCM apprentices, who are trained through apprenticeship without acquiring any knowledge of modern medicine, refuse to be evaluated (C-P15). Finally, the lack of qualified practitioners to provide healthcare services in rural areas is another reason behind the persistent service provisions by unregistered TCM practitioners. This was acknowledged by an acupuncturist from the China Beijing International Acupuncture Training Centre (CBIATC) (C-P16). Once the demands of the community are fulfilled, their services may not be needed and will be abolished gradually. Otherwise, as one of the TCM nephrologists from the Guang An Men Hospital (GAMH) stressed, the removal of these unqualified practitioners from their communities may invoke anger among the villagers and cause chaos (C-P28).

With regard to qualifications, the senior officer from the GDPH elaborates that after completing the five-year basic degree in TCM, the students have to serve as interns for a year, and then sit for the national 'examination to determine the qualifications of doctors' (EQD, 医师资格考试) (C-M4). Upon passing the examination, they will become qualified TCM practitioners. Following that, they have to work for at least one year in a medical department, disease-prevention centre, or healthcare institution, prior to taking the second national examination – EQLD, to qualify them for registration in their respective provincial SATCM, MOH. The senior officer from SATCM, Beijing, emphasizes that to ensure professionalisation of TCM, all TCM practitioners with the required qualifications – certificate of qualification (资格证书), license for practising (执业资格证书), and license for the job position (单位的资格证书) (C-M5) – are allowed to practise.

Ideally, as pointed out by a senior TCM oncologist from GAMH (C-P4), professionalisation of TCM should include the professionalisation of TCM apprenticeship. The oncologist feels that specialist apprentices with their own schools of thought must comply with the standards set for qualified TCM practitioners for TCM professionalisation purposes. Moreover, as a practitioner indicates, only qualified TCM practitioners' formulas are accepted, evaluated, and applied clinically (C-P10). In responding to this concern, the former leader of the SATCM, Beijing, acknowledges that TCM apprentices have not been recognised by the Chinese Government since 1962 when institutional qualified practitioners became available (C-M1). The TCM Institute was established in 1955,²⁸⁴ and the BUCM a year after. He also informs that MOH had put in place both the written and clinical examinations to evaluate TCM students prior to the implementation of the structured national examination system, between 1951 and 1957. However, two respondents from the policy makers' group still believed that practice by this category of TCM practitioners is not disallowed (C-M2 & 4). Their view is based on the 2006 and 2007 announcements by the Health Minister that "well-known and experienced TCM practitioners are allowed to continue their practice and provide services to the community in spite of lacking paper qualification. However, they are strictly prohibited from prescribing allopathic drugs."

Subsequently, the senior officer from SATCM, Beijing, highlights the fact that the older generation of TCM practitioners are allowed to practise under the 'Grandfather Clause', whereas the younger generation of TCM practitioners have to fulfil the requirements of the Law – do a five-year TCM degree course and then sit for the qualifying examination (老人老办法， 新人新办法) (C-M6). She further indicates that based on Article 11 of the Law, apprentices who have completed

²⁸⁴ In fact, systematic medical educational institutions had been established in China since the Southern and Northern Dynasties and these became more popular during the Tang and Song Dynasties for training imperial physicians. Undoubtedly, the institutes in ancient China could not be compared to the current well-structured TCM universities or institutions. However, ancient medical institutions had an education system to be followed too. See "The Ancient Medical Education Model in China", <http://www.51daifu.com/documents/2007/0305/62596780DF19DE2AH100520.shtm> (accessed May 12, 2008).

their high school education have to study TCM for more than three years by way of apprenticeship, or possess proven specialised knowledge or skills in the field of TCM. Or, they must pass the provincially formulated TCM examination and complete one year of internship at any recognised medical institute before they are allowed to sit for the national examination for TCM apprentices. In addition, their masters must be reputable and registered TCM practitioners with more than 20 years of clinical experience in TCM. The examination is focussed on testing their capability to treat patients, to evaluate their knowledge of the fundamentals of TCM, basic clinical techniques, and any other specialities they may have inherited from their master practitioners. However, the examination does not evaluate their knowledge in modern medicine. It consists of a “personal presentation, an oral test, a written test, practical tests, and a test on a medical case record.”²⁸⁵ She stresses that if they pass this national examination, they are exempted from the five-year institutional education and training and allowed to continue their practice. The time frame is negotiable and depends on the standard of TCM practitioners in the respective provinces. An oncologist from GAMH suggests that the authorities concerned may consider categorising the apprentices into different disciplines after their evaluation to help them become familiar in a particular field of practice (C-P21). Meanwhile, his colleague, an acupuncturist, states that they should undergo three to six months of in-service clinical training in tertiary hospitals after evaluation (C-P23).

For clarification purposes the officer from SATCM, Beijing, explained that the older generation of experienced TCM practitioners with professional titles and those who had obtained professional positions before the implementation of the Regulation, are exempted from taking the examination for TCM apprentices (C-M5). However, another professor highlights that under the ‘Grandfather Clause’, the older generation of TCM practitioners above a certain age limit must sit for examinations

²⁸⁵ See “Temporary Regulation for the Examination on Apprenticeship in Traditional Medicine and Proof of Suitability to Be a Doctor” in *Collections of Laws, Regulations and Documents on Traditional Chinese Medicine*, ed. Daning Li et al. (Department of International Cooperation SATCM, 2005), 129-133, 130.

related to the TCM rules and regulations (C-A14). The required notes and texts on rules and regulations are distributed to them prior to the examination to help them prepare. They can even bring these notes or texts into the examination hall and refer to them during the examination. The main objective of the examination is to ensure their awareness of the existence of rules and regulations in their field of work. Moreover, as acknowledged by one of the TCM practitioners, the elderly experienced apprentices who do not have students or children of their own, are encouraged to document their skills and experiences for purposes of future research and application (C-P6). Similarly, well-known practitioners who are awarded professorships are also required to pass down their knowledge and clinical skills to students. This ensures protection and continuation of Chinese traditions.

Apart from regulating TCM practitioners for professionalisation, a TCM general practitioner from Guangzhou points out that the authorities concerned should also consider regulating the TCM herbalists (C-P1). At this point in time there are no rules and regulations to regulate and monitor the TCM herbalists. TCM has a wide pharmacopoeia; and 500-600 varieties are in use. He feels that while TCM practitioners are trained in clinical science and herbal preparation, TCM herbalists are only trained in identifying, preparing and dispensing the herbs. He stresses that if Guangzhou wishes to follow Zhang's strategy and become the 'national TCM champion' (中医药强省), the regulation of TCM herbalists should be taken into serious consideration.²⁸⁶ The objectives of Zhang's strategy are to establish popular TCM institutions and disciplines, train TCM experts, enhance the accessibility of TCM (herbs) in rural areas, and ensure good quality TCM. It must be mentioned that the regulation of TCM herbalists and medicinal products is however, not within the scope of this study.

²⁸⁶ Zhang Dejiang is the Secretary of the Chinese Communist Party (CCP) Guangdong Provincial Committee since 2002.

It may be observed that TCM institutions or universities had been established to develop professional human capital prior to the implementation of laws. It has taken China more than 40 years to professionalise its TCM practitioners. The pertinent point is that the decision to professionalise TCM is respected and supported by the majority of the people, including politicians and TCM practitioners themselves. The senior officer from the SATCM, Guangdong, thinks that integration of TCM with modern medicine (C-M3) is only possible through standardisation and ethical practice.

50% of the respondents from the TCM practitioners' group think that some of the rules and regulations are unjustified and should be reformulated. An acupuncturist from CBIATC stresses that she is very unhappy with a particular rule which states that each qualified practitioner is only allowed to register with one employer, for example, with a hospital (C-P9). TCM practitioners are not permitted to have dual registration prior to retirement. She is of the opinion that qualified TCM practitioners should be free to practise anywhere they choose. Another acupuncturist from GAMH similarly feels that it is unreasonable to restrict TCM practitioners according to the location of their practice (C-P24). Yet another practitioner from the Beijing Tong Ren Tang (BTRT), disagrees with the retraining and re-evaluation requirements of practitioners seeking to resume their medical practice after more than a year's break in service due to personal health problems or other unforeseen circumstances (C-P14). They are required to undergo clinical training for three to six months, possibly under the supervision of junior colleagues, and take the national examination EQLD. This increases the psychological burden on them unnecessarily. She suggests that the authorities concerned should consider leaving out the written examination and just focus on oral and clinical assessments. An oncologist from GAMH disagrees with the rule that TCM practitioners' performance be evaluated annually by hospitals (C-P21). Based on the report, the selected doctor with the best performance is honoured as 'distinguished doctor' of the year. He thinks this is an unhealthy practice; to avoid any favouritism, practitioners should be evaluated and credited by the patients or

the public and not by the hospital. A colleague of his points out the unfairness in the salary system (C-P25). The salary of each practitioner varies based on the hospital (primary or tertiary), discipline, position, and the number of patients attended to.²⁸⁷ The most unfair rule is regarding the registration fees. The charge is higher for consulting a senior consultant. This does not allow the poor access to the services of experienced practitioners. A practitioner says that he is very unhappy with the regulations but he was reluctant to engage in further disclosure and discussion (C-P7).

It can be observed that at this point in time there is a certain degree of dissatisfaction with regards to law and regulations. It could be because the existing law and regulations meant to regulate the two professional groups of allopathic doctors and TCM practitioners are more general than specific. There is no specific legislation to govern TCM practitioners in China. Modern medicine and TCM are different in many aspects. In responding to this concern, one senior officer from SATCM, Beijing, discloses that there is a major plan within the MOH for the drafting of the bill for TCM, potentially known as the Law of Traditional Chinese Medicine (传统医学法) (C-M5). He explains that the new proposed TCM law includes regulation of both TCM practitioners and their products. However, it does not contradict the existing laws and regulations in China such as the Law and Regulation of the PRC on Traditional Chinese Medicines 2003.²⁸⁸

4.3 Formal Organisations

This section addresses the following concerns in relation to formal organisations:

²⁸⁷ Depending on the Chinese healthcare policy, each practitioner has to attend to at least 4 patients in each working hour in order to get the full salary. If they failed to achieve their target, their salary would be compromised. Their salary was partly contributed by the hospital and partly by the government.

²⁸⁸ "Regulation of the People's Republic of China on Traditional Chinese Medicines" in *Collections of Laws, Regulations and Documents on Traditional Chinese Medicine*, ed. Daning Li et al. (Department of International Cooperation SATCM, 2005), 1-8.

(i) establishment and development of the professional bodies for TM, (ii) determination and definition of the education structure, and (iii) the setting up of the integrated healthcare hospitals.

4.3.1 Formation of the Professional Bodies for Traditional Medicine

According to a senior TCM practitioner from BTRT, there are two major professional TCM associations in China, namely, the China Association of Chinese Medicine (CACM, 中华中医药学会) and the Chinese Medical Doctors' Association (CMDA, 中国医师协会) (C-P13). Both these associations are under MOH, China. They maintain professionalism and promote the development of TCM in China.

The CACM, which is the first and the largest TCM association in China, was established in 1979.²⁸⁹ Its main objective is to promote TCM academically. Its members are qualified practitioners with expertise in particular fields of TCM. CACM therefore, comprises various speciality sub-associations, for example, internal medicine. Each region has its own association of Chinese such as the Association of Chinese Medicine in Beijing.

The CMDA is a national, voluntary, non-profit, and professional association of 2.1 million practising physicians, both allopathic and TCM, in China.²⁹⁰ It was founded in 2002 and organised under the Medical Practitioners Act 1999 (执业医师法). Its mission is to promote professional ethics, to advance medical knowledge and improve medical services. All professionals are required to conform to professional ethics. Over the past five years CMDA has become the largest and most influential medical association in China, managing 26 local associations, 39 speciality sub-associations, 5 speciality committees, and 18 medical publications.

²⁸⁹ The China Association of Chinese Medicine, see <http://www.cacm.org.cn/cobportal/portal/zhzyxhw.page> (accessed January 14, 2009).

²⁹⁰ The Chinese Medical Doctors' Association, see <http://www.cmdae.com/en/about.php> (accessed January 14, 2009).

The same TCM practitioner states that every TCM practitioner has to register with CACM upon graduation, and with CMDA, if they wish to practise (C-P13). The membership for both associations must be renewed annually with a registration fee of RMB50 (renminbi). For those employed in hospitals, the hospitals assume the responsibility to register them annually. For those working in private medicine shops there is either a person in charge or each practitioner is responsible for his own registration. CMDA and CACM work together with SATCM to verify qualifications, maintain professional ethics and to ensure continued medical education (CME) of all TCM practitioners in China. The management ensures that rules and regulations pertaining to professional ethics are distributed to all TCM practitioners in the respective hospitals and medicine shops. CMDA also organises seminars and conferences to enable knowledge exchange among the practitioners. It is an ongoing half-day weekly CME session conducted every Wednesday. However, the CME sessions may be cancelled for some weeks of the year during the summer or winter season because of bad weather. The seminar topics comprise different disciplines, such as surgery. TCM practitioners accumulate their CME points by attending these CME sessions whereby one point is allocated for each weekly attendance. CME points are necessary for those who wish to continue to practise and upgrade their status. Annually, each practitioner requires a minimum of 25 out of a total of 52 (52 weeks in a year) CME points. The former Director of the Examinations Department of China's National TCM remarks that failure to achieve the minimum CME points for two years in a row meant that the practitioner's qualifications to practice will be struck off (C-A13). He further emphasised that at least five out of the 25 CME points must come from the national level while the remaining 20 points can be obtained from the provincial level.

The same respondent from BTRT further mentions that for a brighter future every TCM practitioner is encouraged to publish one or two articles every two years in the journal of CACM (C-P13): the China Journal of Traditional Chinese Medicine and Pharmacy (中华中医药杂志). The monthly journal can be purchased from the

association. A 50% discount is offered to all members. The above findings show that both professional associations continue to work towards a common objective to develop and promote TCM.

4.3.2 Universities of Traditional Medicine

Two senior officers from SATCM, Beijing, acknowledge that under the Law, all the universities in China come directly under the education department of the respective people's government (the respective municipalities, provinces and autonomous regions) (C-M5 & 6). The SATCM is not responsible for the affairs of any university (C-M6). However, it is indirectly involved in the supervision of TCM education and in the development of the Beijing University of Chinese Medicine (BUCM). There are approximately 47 TCM colleges and universities in China, and many other universities which have a Chinese Medicine department and conduct TCM courses.²⁹¹

In China, integrated TCM education was introduced and implemented in the 1950s. This was confirmed by the senior officer from the GDPH (C-M4). At this point in time, integrated medicine system of education is more popular than pure TCM education, which is almost extinct. A professor from the BUCM explains that the integrated healthcare system is officially recognised in China (C-A3). In all the hospitals including TCM hospitals, integrated medicine is being practised. TCM practitioners who possess knowledge of modern medicine are in higher demand compared to pure TCM practitioners, especially in tertiary hospitals. Hence, almost all the universities adopt the integrated medicine system and emphasise modern medicine in order to ensure employment in any hospital upon graduation. A TCM practitioner states that these days pure TCM practitioners either serve in rural areas or practise in old medicine shops (C-P5). Four academics mention that

²⁹¹ There are 89 modern medicine colleges and universities with TCM courses, and 138 non-medical colleges and universities or research institutes with TCM courses. See *China Health Statistics Yearbook 2009*, <http://www.moh.gov.cn/publicfiles/business/htmlfiles/zwgkzt/ptjnj/200908/42635.htm> (accessed March 28, 2010).

integrated medicine also allows TCM practitioners to earn their living abroad in countries where modern medicine is the mainstream practice of medicine (C-A6, 10, 11 & 12). This strongly suggests that TCM students have better future career prospects if they possess knowledge of modern medicine and good clinical skills. Therefore, 50% of the academics surveyed agree to the incorporation of modern medicine subjects into the undergraduate curriculum of TCM students and vice-versa. The bachelor's degree for the integrated TCM study is a five-year course while the postgraduate course is a seven-year combined bachelor and masters' degree programme.

Finally, a basic knowledge of modern medicine allows TCM graduates to take part in national and international activities. This is the opinion of an academic who says that in the Sichuan Earthquake on May 12, 2008, TCM practitioners, with their knowledge of integrated medicine, participated in the rescue activities (C-A12). TCM emphasises treatment to stabilise fractures and minimise the risk of post-fracture complications, the prevention of infectious diseases, and rehabilitation such as acupuncture and massage to improve the mobility of the limbs and quality of life, together with counselling with psychological support.²⁹² However, she stresses, this does not mean that integrated medicine discourages TCM practitioners from practising TCM. In the near future, with the high demand for TCM specialities, pure TCM education may be re-emphasised. Moreover, with the availability of a multi-disciplinary and cross-referral system, a practitioner may not be required to possess knowledge of various systems of medicine. Subsequently, the professor from the GUCM remarks that "full attention on TCM from every TCM practitioner could enhance the development of TCM" (C-A1).

In order to develop TCM, the SATCM requests all foreign students who wish to study TCM in China to have a good command of Mandarin, both written and oral. The former Director of the Examinations Department of China's National TCM

²⁹² Zhang, X.P. et al., "The Benefits and Clinical Applications of Chinese Medicine on Rescuing Victims in the Sichuan Earthquake," *Beijing Journal of Traditional Chinese Medicine* 28(1) (2009): 6-7.

states that the Chinese Education Department has upheld the value of the Chinese language (汉语) in TCM education and used Mandarin as the medium of instruction for integrated medicine (C-A13). The basic theory of TCM such as the Classics is based on ancient Chinese language and culture.²⁹³ He stresses that it is possible to teach basic science, statistics and pharmacology in English or other languages, but not the Classics. The major problem is the absence of the corresponding ‘Siamese twins phrases’²⁹⁴ and ‘imaginary numbers’²⁹⁵ in other languages. A TCM practitioner emphasises that if improperly and inaccurately translated, the TCM terminologies may alter the original context of the texts (C-P9). Without understanding the message in the Classics, the TCM students are not able to appreciate the origin and nature of TCM. Therefore, the medium of instruction for TCM has to be the Chinese language. For example, Yan-bian Medical University in Jilin recruits mainly students from Korea. In this university, lecturers are able to teach and communicate in the Korean language. In the first year, the medium of instruction is Korean, in the second year it is a mixture of Korean and Chinese, and in the third year, it is purely Chinese.

With regard to challenges in integrated medicine education, an academic from the GUCM realises the difficulties in ensuring that the fundamental theories of TCM be taught and understood by TCM students (C-A1). This challenge in integrated medicine education is secondary to the fact that TCM students fail to appreciate the philosophical thinking of TCM that is immeasurable.²⁹⁶ On the other hand, students easily accept the parameters of measurable scientific theory of modern medicine. In responding to this, two academics explain that these days, the younger generation rarely expose themselves to traditional Chinese culture and philosophy since childhood (C-A7 & 14). Childhood exposure to traditional

²⁹³ The ‘Classics’ will be used to replace the ‘Four Chinese Classics of Medicine’.

²⁹⁴ Li, P., and Y.Z. Shi, “English Translation of Antithetical Words in Huang Di Nei Jing,” *Journal of Chinese Integrative Medicine* 7(1) (2009): 85-88.

²⁹⁵ Fu, L.Y. and Y.Z. Shi, “English Translation of Imaginary Numbers in Yellow Emperor’s Classic of Medicine,” *Journal of Chinese Integrative Medicine* 6(12) (2009): 1318-1320.

²⁹⁶ In TCM, there are different schools of thought. Some are based on Confucian and Taoist philosophical thinking.

Chinese culture establishes a good foundation in TCM culture. This is the determining factor for the future success of being a well-known TCM practitioner, for example, Wang Hong Shi.²⁹⁷ Without early exposure a majority of them find it difficult to understand the classical literature of Chinese medicine and accept the fundamental theories of TCM. They even doubt the healing properties of TCM due to the existence of the numerous schools of thought. A suggestion from one of the academics is that the authorities concerned may consider teaching TCM and planting the TCM philosophical theory in the students' minds prior to introducing knowledge in modern medicine since students are able to accept modern medicine easily (C-A14). Moreover, TCM students may be tempted to compare both TCM and modern medicine in integrated medicine education. This could cause some confusion while studying the two systems of medicine simultaneously because of the conflict between the philosophical theory of modern medicine and that of the traditional system of medicine. The alternative is to establish courses on 'traditional Chinese culture and TCM' to enhance TCM students' confidence and a feeling of pride in their profession. For example, Shanghai University of Chinese Medicine (SUCM) has conducted the 'traditional Chinese culture and TCM' since 2002, and a 2007 report demonstrated that more than 80% of the students were enthusiastic about learning traditional Chinese culture.²⁹⁸

Nevertheless, the integrated medicine education system in most TCM Universities is purely on the natural sciences, and does not educate students on Asian Chinese Medicine or the Classics. This is highlighted by an academic from the BUCM (C-A3). In fact, this traditional theoretical education on TCM can be maintained if the authorities concerned consider retaining more 'credit hours' for TCM subjects.²⁹⁹ Initially, the credit hours for modern medicine (basic medical sciences and clinical modern medicine) are 30-40% of the total credit hours for the

²⁹⁷ Liu, N., et al., "Understanding the Current Chinese Medicine Education based on the success of Beijing's well-known physician, Wang Hong-Shi," *Beijing Journal of Traditional Chinese Medicine* 27(3) (2008): 235-237.

²⁹⁸ Ye, G.H., et al., "Analysing the Study on Traditional Chinese Culture Education in the University of Chinese Medicine," *Beijing Journal of Traditional Chinese Medicine* 27(7) (2008): 574-575,575.

²⁹⁹ 1 credit hour equals 45 to 50 minutes.

whole TCM degree course, and some TCM universities have even increased this to 50%. In comparison, in the modern medicine universities, the credit hours for TCM make only 5% of the total credit hours.³⁰⁰ He remarks, "...in TCM universities, there is a problem in balancing the ratio of credit hours between TCM and modern medicine since the incorporation of modern medicine subjects into the undergraduate degree course has decreased the credit hours for TCM subjects." The former leader of SATCM holds a similar view. After the Cultural Revolution, the ratio of credit hours between TCM and modern medicine was not maintained at 7:3 (C-M1). It has become 1:1 (50%). This is secondary to the increase in the modern medicine subjects without extending the credit hours for the entire course in a TCM university.

In responding to the above issue, an academic expresses her frustration by saying that reducing the credit hours for TCM creates difficulties in the TCM syllabus arrangement and teaching materials preparation and ultimately compromises certain TCM subjects (C-A12). For example, TCM History and Philosophy that would prove useful in disease management as attested to by 50% of the academics. She strongly recommends maintaining the proportion of the credit hours for TCM subjects and removing irrelevant compulsory subjects such as English language. Politicians and academics comment that English should be an optional subject in the integrated TCM curriculum.³⁰¹ An academic from the GUCM suggests that TCM practitioners can attend part-time or short courses in modern medicine after their graduation (C-A2). In this way many credit hours can be saved for TCM instead of for modern medicine. A policy maker emphasises that the addition of modern medicine subjects should not compromise the credit hours for TCM (C-M4). The former Director of the Examinations Department of China's National TCM points out that, "No matter what, TCM and modern medicine universities should not be combined. Otherwise, TCM would be overshadowed by

³⁰⁰ Students of modern medicine have to study only one subject on TCM. Moreover, it is not an important subject in their syllabus since a compulsory pass is not required for them to qualify as allopathic physicians.

³⁰¹ Jia, Y.L., "The Necessary in Excluding the Examination of English Subject in the Universities of Chinese Medicine," *Guangming Journal of Chinese Medicine* 24(2) (2009): 364-365, 365.

modern medicine and lose its nature and origin. This is because if these courses are combined in a university, TCM will just become a single discipline / subject” (C-A13).

Two professors highlight the fact that given the time constraints and capacity limitation, TCM students who study integrated medicine spend most of their time on modern medicine subjects and neglect TCM subjects (C-A4 & 12). It is very difficult for students to be engaged in both systems. They would therefore like to opt for the system which is the easiest to cope with and is acceptable. However, a lecturer points out that students do not receive proper guidance for their optional biomedical subjects either, especially statistics and clinical epidemiology (C-A8). It can be said that many academics are uncertain about the methodology for educating and guiding the TCM students to ensure that they understand and appreciate integrated medicine. Additionally, it is felt that studying modern medicine has negatively affected the ability of TCM students to analyse and understand TCM. Another lecturer notes, “TCM has a variety of schools of thought with a complicated philosophical theory behind it” (C-A7). A professor from the CBIATC agrees, “TCM is a very specific system of medicine which is related to nature, culture and science; every TCM student must have an interest in it in order to understand and be a successful TCM practitioner or researcher” (C-A10). She therefore suggests that all TCM academics should know about the interests of their students who enrol for integrated medicine or TCM degree courses. Some students do not show any interest but enrol because of family coercion.³⁰² She even suggests that after high school, students should be exposed to a variety of disciplines prior to pursuing higher education. She refers to the principle of the American system whereby all students have to undergo a four-year fundamental training in all the science disciplines prior to taking up a medical course. She believes that after four years students would be mature enough to opt for a

³⁰² A report from the Shanghai University of Chinese Medicine showed that 46.2% of students were under coercion to opt for professional courses. See Yan, X.T., et al., “Discussion on PBL Teaching Policy Based on Our National University Students’ Learning Attitude,” *Beijing Journal of Traditional Chinese Medicine* 28(1) (2009): 76-77.

suitable course. The evidence above shows that increasing student interest in TCM is surely a challenge for all the TCM academics.

Another challenge of the current integrated education system is the lack of clinical training which leads to poor academic performance by TCM students. A professor from the CBIATC says, “Nowadays, TCM universities have recruited too many students and yet they do not have enough facilities to train them clinically” (C-A10). Although certain universities, such as the Peking Union Medical College, have set up their own hospital to provide both theoretical and clinical teaching, there are insufficient opportunities for students to correlate theory and the practice and share ideas. This problem was highlighted by eight out of fourteen respondents from the academic group. One of them explains that in the early days TCM students were exposed to clinical cases from the initial stage under the Apprenticeship System (C-A2). A TCM practitioner disclosed that collaboration between institutional and apprenticeship education was re-implemented and encouraged by the authorities concerned after realising the importance of simultaneously conducting theoretical teaching and clinical training (C-P6). The institutional education has a systematic promoting and monitoring mechanism.³⁰³ This is reaffirmed by a senior officer from the SATCM, Beijing, who says that clinical training is dependent on the experiences of masters, whereas the philosophical theory of TCM is based on reading and understanding the texts (C-M5). In particular, an academic says that the Guangxi TCM College started apprenticeship form of education since 2007 (C-A3). Students are asked to follow well-known senior TCM practitioners so as to increase exposure to clinical cases and learn special clinical skills. In this way students appreciate and understand the holistic principles of TCM better and are able to correlate it with the study of clinical cases from the beginning of the academic year. Unfortunately, according to a colleague, many retired TCM practitioners with 15-25 years of clinical experience do not wish to accept students nor pass down their expertise (C-A14). This

³⁰³ Xue, G., et al., “Follow and Learn the Experiences of the Well-known TCM Masters,” *World Chinese Medicine* 3(1) (2008): 46-47, 47.

indicates that incorporation of clinical and theoretical teaching is highly recommended for the success of integrated TCM education.

In TCM universities such as BUCM, a younger generation of well-known TCM practitioners is recruited (名医子弟班). According to an academic, these students have been under the influence and training of their elders or masters since childhood (C-A12). They have to sit for a special entrance examination upon registration for this class. Once they are accepted they have to undergo five years of institutional training that focuses on TCM clinical training. They are also given a certain amount of time to follow the elders or masters and learn from their experience. The main objective is to allow students to develop a deep understanding in the approach of clinical cases and eventually establish their own specialisation.

With regard to the Apprenticeship System for graduates which began ten years ago, the former leader of the SATCM, Beijing, stresses that only selected qualified TCM practitioners with at least five years of experience (attending doctors)³⁰⁴ and below 35 years old, are allowed to follow these masters or senior physicians to acquire knowledge as well as experience (C-M1). There are about 500 masters in China. Each master teaches and guides two qualified practitioners at a time. After completing their training, the practitioners are evaluated on how both the master and the student examine the same patient and write their treatment/prescription separately. This mainly comprises clinical assessment. Then, a comparison is made to analyse whether the student has acquired the master's speciality. If the performance is good, the student is awarded the title of associate professor without going through the routine process (promotion based on years of experience). He further elaborates that the first class of apprenticeship education was conducted in 1991, the second class in 1994, the third in 1997 and the fourth

³⁰⁴ In China, the clinical posts for doctors in hospitals have the following sequence, from the lower to the higher levels: Intern, residential doctor, attending doctor, vice-chief doctor, chief doctor (The residential doctor is equivalent to a medical officer, the attending doctor is a specialist and the chief doctor is a consultant).

class in 2008. After the completion of the training of the second and third classes, the authorities concerned became aware of the challenges in the apprenticeship education. In particular, the masters were biased and selected only their favourite students. The other challenge was the fact that selected practitioners failed to allocate adequate time to follow their masters because they still had to continue their normal clinical work in order to earn a living. This affected their learning processes. This indicates that the authorities concerned realise the importance of apprenticeship education and its challenges.

Understandably, graduates including Master's and PhD scholars lack TCM clinical experience and end up in deterring the development of TCM. A professor from the BUCM mentions that in the last two years, apart from the Apprenticeship System, the authorities concerned have proposed a temporary measure emphasising clinical training whereby graduates have to go back to hospitals to undergo clinical training again known as 'Hui Lu' (回炉) (C-A11).

Apart from academic performance, the authorities concerned notice the poor performance in the TCM practices and subsequently many of the qualified TCM practitioners practise modern medicine instead of developing TCM.³⁰⁵ As a professor stresses, due to public demand and limited TCM knowledge, the majority of TCM graduates have the tendency to practise modern medicine after graduation especially when dealing with complicated cases (C-A5). As another senior academic argues, "I agree with integrated medicine education, as long as we are sure of its objective which is training and producing high quality TCM practitioners and not allopathic practitioners. Modern medicine is used to support TCM during the process of patient management" (C-A4). The TCM academics wonder if the authorities concerned wish to educate and produce good TCM practitioners or TCM practitioners who merely emphasise modern medicine. In order to improve TCM education, the authorities concerned should have a proper

³⁰⁵ See Kong, F.H., "The Present Chinese Medicine Practitioners Should Enhance the Development of Traditional Chinese Medicine," *Guangming Journal of Chinese Medicine* 23(4) (2008): 526-528, 527.

policy to define and outline the objectives of integrated medicine education. A senior professor from the BUCM highlights that educating and training of integrated medicine practitioners should not cause the TCM practitioner to neglect TCM and practise modern medicine(C-A4). Initially, integrated medicine was promoted by President Mao to meet the high demand in rural China. Bearing in mind the Maoist ideology, another professor from the same university stresses that TCM training should be based on public demand, especially in the rural areas (C-A3). His view is that the training of TCM practitioners at the diploma level (3-4 years) may be of more practical use in China, an agricultural nation.³⁰⁶ TCM practitioners with diploma qualifications could comprise a group of practitioners who go to rural areas to serve the farmers and the poor, whereas those with bachelor's or master's degrees could remain in the urban tertiary hospitals. He further suggests that one criterion for students upon acceptance for diploma training in TCM could be to serve in rural areas. This would also minimise competition in job applications in tertiary hospitals. Practitioners have better opportunities for theoretical knowledge application in clinical cases. The idea of training more practitioners to serve the people in villages is strongly supported by another professor (C-A11).

Clearly, since 1999, the increased student intake in all the universities in China has resulted in poor quality of education, inadequate educational resources, and weak performance of the graduates.³⁰⁷ Therefore, the Education Department decided to formulate and implement the 'Education Improvement Plan, 2003-2007' (2003-2007 年教育振兴行动计划) to emphasise the need for quality in higher education, and education reform. In responding to this, a group of experts from the Hei Long Jiang University of Chinese Medicine recommends the establishment of a 'Higher Education Research and Evaluation Centre' and the implementation of

³⁰⁶ At this moment, China does not organise or conduct any diploma level TCM course, but diploma courses for acupuncture are available, especially for foreign students.

³⁰⁷ The number of recruiting student was increased from 108 million in 1998 to 567 million in 2007. See Fan, Y.G., et al., "Understanding the Evaluation of the Quality of Bachelor's Degree Education," *Beijing Journal of Traditional Chinese Medicine* 27(1) (2008): 72-73.

the 'Education Quality Assurance System'.³⁰⁸ This system would ensure the quality of TCM education and further improvement. It is a complete system with an 'Internal Quality Assurance System' and an 'External Quality Regulatory System'. In the Internal Quality Assurance System, the TCM Higher Education Department and universities are responsible to formulate and implement policies, and perform all administrative tasks. They apply modern medicine education evaluating methods to measure and assess the quality of TCM education. The evaluation methods include evaluating the teaching staff, the management unit of the respective university monitoring the outcome of the lectures, evaluating students' learning conditions, and finally inviting experts to form the university's supervisory committee to monitor and regulate the teaching staff, and the management units of the university and students. The External Quality Regulatory System would gather opinions or comments from various sectors such as other governmental departments, professional associations, career advisors or employers, students' parents, and the graduates, in response to the drafted and implemented policies on TCM education. This recommendation suggests that quality education can be maintained through evaluation by the experts and society.

Furthermore, in order to treasure the tradition and produce high quality TCM experts, Chinese Vice-Premier, Wu Yi (吴仪, 国务院副总理), advocates the 'popular doctors, popular disciplines, and popular institutions' strategy (名医, 名科, 名院战略). This is acknowledged by the Director of the Examinations Department of China's National Traditional Chinese Medicine (C-A13). He explains that in response to Wu's strategy, SATCM has drawn up a special training course known as the 'TCM experts training programme' (优秀中医临床人才研修项目) for TCM clinicians with good reputation. The objectives of this training programme are to promote the application of fundamental theories of TCM in disease differentiation and management, enhance TCM clinical standards especially in managing complicated cases, and improve TCM clinical research.

³⁰⁸ Kuang, H.X., and T.R. Yang, "Quality Assurance System is the Fundamental Principle of Chinese Medicine Education," *China News of Traditional Chinese Medicine*, June 5, 2009.

The action plan is to 'read the Classics, practise TCM clinically, and follow well-known TCM master practitioners' (读经典, 做临床, 跟名师) to achieve these objectives. The first class graduated in 2007. They showed good results since the majority of the candidates belonged to the professor category. The second class commenced in 2008. The courses are conducted every three years because of limited funds and limited human resource. Many elderly TCM master practitioners (80-90 years old) from all over China gathered to form a committee to help draw up the training course and also attended it.

The same respondent elaborates that the TCM practitioners below 50 years old and in the category of consultant/professor, with a basic bachelor's degree in TCM or integrated medicine, continually practising TCM for more than 15 years, with speciality and talents in overcoming difficulties, are selected by the provincial TCM authorities. They are then evaluated on their TCM theoretical and clinical knowledge. Next, the list of the selected TCM practitioners is submitted to SATCM, Beijing, for re-evaluation and final selection. A total of 400 candidates sit for the written examination on TCM theory in October. Six examination centres have been set up in Shen-yan, Beijing, Xi-an, Chen-du, Wu-han, and Nanjing respectively. Finally, 200 candidates are recruited based on the exam results. The recruited candidates choose their TCM master practitioners. The initiation ceremony is fixed for February. Upon completion of training the candidates submit a thesis with their master's consent for final assessment and sit for an examination. The respondent also informs that the Chinese Government provides funds totalling RMB50,000 or 100,000 for this course annually.

The other challenge for TCM education is to develop refresher or reorientation courses for the apprentices. The majority of Chinese academics agree with the idea of upgrading TCM apprentices with the exception of one, who thinks that reorientation courses will not help apprentices as their knowledge is limited to their master's school of thought. (C-A6). The 13 academics indicate that apprentices should go for reorientation courses and training, and be evaluated prior to gaining

approval for continual practice. As a professor from CBIATC acknowledges that even though they have good clinical experience they need to update their knowledge so as to be on a par with institutional practitioners (C-A10). An academic from GUCM notes that structured training provides apprentices with fundamental TCM and modern medicine theoretical and clinical knowledge, and standardises their practice (C-A1). One professor from BUCM recommends short courses rather than long courses for the orientation of apprentices (C-A4). He bases his view on the observation that short courses emphasise clinical skills and knowledge and allow apprentices to choose and focus on their area of expertise. Moreover, short courses are flexible enough to attend for many who have their own practice. Long courses face a lot of constraints. The same respondent stresses that despite the time constraints, studying and understanding the Classics is mandatory. Given their years of clinical experience, the apprentices are expected to be able to understand the Classics at a deeper level. Moreover, this knowledge would enhance their clinical research capacity and add to the efficacy of TCM.

An acupuncturist remarks that TCM is a form of social science which requires combination of TCM practitioners' expert knowledge and specialised skills (C-P23). He is of the opinion that it is acquired and maintained through rigorous and continuous study. Hence, an academic highlights, in China, institutional practitioners had to participate in CME; for example, in clinical training, case discussion, seminars, workshops, and conferences (C-A3) organised by MOH or professional associations. Occasionally, the lecture is delivered by an expert. This allows for exchange of knowledge among TCM practitioners both at national and international levels. He adds that each university allocates a certain budget for TCM students to attend CME.

Inevitably, 50% of the academics stress that CPD among apprentices should be considered and encouraged, especially for those who have passed the national examination. Unfortunately, the authorities concerned have yet to send experts

and offer CME lectures to apprentices found mainly in rural areas. Moreover, funds for apprentices have yet to be sought. In fact, an oncologist from the GAMH mentions that in the early days, apprentices did attempt to accept training and update their knowledge in the GAMH (C-P20). However, this programme has been discontinued because the apprentices show poor academic understanding, especially in basic TCM theory.

Apart from TCM theoretical and clinical training, a policy maker states that embarking on TCM research is essential for integrated medicine to become a reality (C-M7). His colleague suggests the formation of a research committee that comprises TCM practitioners, allopathic doctors, doctors of integrated medicine, and scientists, to begin with (C-M8). This is because research covers a wide range of areas such as education, clinical management and experimentation. The former leader of SATCM also agrees with the view that recruitment of the TCM practitioners is essential (C-M1). However, he is disappointed with the new generation of TCM practitioners who are influenced by modern medicine and possess weak fundamental knowledge of TCM. They cannot handle TCM research as well as expected; they apply modern medicine methodology in TCM research directly without considering its suitability. Hence, TCM research always fails to obtain a definite answer. He is of the opinion that the research committee should focus on research in basic theory.

With regard to the research methodology, 12 out of 14 respondents from the group of academics disagree with the direct use of modern medicine research methodology to evaluate TCM. One respondent states that both TCM and modern medicine are from different systems of medicine and speak different languages, hence the research methodology should also be different (C-A4). Unfortunately, TCM researchers have yet to discover proper TCM research methodology that has a uniform format as in modern medicine. The major challenge in the research on TCM is that TCM is holistic and individualised in patient management as it depends on the patients' constitutions and practitioners' experience. He mentions

that the use of different types of herbal formulations and their dosages cannot be standardised as requested in randomised controlled clinical trials (RCT) that involve a few thousand participants. If the TCM dosage has to be standardised, the efficacy of it is most likely be reduced. TCM will thus lose its origin and nature. Clearly therefore, the modern medicine hierarchical methodological principles that emphasise standard criteria and statistical conclusions cannot be applied to evaluate TCM. Such applications do not work in TCM since it is impossible to represent every individual via a big sample statistical conclusion. Another respondent suggests the use of the Circular Model to evaluate TCM (C-A7).³⁰⁹ This Circular Model is based on the combination of three main principles, namely, the practitioner's clinical experience, the patient's preference,³¹⁰ and the availability of facilities in the hospital. A well equipped hospital with total doctor and patient involvement can result in many diseases being treated successfully. Therefore, evidence-based medicine is not a RCT. RCT is just one of the evaluating instruments in the evidence-based medicine concept of modern medicine. Their views are supported by a professor from BUCM who feels that TCM research should be the accumulation of the clinical experiences of TCM practitioners on the management of diseases (C-A11).

The professor from the Centre for Evidence-based Chinese Medicine, BUCM, says "evidence-based medicine is mandatory for TCM in its efficacy evaluation, development, and incorporation into modern medicine" (C-A3). He explains that the clinical epidemiology method has been introduced in China since the mid 1980s. He elaborates that typical cases of a particular pattern are chosen, a comparison made and then the right approach is decided on. Research requires basic scientific thinking, a comparison and then an evaluation, especially in pharmacognosy that uses modern scientific technology to study and analyse

³⁰⁹ Walach, H. et al., "Circular instead of Hierarchical: Methodological Principles for the Evaluation of Complex Interventions," *BMC Medical Research Methodology* 6(29) (2006).

³¹⁰ For example, the study shows the patients' opinions on the process of disease treatment and its efficacy based on their own feelings and judgments such as frequency of asthmatic attacks. See Zhang, Y.H., et al., "Patient-reported outcomes: Advances in Research and Practical Application." *Journal of Chinese Integrative Medicine* 6(11) (2008): 1101-1104.

chemical components of medicine microscopically. This is followed by the drafting of the Good Clinical Practice (GCP) Guideline by the State Drug Administration, China.³¹¹ The RCT methodology has been widely accepted as a standard method for TCM evaluation since the late 1990s. Moreover, the systematic reviews, observational studies, case series, case reports and other methods are adopted in the clinical study as well.³¹² He is of the opinion that training and building up of research human capital is a preliminary step for TCM to move towards evidence-based medicine. He points out that a majority of the TCM graduates do not possess the capacity for research. He suggests that TCM students be taught about clinical research methodology and statistics from the beginning of the degree course. After graduation, with this knowledge, they will know how to conduct research in clinical TCM and evaluate it. Next, he emphasises national and international collaboration and knowledge exchange through meetings, seminars, and conferences since there is a variety of schools of thought on TCM. Finally, the issue of the lack of research findings is raised. He acknowledges that the current research includes clinical studies on diabetes, cardiac-vascular diseases, stroke, cancer, hepatitis, and HIV/AIDS. His colleague says that the National Research Centre in China uses a clinical approach to examine the TCM basic theory (C-A13).³¹³

A psychologist from GAMH argues that TCM is a truth-based science (C-P25). For example, TCM is based on the yin-yang balance comparable with the Parkinsonism in modern medicine based on the balance level of Dopamine-Acetylcholine. Hence, TCM is a science. Holding the same view, a senior academic also disagrees with research being conducted in TCM (C-A5). He

³¹¹ The GCP Guideline was not developed specifically for TCM; it was for all medical interventions including TCM.

³¹² See Xue, C.C.L., and Yang, A.W.H., "Hierarchical Level of Evidence in Chinese Medicine Clinical Research," in *Clinical Research Methodology for Evidence-Based Chinese Medicine*, ed., J.P. Liu, 1st ed. (China People's Health Press, 2006), 11-31.

³¹³ In the research, Nei Jing is studied through case research, large sample retrospective verification, epidemiological survey, and exploration of case reports in ancient times. See Wang, Q.Q., "Methods for Clinical Study of Nei Jing," *Journal of Chinese Integrative Medicine* 6(7) (2008): 678-681.

expresses his view that TCM is a medicine the efficacy of which has been proven centuries ago. Unfortunately, it has not been documented. He remarks that the absence of documentation should not deny the role of TCM as a good system of medicine. For thousands of years human beings have been the experimental subjects for TCM, unlike animals which are used in modern medicine experiments. He bases his view on the understanding of the fact that humans and nature have a close inter-relationship. The efficacy of the herbs is determined by the earth in which it is planted and the season of harvesting. Hence, the response from the human beings should be the best natural evidence. The animal trials fail to disclose the origin of the disease and can only show the clinical efficacy of TCM.

4.3.3 Integrated Healthcare Hospitals

China is a country with two medical systems, TCM and modern medicine. The former leader of SATCM, Beijing, quotes the former president of PRC, Mao Zedong (毛泽东主席, 1893-1976), “grouping TCM and modern medicine, and move onto the pathway of integrated medicine” (团结中西医, 走中西医结合的道路) (C-M1) to show that he believes the Maoist ideology of TCM and modern medicine integration will enable TCM to be accepted as international medicine in the near future. He explains that in 1955 the China Academy of Chinese Medical Sciences (CACMS) Beijing, conducted TCM classes for allopathic doctors belonging to the category of specialists and consultants. After graduation, this group of allopathic doctors prepared a post-learning report. On October 11, 1958 after reading the report, Mao made the ‘Declaration on Allopathic Learning TCM’ (西医学习中医批示), which is known to be the ‘1011 Declaration’ (1011 批示) to stress the upholding of TCM. President Mao indicated that “TCM is the ancient treasure of China; it should be developed and promoted” (中国医药学是一个伟大的宝库, 应当努力发掘, 加以提高). Following the Declaration, the authorities concerned in all the provinces, municipalities, and autonomous regions were requested to organise and conduct TCM courses for allopathic doctors, train ‘excellent doctors in

integrated medicine’ (中西医结合的高级医生) and produce ‘experts on theory’ (高明的理论家). This was a two-year course and the selected allopathic doctors had to leave their modern medicine practice and were not allowed to refer to modern medicine materials for the duration of these two years. After two years of TCM theoretical training, they had to undergo clinical TCM training for eight months under the supervision of the senior TCM practitioners.

The same respondent elaborates that the TCM trained allopathic doctors were sent back to their respective hospitals to practise and promote integrated medicine upon completion of their training. Due to the lack of support from the other allopathic colleagues who did not understand TCM, these doctors faced various difficulties in the establishment of integrated medicine practice in their respective hospitals. Finally, the TCM trained allopathic doctors suggested ‘Focused Application Strategy’ (集中使用方案), whereby the group gathers to practise integrated medicine in one of the TCM hospitals. The Beijing Hospital of TCM was selected with permission from the authorities concerned. At the Beijing Hospital of TCM, they were posted as attending doctors to the different disciplinary departments and teamed with other senior TCM practitioners. However, the two categories of allopathic doctors and TCM practitioners held different and even contradictory views on patient management. The senior TCM practitioners commented that the Beijing Hospital of TCM had changed and was no longer a purely TCM hospital. Moreover, between 1961 and 1962, newly graduated TCM students who were under the supervision of the allopathic doctors, were influenced by modern medicine thinking, and this resulted in a lot of confusion in their practice. Unfortunately, the development of integrated medicine came to a halt during the 10 years of the Cultural Revolution (1966-1976).

Another policy-maker, the senior officer from SATCM, reveals that the former President of the PRC, Deng Xiao-ping (邓小平主席, 1978-1992) insisted that the authorities concerned look into the development of TCM and ensure high quality TCM services following the Cultural Revolution (C-M6). Her colleague adds that

subsequently, integrated medicine kept being continually promoted by the former President Jiang Zhe-ming (江泽民主席, 1993-2003 (C-M5)). In 1996, during the health ministerial meeting, former President Jiang again emphasised that equal respect and platform be provided for both TCM and modern medicine in healthcare (中西医并重) and TCM modernisation (中医现代化). This ideology of healthcare development is documented and implemented as one of the 17 principles of the CCP that TCM and modern medicine be given equal respect and platform in the healthcare system, and support the development of TCM and other medicine of indigenous ethnic groups (中西医并重, 扶持中医药及各民族医的发展). This tells us that both the former presidents of the PRC, Deng and Jiang, upheld the value of TCM and supported the Maoist ideology of integrating TCM and modern medicine.

In responding to the development of TCM, the former leader of SATCM, Beijing, says that a complete TCM healthcare service provision system was established by 2010 (C-M1). There is a service provision network inter-linking TCM hospitals, modern medicine hospitals, primary healthcare centres, TCM clinics and TCM medicine shops. The reconstruction of old TCM hospitals and setting up of a third grade-class A TCM hospitals and integrated medicine hospitals are included in the long term plan of TCM development.³¹⁴ In accordance with the 2008 statistical report, there were 2,688 Chinese medicine hospitals, 236 integrated medicine hospitals and 191 minority hospitals.³¹⁵ More than 90% of general hospitals and approximately 75% of the provincial hospitals had set up TCM departments.

³¹⁴ The categorisation of hospitals in China is based on the bed numbers, hospital's facilities, disciplines, and academic performance. The third grade-class A hospital is the top-end range hospital which could be national teaching hospital.

³¹⁵ *China Health Statistics Yearbook 2009*, <http://www.moh.gov.cn/publicfiles/business/htmlfiles/zwgkzt/ptjnj/200908/42635.htm> (accessed March 28, 2010).

Nevertheless, Wei and Qiao argue that the authorities concerned fail to place the development of the TCM on the same platform as modern medicine.³¹⁶ For example, 99% of the directors' posts of the healthcare service centres in community areas are allocated to allopathic doctors. The ratio of investment for the development of TCM and modern medicine is 1:65. Moreover, the 2007 report documented that more than 95% of patients from modern medicine hospital are reimbursed for the expenditure on hospitalisation, whereas permission for reimbursement is granted to less than 70% from TCM hospitals. Both of them suggest that if the authorities concerned support the development of TCM especially on disease prevention, expenditure on national health budget can be reduced.³¹⁷ For example, a senior officer from the GDPH informs that during the epidemic of SARS in 2003, TCM integrative medicine was utilised to treat and control SARS and the positive outcomes resulted in TCM gaining the trust and respect of many countries such as Hong Kong (C-M4).³¹⁸ He put it thus, "TCM is preventive medicine, but not allopathic medicine."

TCM integrative medicine on disease prevention is based on the combination of fundamental principles of TCM – syndrome differentiation and human-nature relationship, and models of modern medicine – biology, psychology, and sociology.³¹⁹ Subsequently, a policy maker informs that a research on disease prevention was conducted in 2007 which identified high risk groups for the provision of early TCM interventions such as herbal decoction, acupuncture, and psychological support (C-M1). The efficacy of TCM on disease prevention was measured and analysed. Another officer from GDPH states that with standardisation of TCM analytic techniques, people realise that the main component of many modern medications originated from TCM (C-M2). After

³¹⁶ Wei, D. and B.F. Qiao, "My Opinion on the Community Health Care Scenario and Policy," *Guangming Journal of Chinese Medicine* 23(6) (2008): 863-864, 863.

³¹⁷ Disease prevention includes treatment given before the occurrence of disease, appearance of disease, infectious stage, and recurrence. See Wang, S.C., "The Analysis of the Origin, Context, and Methods of Preventive Chinese Medicine," *World Chinese Medicine* 3(1) (2008): 43-45, 44.

³¹⁸ Jin, S.Y., "Ling Nan Medicine Revelation: Part 13," *Modern Hospital* 8(1) (2008): 66.

³¹⁹ Zhen, Y.B., "Epidemic Influenza Prevention is Individualised," *Clinical Journal of Traditional Chinese Medicine* 20(6) (2008): 560-562.

understanding that infectious diseases has a close relationship with the living environment and individual body constitution, the Vice-Premier of China, Wu Yi, advocated ‘three invasive strategies’ (‘三进’战略), whereby knowledge of TCM in disease prevention is introduced into village, community and family (进乡村, 进社区, 进家庭) to minimise disease infection.³²⁰ This is acknowledged by the professor from BUCM (C-A11). He further explains that individual health profiles can be established based on their body constitution, health status, age factor, and seasonal variation. Then, the patient is offered appropriate advice on dietary and life-style modification and prescription of herbal remedies in accordance with their health profiles. It is plain that TCM treatment and prevention is individualised.

The senior officer from SATCM, Beijing, takes the view that integrated medicine means formal recognition of TCM and other medicine of indigenous ethnic groups, thus allowing the coexistence and simultaneous development of all these medicine systems (C-M5). Moreover, under the integrated healthcare system, there is the existence of both TCM and modern medicine hospitals, public funding through medical insurance, and incorporating TCM into modern medicine. Another respondent from the policy makers’ group interprets integrated medicine as the incorporation of TCM fundamental theory and practice together with modern scientific technology (C-M4). In other words, as explained by an academic, integrated medicine is the combination of diagnostic methods of modern medicine with the treatment methods of TCM or modern medicine (C-A11). Three TCM practitioners comment that the option of treatment is based on syndrome differentiation.³²¹ For example, a perforated gastric ulcer needs surgical intervention, and general consensus involving the patient (C-P17, 24 & 31). Integrated medicine is aimed to address all kinds of diseases, both acute and

³²⁰ SATCM, “The Opinion of the Chinese Government in Responding to Development of Chinese Medicine in Beijing,” *Beijing Journal of Traditional Chinese Medicine* 28(1) (2009): 3-5, 1.

³²¹ The word ‘syndrome’ is “a generalisation of the progress of a disease at a certain period, including its nature, location, manifestations, prognosis and concerned therapeutic methods.” See Li, Z.G., and S.L. Pan, “Comparative Study on WHO Western Pacific Region and World Federation of Chinese Medicine Societies International Standard Terminologies on Traditional Medicine: An Analysis of the Mechanism of Disease (Part 1).” *Journal of Chinese Integrative Medicine* 7(5) (2009): 482-487, 483.

chronic. As an acupuncturist from the GAMH claims, medicine should not be categorised into modern medicine or TM, as all the systems of medicine should be accepted as long as they benefit patients (C-P24).

Based on the understanding of medicine as research on the human body, a policy maker states that no matter who the researcher and what the research methodology is, the nature of human beings is the same (C-M8). Hence, he is of the view that integration occurs if the conclusions from both the TCM and modern medicine methodologies can meet at a particular point. This is the point of integration. A similar description is applied by a professor who describes integration as the meeting point of cave digging where TCM professional groups dig the cave from one side and modern medicine groups dig from the other side (C-A14). He clarifies that a period of time is required to achieve total integration. A similar interpretation of integrated medicine is given by the orthopaedic surgeon from GDPH who says that integrated medicine is a cultural combination, the combination of the Asian Chinese culture and western culture, with public recognition (C-P2). This is also emphasised by a general TCM practitioner from BTRT who says that it is essential to acquire knowledge of the Asian Chinese culture and western culture during the process of learning integrated medicine (C-P15). For example, TCM is a routine household practice in Guangdong whereby almost everyone has herbal soup for dinner.

In the absence of a proper definition for integrated medicine, the senior officer from the World Federation of Chinese Medicine Societies (WFCMS) bases his view on the observation that at this juncture, integrated medicine in China is complementary medicine with TCM and modern medicine complementing each other (C-M7). The former leader of SATCM who is a senior TCM practitioner, also shares this view, "At this moment, the healthcare system in China is not integrated functionally. It is only clinical integration whereby two medical systems are used simultaneously in managing patients clinically. As all of us notice that the TCM hospital is separated from the modern medicine hospital. Moreover, in a hospital

with the coexistence of TCM and modern medicine, the practitioners for both the systems of medicine have their own clinics for consultation” (C-M1). Both the above respondents elaborate that proper integration means integrating from the basic theoretical levels of both systems of medicine. Moreover, TCM principles should be maintained and followed during integration and the standards of modern medicine should not be used to judge TCM. As described by a TCM practitioner, modern medicine targets a particular cell or organ from various aspects, whereas TCM targets different cells and organs gradually since it contains different components of herbs (C-P13). In other words, TCM differentiates syndrome and stabilises the organ’s functions, whereas modern medicine differentiates diseases and treats the diseases’ symptoms and signs.

Understanding that TCM and modern medicine just complement each other in China, a professor from BUCM defines integrated medicine as a process composed of a series of steps (C-A3). The first step is the openness and mutual understanding between the professional groups of two systems of medicine. Next, both the professional groups should have a consensus on patient management, investigation and treatment, based on patients’ best interests. Finally, there should be the involvement of multidisciplinary teams whereby experts from different disciplines such as scientists are invited. He is of the opinion that there are two methods of integration, one whereby a doctor possesses dual basic qualifications on TCM and modern medicine; and the other method is for both professional groups to work together under the same roof. He stresses that China has yet to reach the stage of full integration whereby a professional has qualifications and full knowledge of both systems of medicine.

Until today, the definition of integrated medicine among traditional medical professionals is still uncertain. There is a mixed variety of thoughts related to integrated medicine. The remark from a TCM practitioner is that “with regard to the definition of integrated medicine, SATCM should define it and MOH should announce it” (C-P15). He and his colleague state that integrated medicine is the

compulsory direction to guide the medical paradigm shift and ultimately it will become the final pathway for the development of all systems of medicine (C-P16). Two senior professors from BUCM state that a medical system which integrates at the levels of both theory and practice would be an ideal system of medicine (C-A12 & 13). One of them remarks:

In future, if there is a complete integration, the leading system most likely will be TCM because its origin and nature is based on philosophy. Even the theory of physics also originates from philosophical theory. All the systems of medicine and science are led by philosophy at the end (C-A13).

In responding to integration, a TCM practitioner from GAMH states that integrated medicine provides better results than either modern medicine or TCM alone; for example, the combination of acupuncture with anaesthesia for surgical procedures (C-P5). It is also used in the medical treatment of diabetic nephropathy³²² and nephritis.³²³ Based on this, an acupuncturist from the CBIATC indicates that integrated medicine is being considered as multidisciplinary medicine (C-P16). Another example shows that with the knowledge of integrated medicine, TCM oncologists handle cancer patients confidently by understanding radiotherapy or chemotherapy and its side effects. They use TCM to minimise the side effects of radiotherapy or chemotherapy, such as hair loss and low count of white blood cells, so as assist treatment cycles to be completed as scheduled. According to a TCM oncologist, TCM enhances healing and restores the vital energy (qi 气) of the patient (C-P4).³²⁴ He stresses that TCM practitioners should apply TCM theory and methods on managing patients.

Undoubtedly, modern technology helps TCM in diseases diagnosis and analysis, and enhances the progress of TCM. This is vouched by three TCM practitioners (C-P6, 9 & 25). The scientific diagnostic technology includes chemical laboratory

³²² Zhang, L.F., et al., "Discussion on the Diabetic Nephropathy Treatment by Integrated Medicine." *World Chinese Medicine* 3(1) (2008): 48-50.

³²³ Lin, Y., and C.H. Yu, "Integrated Medicine Help in the Development of Chinese Medicine," *Guangming Journal of Chinese Medicine* 23(5) (2008): 613-614.

³²⁴ Wang, Y., and X.C. Li, "The Usage of Chinese Medicine in Post-Radiotherapy or Post-Chemotherapy Cancer Patients," *World Chinese Medicine* 4(2) (2008): 97-98.

testing and physic methodologies (for example, ultrasound). Printed paper parameter from the diagnostic tools is used as a reference, which is more convincing to patients. Next, an oncologist from GAMH admits that modern technology helps to understand the sequence of disease development and assess the response to treatment, for example, radiological assessment of the tumour size prior to and after cancer treatment (C-P4). Then, treatment can be optimised. Dual knowledge therefore, allows accurate diagnosis, minimises the risk of delayed or missed diagnosis, enhances confidence in patient management, and reduces manpower usage and healthcare budget expenditure. However, his colleague points out that at this point of time, TCM has yet to seek a standard quality control over its prescription since it is individualised (C-P5). Finally, modern technology also plays a role in TCM quality measurement and proven efficacy. He recommends that this should begin at the level of cultivating and harvesting of the herbal plants.

Chen Chu (陈竺), Health Minister of PRC, states TCM modernisation is a necessity, and integrated medicine has offered it a platform.³²⁵ Evidence-based TCM facilitates modernisation of TCM through improving the standards of TCM clinical research, formulating an evaluating system for the TCM clinical research standards, enhancing the treatment efficacy, continuing professional education, educating the new generation and encouraging their active participation in TCM research, and international collaboration.³²⁶ As remarked by a TCM practitioner from GAMH, “Modernisation of TCM does not mean dividing TCM into molecules or atoms and then doing a scientific analysis” (C-P5). Half the number of TCM practitioners is united in the view that scientific technology will not alter the origin and nature of TCM as long as TCM practitioners emphasise TCM fundamental theory while practising.

³²⁵ Chen, Y.Z., “Understanding the Current Status of Chinese Medicine Modernisation,” *Clinical Journal of Traditional Chinese Medicine* 20(6) (2008): 624-627, 625.

³²⁶ Liu, J.P., “Evidence-Based Chinese Medicine: Opportunities and Challenges,” in *Clinical Research Methodology for Evidence-Based Chinese Medicine*, ed., J.P. Liu, 1st ed. (China People’s Health Press, 2006), 1-10, 8.

Meanwhile, the other 50% of the TCM practitioners disagree with the incorporation of scientific technology into TCM. They feel that molecular and atomic theory should not be used to evaluate TCM. They argue that TCM itself is a science - an experienced science; evaluation by other scientific technology is not needed. Even though modern medicine is the mainstream medicine in China, it does not mean that it is better. A TCM practitioner from the psychological department of GAMH remarks "The human being is not a machine, so the disease diagnosis should not be based only on scientific technology" (C-P25). Holding the same view, a TCM dermatologist and general practitioner express the view that in early days TCM practitioners used their basic knowledge from the Classics to diagnose diseases and treat patients, for example, Zu's pulse diagnosis (C-P27 & 31).³²⁷ Pulse is used as to evaluate the efficacy of TCM therapy too.³²⁸ Hence, they wonder why TCM practitioners need modern diagnostic technology at this point. He adds that scientific technology helps in confirming the diagnosis, but it should not be thought that without it, diagnosis and treatment of diseases are impossible. They affirm the view that modern technology alters the origin and nature of TCM since it will never be able to explain and replace the fundamental theories of TCM. Dr. Scheid, a TCM physician in Britain, has voiced that the authenticity of the TM is often being hindered by the total application of modern medicine during integration.³²⁹

Following that, a TCM oncologist highlights that paper documentation cannot replace the years of clinical experience of a clinician (C-P20). He explains that the investigative reports and statistical conclusions of research fail to illustrate the origin of diseases and pathology. He further elaborates that based on the so called statistical conclusions, the herbal compounds have to be processed and packaged (into capsules or tablets). Moreover, certain components of the herbal formulation

³²⁷ Hu, N., "The Experience of Zu Jin Zhong in Differentiation of Signs and Symptoms through the Pulse Diagnosis," *World Chinese Medicine* 3(1) (2008): 25-26.

³²⁸ Yan, H.X., et al., "Changes of Tongue and Pulse Parameters in 50 Lung Cancer Patients Treated with Integrated Chinese and Western Medicine," *Journal of Chinese Integrative Medicine* 7(3) (2009): 218-222.

³²⁹ Scheid, V., "Authenticity, Best Practice, and the Evidence Mosaic: The Challenge of Integrating Traditional East Asian Medicines into Western Health Care," *Complementary Therapies in Medicine* 16(2) (2008): 107-108, 107.

have to be removed, which result in the alteration of its nature and efficacy. His colleague agrees and states that the scientists should focus on the toxic component of the herbal formulations, instead of every single component (C-P21). He also emphasises that the interpretation of 'drug toxicity' in TCM is different from modern medicine. In TCM, the toxicity depends on the nature of the herbs or herbal compounds (category, part, area in which it is cultivated and quantity) and patients' constitutions.³³⁰ Similarly, TCM treatment depends on the patient's constitution and the exposure to the environment. Hence, he is of the opinion that patients should not be evaluated by a calculator and treated by a fixed dosage of herbal formulation and that patients should be evaluated by human beings. As Dr. Scheid remarks, "Human beings are shaped by a multitude of other factors besides biology."³³¹

This same group of CM practitioners again emphasise that for now, complete integration is impossible because both TCM and modern medicine have yet to integrate at their fundamental theoretical levels. As one TCM practitioner phrases it, "integration is impossible. If they are integrated immaturely, TCM is most likely to be overshadowed by modern medicine" (C-P10). Similarly, two other practitioners remark, "modern medicine should not overshadow TCM since each system of medicine has its own value" (C-P8 & 21). They are of the opinion that all systems of medicine should be respected and allowed to move in their own direction. In short, TCM practitioners should practise TCM and prescribe herbal medicine only. The much anticipated news from one of their colleagues is that in the near future, TCM practitioners who graduate from TCM universities can practise only TCM in TCM hospitals unless they have acquired the qualifications in modern medicine (C-P28). Similarly, all allopathic doctors are allowed to practise modern medicine and are restricted to prescribe over the counter TCM medicine.

³³⁰ Chinese practitioners consider that all herbs/drugs are toxic; they can save as well as threaten patients' lives. See Liang, Q., and M. Xie, "Analysis of Toxicity of Chinese Herbal Medicine and Its Connotation," *Journal of Chinese Integrative Medicine* 7(2) (2009): 101-104.

³³¹ Scheid, V., "Traditional Chinese Medicine – What Are We Investigating? The Case of Menopause," *Complementary Therapies in Medicine* 15(1) (2007): 54-68, 65.

Furthermore, a general TCM practitioner from Guangdong considers integrated medicine as repetitive medicine that unnecessarily increases a patients' financial burden (C-P3). He explains that certain diseases can be treated by either modern medicine or TCM; if integrated medicine is used in such a scenario, it ends up in resources being wasted. Particularly, for an infection, antibiotics are used by allopathic doctors to remove inflammation, whereas herbal decoctions are used by TCM practitioners to remove toxins. In fact, as shown in the explanation from a BTRT TCM practitioner, both the antibiotics and the herbal decoctions have the same function (C-P11). In response to this, another TCM practitioner from BTRT highlights that integrated medicine should take the factor of affordability into serious consideration, and should minimise the wastage of resources (C-P31).

Table 4.1: Different Interpretations of Integrated Medicine by Respondents from China

Features	Focus Groups	Policy-makers	Academics	Traditional Practitioners
Full partnership with modern medicine		Parallel / Complement	Complement	Complement
Cross-referrals		+	Nil	+
Modern medicine for diagnostic and acute conditions		+	+	+
Traditional medicine for preventive and chronic cases		+	+	+
Common consensus on treatment		+	+	+
Option of treatment		Optional	TCM	TCM/Optional
Knowledge sharing and exchange		+	+	+
Unity (a person who possesses knowledge of 2 medical systems simultaneously)		Nil	+	+
Basic theory combination		+	+	+
Cultural combination /Social science		+	Nil	+
Multidisciplinary Medicine		Nil	+	+
Repetitive Medicine		Nil	Nil	+
Evidence-based medicine		+	Nil	-
Plurality and Easy accessibility		Nil	Nil	+
Public or patients' interests		Nil	Nil	+

(In the table above, the symbol + indicates agree, - indicates disagree, while Nil indicates no comment.)

It can be observed that China has attempted to move into full integration. At this juncture, the TCM practitioners have acquired biomedical knowledge and practised with their allopathic colleagues in the same wards. However, they still practise in their own consultation rooms and have different clinical sessions. Theoretical integration has yet to be achieved in order to reach the level of complete integration.

4.4 Cognition and Support

There is the question of whether all the stakeholders have the desire or intention to support the development of TCM. Political will plays a significant role in upholding and developing TCM. Political will includes the support from the government, academics, traditional practitioners, allopathic doctors, and the public.

4.4.1 Governmental Support

A policy maker from WFCMS remarks that the Chinese authorities concerned have upheld the value of TCM, for example, the establishment of SATCM and its branches in all the provinces, TCM universities, research institutes or centres, and TCM hospitals (C-M7). The former leader of SATCM, Beijing, states that a fixed amount of the funds in the national budget is allocated to MOH annually (C-M1). Following that, these funds are distributed to all the municipalities, provinces and autonomous regions. The proportion of funds allocated to each of the units varies annually, based on their respective proposals and requirements.

Every respondent from the policy makers' group knows that funds are allocated to develop TCM education. Two senior officers from GDPH state that the universities in the four municipalities of China - Beijing, Shanghai, Tianjin, and Chongqing - obtain their financial support from the Central government, whereas the

universities in the provinces obtain their funds from the respective people's government (C-M2 & 4). The professor from the Centre for Evidence-based Chinese Medicine, BUCM, discloses that the Chinese Government began providing research funding for TCM since the 8th Five-year-plan (1986-1990) (C-A3). Subsequently, there has been an increase in funding for TCM research, especially a sharp increase in the 11th Five-year-plan (2000-2005). The Ministry of Science and Technology offers over RMB1 billion for TCM research institutes to conduct research. In responding to further development of TCM research especially on disease prevention, a senior officer from SATCM, Beijing, states that the authorities concerned ensure that there are well-equipped research facilities with modern technology in order to modernise TCM (C-M5). He suggests that research centres should have close collaboration with TCM universities and hospitals. Many TCM universities and hospitals have been set up for the development of TCM. The newly constructed TCM universities include those in Nanjing, Shanghai, Guangzhou, and Liao Nin. His colleague adds that apart from the establishment of new universities, the authorities concerned should reconstruct old TCM universities, such as those in Beijing, and install up-to-date information (C-M6).

All 14 respondents from the group of academics realise that the budget allocation for education depends on the number of universities and hospitals available in that particular province etc. According to one TCM practitioner, there are more than 100 modern medicine universities compared to approximately 30 TCM universities (C-P5). In Beijing, in comparison to more than 1,000 modern medicine hospitals, there are only 10 TCM hospitals. The majority of these hospitals are integrated hospitals. 60% (8 out of 14) of the respondents acknowledge that there is an inadequate budget for TCM education in China. Five are united in the view that the authorities concerned treasure the value of modern medicine more than TCM. An academic expresses his view thus:

Based on my personal view, the concerned authorities do not uphold the value of TCM. For example, the modern medicine universities are provided with more funds for

education and research, whereas the TCM universities still operate with old facilities. TCM research and development is delayed as well as deterred. However, the payment for the recruitment of each student on admission will be the same as the respective universities from the education department (C-A3).

The professor from CBIATC shares this view and notes that in TCM universities the education facilities are insufficient and the grounds are smaller (C-A10). For example, she says that the compound of the Beijing Medical University is almost four times bigger than that of the BUCM.

On the other hand, three of the respondents from the academics' group, who believe that the government has supported and upheld the values of TCM, state that even the modern medicine universities lacked funding (C-A4, 12 & 13). Even though they agree that the universities in the respective systems should receive an equal allocation for the education budget, they cannot provide a definite answer to the equality of budget distribution for education since a survey has not been conducted to look into this issue. One of them says there is a possibility that modern medicine universities are allocated more funds since the demand for modern medicine is higher (C-A4). In China, modern medicine is the mainstream medicine and most of the national medical education budget goes towards its development. The remaining six academics (40%) claim that budget allocation is up to the authorities concerned. It appears that more than a third of the academics are unhappy with the unequal budget allocation between modern medicine and TCM universities based on the unjustified reason that modern medicine is the mainstream medicine and in higher demand. Moreover, a few academics are quite reluctant to disclose the information and comment on the government in China.

4.4.2 Traditional Support

In the subsection pertaining to universities of TM, short term reorientation courses for TCM apprentices had been suggested. Apprentices should consider attending the short term reorientation courses to upgrade themselves, to accept evaluation, and to professionalise their profession. This is stressed by a practitioner (C-P15).

A lecturer from BUCM declares that short term reorientation courses allow knowledge sharing (C-A7). This is further emphasised by an academic who feels that it is good for apprentices to have an open mind and exchange knowledge with their colleagues, be they apprentices or institutional practitioners (C-A14). They may be weak in their basic theory, but good in clinical experience. Hence, through the courses they have an opportunity to communicate and discuss complicated cases among themselves. Such team work among institutional and non-institutional practitioners will promote further development of TCM and integrated medicine.

In fact, a professor from the CBIATC states that TCM practitioners are very keen to collaborate with the allopathic doctors and to assist them in understanding TCM (C-A10). Some academics have even taken the initiative to organise special TCM courses for allopathic doctors, for example, the short term acupuncture and moxibustion training courses in CBIATC. The academics have thought about the possibility of challenges in educating qualified allopathic doctors on TCM and taken measures to overcome them. Wang, in particular, suggests several steps to facilitate the teaching of the fundamental theory and practice of acupuncture.³³² Initially, it is to demonstrate the beneficial effects of acupuncture to attract the students' attention and interest after which they are allowed to observe the whole sequence of acupuncture and moxibustion with its theory explained. Following that, they are encouraged to perform acupuncture on their own limbs so as to overcome their fear. Once they are familiar with the normal acupuncture points and manipulative techniques, they will be allowed to perform acupuncture on patients.

4.4.3 Allopathic Support

The policy maker from WFCMS stresses that allopathic doctors should have an open mind and accept TCM so as to create harmony among colleagues and

³³² Wang, R., "Understanding the Practice of Clinical Teaching of Acupuncture and Moxibustion for International Training Courses," *Guangming Journal of Chinese Medicine* 23(2) (2008): 240-241.

respect for patients' choices (C-M7). This can be achieved through knowledge exchange via training courses, workshops, and seminars on TCM. With a better understanding of TCM, the allopathic fraternity groups will recognise and accept TCM.

In order to obtain recognition and support from the allopathic fraternity groups, the senior officer from SATCM, Guangdong, stresses that allopathic doctors with interest in TCM or have worked in TCM hospitals, should be encouraged to attend a special TCM course (C-M3). Most TCM courses are organised and conducted after office hours. In China, many hospitals organise these special TCM courses. For example, GAMH has 40 years of experience. It is a full time two-year course, covering all theory, clinical practice, and research. It begins with TCM clinical training followed by basic TCM theory teaching. It is mainly clinical in approach. In certain TCM hospitals, the course is run in a cyclical manner over 3-4 years. Upon completion of the course, attendance certificates are issued and not degree certificates since they are already qualified and practising allopathic doctors. Following that, they are allowed to prescribe traditional medicine.

A lecturer from BUCM who has undergone modern medicine education states that modern medicine students are encouraged to take up TCM subjects along with their normal modern medicine curriculum (C-A8). Modern medicine universities do conduct TCM courses.³³³ The TCM course aims to introduce history and the origins of TCM to modern medicine students. It assists the students to familiarise themselves with the characteristics, fundamental principles, therapeutics and development of TCM. Its objective is not to produce an expert of TCM in modern medicine universities. However, there are challenges in lecturing TCM subjects in modern medicine universities. Particularly, due to time constraints, TCM teaching has to be sped up. A lot of knowledge is being taught, but students fail to absorb and understand. Several suggestions have been provided to enhance students'

³³³ Shi, J.J., and F.Y. Xu, "Teaching Reform of Chinese Medicine," *Guangming Journal of Chinese Medicine* 24(2) (2009): 362-364.

enthusiasm, avoid repetition and allow incorporation of theoretical knowledge into practice. To begin with, the first lecture could include a concise and clear introduction on the historical development of TCM and its fundamental philosophical theory. Next, lectures are delivered based on the five main organs: liver, heart, spleen, lung, and kidney, and correlated with physiology, pathology, and other modern medicine principles. Finally, application of advanced teaching technology such as projecting a colourful diagram on pulse pulsation is recommended, to make TCM knowledge distinct and easy to recall.

Understanding the importance of collaboration, the senior officer from SATCM together with the officer from WFCMS agree to the idea of involving the TCM practitioners, allopathic fraternity groups and scientists in a training programme for TCM research (C-M6 & 7). Allopathic doctors with acquired TCM knowledge can help TCM to move into a scientific level and grow with modernisation. The allopathic doctors and scientists can assist TCM practitioners in applying the principle of RCT and double-blinded studies to complete their study of looking into the efficacy of TCM. Their collective views are essential as collaboration allows further improvement and development of TCM. Unfortunately, the training programme has yet to materialise.

4.4.4 Public Support

With the respect and trust from the public, TCM apprentices continue to provide services to their communities in rural areas. A TCM practitioner says they treat patients in their houses or medicine shops (C-P1). The oncologist from GAMH explains that the apprentices may have their specialties or a specific formulation for a particular kind of disease, but have no clue in handling other illnesses (C-P4). His view is supported by another respondent who says that it is most likely that apprentices have not acquired the fundamental theories of TCM (C-P12). With the demands and trust from their community, the experienced but unregistered TCM practitioners are not bothered about paper qualifications and registration. Another

TCM practitioner suggests educating the public through media such as radio, television, and newspapers, about the application of basic TCM knowledge, certainty on the qualifications of TCM practitioners and availability of regulations for TCM practitioners and their practices (C-P13). She stresses that the public should be alerted on the possibility of morbidity such as infection following intradermal needle therapy at particular acupuncture points to treat facial palsy,³³⁴ and even mortality secondary to mismanagement by unqualified TCM practitioners. Moreover, the public is ensured that in order to improve the rural healthcare services, the government should send more experienced practitioners for the rural healthcare service provision and implement 'cooperative medical scheme' in all rural areas by the end of 2008, (?) whereby each farmer pays RMB80 out of his own pocket and the government subsidises RMB160 per person for their healthcare.³³⁵ According to the developmental status of the rural areas, the 'cooperative medical scheme' varies from one rural area to another rural. It has limitations in the respective area, for example, up to RMB5-6 million per person in a year. Beyond this limit, the individual has to bear the remainder amount of payment.

Furthermore, the authorities concerned may consider studying and understanding the culture and customs of a particular community especially in the autonomous regions in order to gain public support in improving the healthcare system. Particularly, under the threat of global climatic changes, environment pollution, economic instability, and uneven distribution of resources, incidence of epidemic and pandemic infectious diseases has increased. Much of the Chinese culture can help with the health maintenance.³³⁶ Many practices by the Chinese public such as

³³⁴ Li, W.D., "Observational Study on the Intradermal Needle Therapy with Chinese Herbal Medicine in the Treatment of Facial Palsy," *Guangming Journal of Chinese Medicine* 23(5) (2008): 605-606, 605.

³³⁵ In China, there are healthcare insurance system in urban areas and cooperative medical scheme in rural areas. In Beijing, if the payment for the medical care of any public servant is more than RMB2,000 per year, 78-80% of the payment will be taken care by the government. As for the retired public servants, 80-90% of their expenses on medical care will be taken care of if it is more than RMB1,300.

³³⁶ Wang, Y., "The Approach in Removing and Avoiding Infectious Diseases Based on Chinese Customs," *Guangming Journal of Chinese Medicine* 24(1) (2009): 117-118.

bathing with herbal water, hanging fragrant herbs in the house, wearing of ornaments as a talisman, taking food and drinks from herbal sources, and smoking the house with fragrant smoke, are found to raise the immune system. For example, Boatorchids (*Cymbidium*, 兰草) is used to remove all the misfortune and to enhance health. It has the property of killing insects, promoting health and delaying aging. Boatorchids are boiled and then the water used for a shower can cure upper respiratory tract infectious diseases, asthma, stroke, arthritis, and headache etc. Similarly, Argyworm Wood Leaf (*Folium Artemisiae Argyi*, 艾叶) boiled water used for a shower can help to minimise the risk of catching a cold. Garden Balsam (*Impatiens Balsamina*, 凤仙花) in the house can kill germs. In line with these beliefs, TCM preventive and health maintenance therapies may be standardised and popularised in rural as well as urban areas.

With regard to structural medicine education, an academic points out that the public is familiar with modern medicine but not TCM, partly due to aggressive advertisement and promotion of modern medicine syllabus (C-A6). He recommends that TCM syllabus should also be advertised for the public to become familiar with it. Chinese culture and basic TCM knowledge could be introduced into the primary and secondary school curriculum. For example, the origin and historical development of TCM can be conveyed to students through story telling such as 'Shen Nong Tested Bai Cao on His Own Self' (神农尝百草) and 'How the Apricot Forest Came About' (杏林的由来) which celebrates the reputed TCM practitioners.³³⁷ Next, the usage of certain plants (ginseng to replenish vital energy) and animals (leeches for sucking on blood clots) as the sources of medicine, can be explained during biology classes. Finally, students should learn about the importance of a healthy life-style and basic principles of TCM. This form of public education and participation will help the progress of TCM development.

³³⁷ He, C.Y., "How to Initiate the Chinese Medicine Education from Primary and Secondary Schools," *Guangming Journal of Chinese Medicine* 23(7) (2008): 1040.

4.5 Recommendations to Malaysia

Based on the comparative nature of this study across three countries, here are some recommendations derived from China's experience in educating the students about TCM and integrated medicine, and incorporating TCM into their mainstream healthcare system and vice-versa. These may be relevant to Malaysia with the aim of improving the TM healthcare policy and subsequently professionalising it.

4.5.1 Experiences in the Establishment of Traditional Medicine Education

A senior officer from SATCM, Beijing, declares that the members of SATCM comprise experts in various fields such as TCM practitioners (70-80%), allopathic doctors, lawyers, administrators, and linguists (C-M6). She says, "I am uncertain about the administrative structure of the TM department in Malaysia. However, it is advisable to recruit the experts from various aspects especially those from TM." She strongly advises that the Malaysian Government should consider establishing a TM council following the drafting of the Bill. This council ought to examine and recognise the education system, define the examination system, verify the qualifications, and ensure registration. Another academic indicates that administrative work in a TCM University should be handled by someone with TCM knowledge (C-A10). Their suggestions show that it is necessary to have a proper centre and system of administration to regulate TM.

A former leader of SATCM, Beijing, remarks, "while preparing the rules and regulations on regulating the TCM practitioners, we need to consider their level of education and clinical experience" (C-M1). He based his view on the observation that it is not advisable for Malaysia to follow the entire TCM education structure in China such as establishing universities for TCM directly. Malaysia is advised to

start TCM education on a small scale; it can start TCM teaching with minimum facilities such as some classrooms and a few lecturers, and share the facility with the existing medical institutes, for example, the laboratories. Later, the establishment of a TCM department in an existing medical university may be considered. This will be financially more viable. He states that in China, many people unhappy with the idea of combining universities and sharing facilities because many experienced academics are eyeing principal posts in a particular institute or university. If the combining occurs, chances for promotion will be reduced. The same respondent also suggests that Malaysia should establish TCM hospitals gradually, or at least set up a TM unit or department in government hospitals to facilitate clinical training. At the initial stage, the authorities concerned could consider uniting all the traditional Chinese medical halls to form TCM franchise clinics and units. Later, with the setting up of laboratories and the development of human capital, a TCM hospital can be built. The availability of training clinics or hospitals allows TCM students to undergo clinical training locally and saves them from having to go to China. The professor from GUCM who holds a similar view, stresses the necessity for the attachment of TCM universities to TCM hospitals or hospitals with TCM services (C-A1).

Undoubtedly, a majority of the Chinese academics support Malaysia establishing a TCM university. They are united in the view that Malaysia is a multicultural country with Malays, Indians, and Chinese that comprises 30% of the total population. It is therefore highly suitable to establish a TCM university. They are very pleased to assist Malaysia in whatever way possible in the setting up of a TCM university with high standards so as to ensure the progress and development of TCM. Their offer includes designing of the TCM syllabus (based on needs such as the most common diseases in Malaysia), management and evaluation of the quality of teaching, and definition of the examination standards. An academic states that TCM experts from China can be sent during the initial stages to teach and train the TCM students (C-A4). He even indicates that if Malaysian allopathic doctors show interest in TCM, Chinese academics will be willing to help conduct special TCM

courses, and provide more validated and comprehensive information on TCM. In Malaysia, based on the different demands, the course can be modified or shortened to a year by increasing the daily teaching hours. Alternatively, allopathic doctors can be sent to China for the course. Later, they share their knowledge with other allopathic colleagues. The former Director of the Examinations Department of China's National Traditional Chinese Medicine recommends the training of selected local TCM practitioners to become TCM lecturers (C-A13). They may be able to get the message of TCM across to students faster and more efficiently since they have a better understanding of Malaysian culture and customs.

The senior officer from GDPH mentions that TCM practitioners are categorised into institutionally qualified practitioners and apprentices (C-M4). He strongly recommends that the Malaysian Government consider giving apprentices the opportunity to undergo certain periods of training, and then evaluate them through a national examination. If they pass the examination, they will be allowed to continue their practice. This maximises the use of human resources while preventing loss of tradition. Another senior officer from SATCM, Beijing, also advises Malaysia to train TCM practitioners to become the experts in identifying and categorising herbs since Malaysia has rich rain forests with a variety of natural herbal plants (C-M6). Meanwhile, the professor from BUCM strongly recommends organising TCM refresher or reorientation courses to update the knowledge of qualified TCM practitioners (C-A3). In Malaysia, the majority of TCM practitioners are general practitioners. The professor is of the opinion that they should be encouraged to continue their professional development.

One Chinese academic is aware that the national language in Malaysia is Malay (C-A4). Hence, he is quite concerned about the medium of instruction for TCM subjects in the future TCM university in Malaysia. Language barrier can be one of the major obstacles to TCM development abroad. He insists that the Classics which comprises the fundamental theory of TCM has to be taught in Mandarin in order to convey the correct message to the students. The former Director of the

Accreditation Division in the Education Department highlights that this invaluable portion of TCM knowledge is very useful in future clinical practice (C-A9). Hence, he states that whoever wishes to study TCM should have a good command of the Chinese language and an interest in Chinese culture.

In response to the challenge on the inappropriateness of credit hours in integrated medicine education, the senior officer from WFCMS stresses the fact that in China, TCM students have to undergo integrated medicine education so as to have better prospects (C-M8). Is it necessary for Malaysian TCM students to do the same? He also wonders if all the qualified TCM practitioners should be allowed to practise modern medicine in Malaysia. He feels that the Malaysian government should draw up a proper national policy to provide a clear picture and direction for TCM academics and practitioners. A majority of the academics share this view and stress that the system of TCM education should be in line with the national healthcare policy in Malaysia. They are of the opinion that the Chinese integrated TCM education can be either adopted and customised in accordance with the recommendation of the Malaysian healthcare policy (the standard of qualification and direction of TCM) or used as a reference. As advised by one respondent, Malaysia may have to consider focussing on pure TCM education system at the initial stage and then move on to the integrated education system later (C-A7).

On the other hand, an academic from GUCM states that even if Malaysia considers implementing the integrated medicine education system, it does not mean that TCM practitioners who have acquired modern medicine knowledge should practise modern medicine (C-A2). For example, the traditional practitioners of medicine in Korea are also not allowed to practice modern medicine even after having undergone courses in integrated medicine. This is acknowledged by a lecturer from BUCM (C-A8). In order to avoid the inappropriateness in the credit hours ratio, a professor from BUCM suggests that 20% allocation of the credit hours for modern medicine subjects is reasonable (C-A3). The alternative is that TCM practitioners who show interest in modern medicine can attend part-time

courses or short courses in modern medicine and vice-versa. Under such circumstances they can have more time for a particular system. Moreover, he suggests that TCM students in Malaysia should focus on the clinical training of TCM from the beginning of their academic year, not on research as yet. However, he recommends recording all data regarding a patient's illness and its management, in the electronic database to facilitate future research.

The senior officer from WFCMS is of the view that international collaboration is essential for knowledge exchange and further development of TCM (C-M8). In particular, what is important is designing a TCM course for allopathic doctors, organising regular seminars and conferences to discuss specific diseases, and the development of TCM research. Another two policy makers stress that international collaboration also enhances the integrated healthcare system (C-M2 & 6). One of them, the senior officer from SATCM, Beijing, says, “based on the public demand, China is willing to send some experts to Malaysia to train the local TCM practitioners” (C-M6). She highly recommends team work: The Malaysian TCM practitioners and private associations should work with the government to establish universities and set up a standard curriculum for TM so as to ensure uniform qualifications.

4.5.2 Experiences in Integrated Medicine

The senior officer from SATCM, Beijing, highlights that China practises integrated medicine systems. TCM and modern medicine co-exist in hospitals whereby trained TCM practitioners are allowed to practise modern medicine in TCM hospitals and vice-versa (C-M5). He feels that in order to move towards integrated medicine, the first step is an official recognition of TM and then allowing both TM and modern medicine to co-exist in the healthcare system of Malaysia. This view is supported by three other policy-makers who feel that TCM and modern medicine are sciences; they should have an equal platform and TCM should be accepted by the allopathic fraternity (C-M2, 3 & 8). A respondent from GDPH who

hold the same view stresses that since Malaysia is a multi-ethnic and multi-cultural country, the value of TM and medicine of other indigenous ethnic groups should be maintained (C-M4).

Another senior officer from SATCM, Beijing, stresses, Malaysia should seriously consider drafting GCP guidelines for TCM integrated medicine (C-M6). She points out that the biggest challenge in developing this guideline is the absence of adequate evidence to prove the efficacy of TCM. In addressing this challenge, she suggests the formation of a 'guideline drafting committee' comprising multidisciplinary experts who should focus on the country's main health concerns and categorise all gathered evidence for TCM. Finally, she emphasises the need to regularly update the guideline.

A senior officer from WFCMS states that social science has a close relationship with culture in a developing country like China (C-M7). TCM is an inherited treasure that is part of Chinese culture. In other words, TCM is influenced by Chinese culture. The cultural background knowledge enables a better understanding of the fundamental theory of TCM. That is to say that integrated medicine falls into the category of social science. Hence, in order to ensure a high quality of TCM or the provision of integrated medicine service, the officer recommends an understanding of Chinese culture prior to practising TCM in another developing country like Malaysia.

One policy maker puts it clearly, "TCM emphasises holistic approach and yin-yang balance, whereas modern medicine emphasises microscopic approach and the science of dissection, cell, atom, and gene. TCM should not be changed into modern medicine" (C-M4). He therefore suggests that at the initial stage in Malaysia, the two medical systems should be allowed to run parallel and play their own roles to complement each other.

4.6 Summary of the Findings in China

The link established among the Scott's institutional elements in legal regulations, formal organisations, and cognition together with support, is related to the process of developing and implementing healthcare policies and rules to regulate the practice of TCM in China. The outcome of this linkage demonstrates the process of incorporating the traditional medical system into the modern medical system. However, challenges and tensions are also created along with the process of policy and regulation development.

For the purpose of regulation, attention is paid to the organisational structure within which professionalisation of TCM occurs. The SATCM was established to implement and enforce the standards set by the highest authority, the State Council of the PRC. The SATCM is led by two groups of professionals, the TCM and the allopathic group. The commitment of these two professional groups contributes to the process of regulating TCM. Their involvement in the professionalisation of TCM is intended to allow all ideas and values to be discussed and understood in a collaborative environment.

Under the Law, regulation of TCM practice includes recognition of the qualification and registration of practitioners, and research development. In China, only qualified practitioners, who have achieved skill competencies and passed the two national examinations are allowed to practise. The national examinations contribute to institutionalisation of professionalism and regulation of TCM practitioners. However, the rules and regulations are viewed as rigid and inconsiderate. For example, in the hospitals policy, the position of the practitioners and the number of patients attended to are used to determine practitioners' actual salary and promotion decisions. The hospitals' reward criteria and the perceived unfairness of the salary system affect institutionalisation of professional development and integrated medicine practice. Survey results indicate that a

majority of the TCM practitioners disagree that performance of practitioners is appropriately weighted by the hospital. Moreover, the lack of discipline in the higher levels and weak enforcement result in the persistence of unregistered TCM practitioners. As Scott's analytic argument states that incorporation of new practice into the existing practice under particular rule system without necessarily believing the rules are fair.

The study shows that there are two major professional associations for TCM, namely CMDA and CACM. They are directly under the MOH. Both the associations help to maintain professional ethics and ensure continued professional development. TCM education in China mainly adopts the integrated TCM medicine system of education so that the graduates can be easily accommodated by the society upon their graduation. This is grounded in a collective sense of what is appropriate for China whereby the normative element of Scott is applied in the analysis.

However, there are challenges in the integrated medicine education system, for example, the need to put in more effort to teach the fundamental theories of TCM, insufficient clinical training, and inappropriateness in the proportion of credit hours, are some of the challenges faced by both lecturers and students. Particularly, 30-50% of total credit hours for the TCM courses have to be allocated for modern medical subjects under the integrated medicine education system. Modern medicine becomes the more enduring part of the TCM curriculum under the system of integration. All challenges have a long-term influence on TCM, which in turn has a significant impact on institutionalisation of TCM as a profession. The process of professionalisation of TCM has sacrificed the mission of developing human capital in TCM and protecting the rights of qualified TCM practitioners. For example, many graduates, especially those under the supervision of allopathic doctors, have the tendency of practising modern medicine. In this survey, 50% of the TCM practitioners point out that professionalisation of TCM has moved away from its original mission.

On the other hand, China has yet to achieve complete medical integration. There are TCM and modern medicine hospitals with a mixture of TCM and allopathic professional groups in either hospital. However, although under the same roof, they conduct their own clinical sessions. While in principle, integrated medicine is believed to prevent disease, increase treatment efficacy and produce better outcomes. There is a concern that premature integration may result in TCM being overshadowed by modern medicine.

The actual success of regulation depends on the degree of political will that is present. The authorities concerned have set up the SATCM and its branches, TCM universities and hospitals, and research institutes. Old TCM universities and hospitals are reconstructed so that they can collaborate with research institutes. Professionalisation and integrated medicine development in China depend on public funds. Lecturers' salaries, materials and facilities costs are paid from university operating funds, which in turn come from the government. With greater budget allocations, integrated medicine can be institutionalised. Unfortunately, the discrepancy in developing the two medical systems has resulted in modern medicine development taking high precedence over Chinese medicine – officially, due to high demand, but indeed, in part, due to the continuing dominance of modern medicine from Kuomintang times through into post-Revolutionary China.

Stakeholders such as TCM practitioners and allopathic doctors who are involved in the professionalisation of TCM, hope that their system will be institutionalised. Collaboration by all teams can help to overcome the challenges, for example, collaboration between institutional and apprenticeship education for TCM students can address shortages in clinical training. Moreover, willingness of TCM practitioners to upgrade themselves and to assist allopathic doctors in understanding TCM indicates the existence of a strong cooperative culture while both see value in upgrading themselves and assisting one another.

More importantly, the public believe in the value of TCM and the skills of TCM practitioners. Many communities take it for granted that local practitioners, with or without qualifications, are skilful and can cure their ailments and illness. It shows that common beliefs still exist among the communities in China. Public education on the proper use of TCM and the availability of regulations for the practice of TCM are suggested.

Under Scott's coercive, normative, and mimetic pressures, changes in rules, values, norms, beliefs, and behaviours have occurred within TCM education and healthcare in China. China has taken more than 40 years to professionalise TCM and integrate it into the mainstream healthcare system prior to the implementation of the Law.

Malaysia could draw out implications for professionalising TCM in a gradual manner via education. It would seem a necessary step to respect and recognise TCM. One option for Malaysian T&CM Division could be to recruit multiple relevant professionals in the field such as TCM practitioners and to draft guidelines for GCP. Pertaining to TCM education, experts from China could be invited at the initial stage and following that, qualified local TCM practitioners are to be trained.

The major challenge of TCM education in Malaysia is the medium of instruction since TCM academics realise that Malay is the national language of Malaysia. No matter what, it would seem appropriate for Malaysia to set up and conduct TCM education in accordance with the recommendations of the national healthcare policy.

Integrated medicine education does not guarantee success in the integrated healthcare system. There is no harm in thinking of the alternative, such as a parallel system, which allows both TCM and modern medicine to complement each other without the necessity to integrate into a single administrative or clinical system, while at the same time offering choice to the public.



Dr J.R.Raju, senior Ayurvedic physician who is an expert in traditional pulse reading in Maharishi Ayurveda Hospital, India, conducts a question-answer session with his patients regarding Ayurveda and their illness. (*Photo courtesy of C.S.Goh*)

Chapter 5

ANALYSIS OF THE FINDINGS IN INDIA

5.1 Introduction

This Chapter presents research findings related to healthcare policies in India. The information is sourced from primary research and analysis of governmental and non-governmental published articles and documents. As in Chapter 4, the findings in India are analysed based on Scott's organisational ideas. Subsequently, the advice to Malaysia, a country which has started its pilot project on integrated healthcare hospitals, is examined together with a summary of the analysis of the findings on India.

5.2 Legal Regulations

In this section, governance is identified as one of the tools used to monitor traditional practice. Governance is mainly concerned about the formulation of policy and regulation and their implementation, and establishment of the governing body.

Approximately 65% of the primary healthcare in India depends on Ayurveda and medicinal plants.³³⁸ India has 15,000 medicinal plants, of which there are 7,000 plants used in Ayurveda, 700 in Unani medicine, 600 in Siddha medicine, and 30 in modern medicine.³³⁹ These figures were provided by the senior officer from the Central Research Institute for Siddha (CRIS), Chennai (I-M12). He said that ISM is popular in India and 70% of the Indian population rely on locally available herbs for their health problems. He explained that practitioners of ISM are experienced, easily accessible, and affordable. In responding to the increased demands of ISM,

³³⁸ WHO Secretariat report on Traditional Medicine: Fifty-sixty World Health Assembly: Provision agenda item 14.10.

³³⁹ WHO, *WHO Country Cooperation Strategy 2006-2011 India: Supplement on Traditional Medicine* (Country Office for India, 2007), 1.

and the wish to develop further the rich Indian medicinal heritage and enhance the utilisation of ISM in the healthcare system, *The National Policy on Indian Systems of Medicine and Homeopathy* was formulated in 2002 with the assistance of WHO. Two policy makers from CCRAS stated that the main objectives of the national policy are to promote good health through the utilisation of ISM in preventive and curative aspects of intervention; to improve the quality of ISM education and research; to ensure affordability and accessibility of high quality ISM services; to utilise authentic and good quality herbs and herbal compounds; to integrate ISM into the mainstream healthcare system and to develop ISM (I-M5 & 6).

In India, the IMCC (Amendment) Act, was promulgated and implemented on November 7, 2003 to regulate the practice of ISM in India.³⁴⁰ The senior officer from the AYUSH Department, Ministry of Health and Family Welfare (MOH & FW), mentioned that under the IMCC Act, the Central Council of Indian Medicine (CCIM) is the highest statutory or regulatory body for the health sector in ISM (I-M8). It was established in 1971 and changed its name to the Department of Indian Systems of Medicine and Homeopathy in March, 1995, and in November, 2003, became the AYUSH Department. Two senior officers from CCIM indicated that CCIM committee members comprise mainly one elected practitioner for each of the Ayurveda, Siddha, and Unani systems of Indian medicine respectively, based on the State Registers; one elected faculty member for each of the Ayurveda, Siddha, and Unani systems of Indian medicine from each university; and not more than 30% of the total experts in ISM from the above two categories are nominated by the central government (I-M3 & 13). The officer from AYUSH Department, MOH & FW pointed out that the Act is implemented and enforced by AYUSH Department in New Delhi, the state governments, medical universities and colleges (I-M8). There is a state board in each of the states such as the Karnataka State Board for Indian Medicine. He further explained that all the state boards

³⁴⁰ The principal Act is the IMCC Act, 1970 enacted by Parliament. In the amended version of the IMCC Act, matters on the definition of medical colleges, permission for establishment of new medical colleges or courses by the Central Government, and non-recognition of medical qualifications in certain cases have been inserted.

maintain their State Registers of Indian Medicine through registration and names are removed or restored in these State Registers according to information received by CCIM regarding the lists of registered practitioners of ISM. This means that every practitioner of ISM has a valid registered number from the Central Register. The Central Register of Indian Medicine is reviewed every five years.³⁴¹

Nonetheless, a senior officer from the Central Council for Research in yoga and naturopathy (CCRYN) voiced his disappointment that yoga and naturopathy have only been regulated for the last thirty years in five states, namely Andhra Pradesh, Karnataka, Tamil Nadu, Madhya Pradesh, and Chhattisgarh (I-M4). In responding to this, an officer from CCIM expressed his view that at this point in time qualified personnel in yoga and naturopathy are known as ‘supporting therapists’, and not practitioners (I-M6). They are therefore not registered practitioners under the IMCC Act. According to two yoga practitioners, they have also fought for similar regulation and central registration (I-P6 & 9). The undoubtedly welcome news from the senior officer in the AYUSH Department, MOH & FW, is that the Indian Government is considering regulating yoga and including it under the umbrella body of AYUSH so as to standardise the training, and prevent any misuse of yoga, thereby protecting the Indian tradition (I-M7). This means the Indian Government will register all yoga practitioners in the National Register. Dr. Anbumani Ramadoss, the Union Minister for Health and Family Welfare, stressed that “Yoga is a traditional system of Indian medicine and has the vast potential of prevention and therapeutic dimensions.”³⁴²

It can be observed that ISM is regulated by a traditional group of professionals. The majority of ISM practitioners (28 out of 30) had no objection to being regulated by the traditional sector. Their consensus was based on the fact that the traditional group of professionals have knowledge of ISM. They have recognised the differences in the fundamental principles between ISM and modern medicine.

³⁴¹ CCIM (Central Register of Indian Medicine) Regulations, 1979, S 4(2).

³⁴² Bhan, V., “Yoga Is Gradually Making a New Niche in the Health Care Sector,” *Sanjivani Medical Times*, March-April 2008, 3.

However, approximately 50% of them were dissatisfied with the manner in which the current regulatory system for ISM is being implemented. Firstly, a senior Ayurvedic practitioner from the Maharishi Ayurveda Hospital (MAH) stated that there is a shortage of experts at different levels such as practitioners, medicinal plant experts, and legal personnel to constitute policy and regulation planning committees (I-P1). Particularly, members of CCIM who lack vision have not been replaced for the last 10 years since there has been a delay or postponement in CCIM elections.³⁴³ Firstly, this is because the existing members have challenged the new list of the State Board of practitioners of ISM. A senior Ayurvedic practitioner who is the President of the Advisory Committee of ISM said, "Ayurveda can provide much more and progress further with more competent personnel" (I-P8).

Secondly, two senior Ayurvedic practitioners from the Sri Sri College of Ayurvedic Science & Research Hospital (SSCASRH) appeared very unhappy with the non uniformity and uncertainty of regulations (I-P26 & 28). For example, qualified Ayurvedic practitioners are allowed to practise modern medicine in Uttar Pradesh, but not in Karnataka and Kerala States even though they have undergone training in modern medicine. They pleaded that as long as the particular Ayurvedic practitioner has been trained in integrated medicine, he or she should be allowed to practise integrated medicine in any of the states. This was clarified by two senior officers from AYUSH Department, MOH & FW that under the state government orders, practitioners of ISM who have been trained in modern medicine in Gujarat and Uttar Pradesh, are allowed to practise modern medicine especially in handling emergency cases (I-M7 & 8). Following that, an academic indicated that integrated medicine practice is prohibited in other states due to strong opposition from the allopathic fraternity of professionals. He cited monetary profits as the reason (I-A1).

³⁴³ Election of members of the Central Council is conducted once in every 5 years. If new members were not elected, the existing members would continue hold the post in the CCIM. See IMCC Act (Amendment), 2003, S 7(1).

Thirdly, the same Ayurvedic practitioner from SSCASRH again pointed out that the non-institutional and unqualified healers are given registration numbers from the registration board of ISM (I-P28). For example, in Kerala, Karnataka and other states in the southern part of India, healers are allowed to register. He felt that this to be an insult to the qualified practitioners of ISM. His colleague, who holds a similar view, suggested that well-known and established traditional healers could be registered in a separate registry board and regulated by a separate set of rules and regulations (I-P29). This would preserve tradition and at the same time alleviate the concerns of qualified practitioners.

Fourthly, there is discrimination in the development of the three ISMs. A senior Unani practitioner pointed out that the authorities concerned show favouritism to Ayurveda (I-P11). He stated that fewer funds are allocated for the development of Unani medicine. The point that “Unanipathy was ill-treated”³⁴⁴ was highlighted by Dr. (Hakim) Mohammed Shamoan, former Deputy-Advisor (Unani medicine) of the Indian MOH. Another Unani practitioner explained that at this point in time Unani practice is conducted by Unani practitioners in Ayurvedic hospitals (I-P18). This means Unani practitioners do not have their own hospitals. Moreover, she stressed that there is only one Unani Medical College in Karnataka State. Their colleague suggested that the authorities concerned should recognise and look into the potential of all the systems in ISM with an objective attitude (I-P17). With regard to Siddha medicine, a Siddha practitioner stated that Siddha medicine has just been developed recently in south India since it is popular among the rural population (I-P20). He stressed that the Indian Government should expand Siddha medicine by building Siddha hospitals in all the other states in India.

All 14 respondents from the policy makers group realised that the main objective of the IMCC Act, 2003 is to define the qualifications of the practitioners of ISM and ensure their registration to professionalise ISM. 2009 statistics showed that there

³⁴⁴ Shamoan, M., “The Most Ill-Treated Unanipathy,” *Ajmal-2007*, 2007, 7-9.

are 725,190 registered practitioners for ISM.³⁴⁵ The majority of them are Ayurvedic practitioners followed by Unani and Siddha practitioners. All 30 respondents from the practitioner group also agreed to being regulated since they believed that regulation would protect their rights and the public by preventing quackery. Two practitioners indicated that with regulations only qualified practitioners would be allowed to register and practise and thus public safety would be ensured (I-P12 & 27). Another Ayurvedic practitioner explained that in order to be qualified practitioners must possess basic theoretical knowledge, clinical experience, and pass the University Board Examination (I-P8).

Approximately 50% (14 out of 30) of the registered ISM practitioners claimed that there is a decrease in illegal practices in India following implementation of the IMCC Act. A yoga practitioner said that illegal practice has gradually diminished with the increase in the number of qualified practitioners (I-P6). In comparison, 12 out of 30 of the practitioners disagreed with their colleagues. The persistence of illegal practices is mainly attributed to the inaccessibility of allopathic professionals especially in the remote areas. On the other hand, unqualified practitioners or healers are easily available to the villagers whenever they are unwell. Secondly, according to an Ayurvedic surgeon, the villagers are not aware of the existing regulations and qualifications (I-P26). He felt that even if they were aware, they would still visit the healers based on trust and cultural beliefs. For example, his colleague said that in Kerala, healers who have the family speciality in treating snake bites with the mixture of extracted juice from the leaves and roots of certain herbal plants could not be prohibited from practising since the community trusted and respected them (I-P25) for their long-standing service to the community. Thirdly, a lack of discipline and organisation in the regulatory body also contributed to the failure in abolishing illegal practices. In a very frustrated tone, a senior practitioner explained that as a regulatory body, the CCIM has failed to fulfill its duty due to corruption (I-P12). For example, the officers approved the opening of

³⁴⁵ Rao, S., "An Overview of AYUSH in India and Global Perspectives" (paper presented at the International Conference on Traditional Indian Systems of Medicine, Kuala Lumpur, Malaysia, March 2, 2010).

badly equipped new colleges without subjecting them to proper inspection in 2001.³⁴⁶ The worst scenario is that some officers have attempted to destroy the reputation of certain good colleges or universities such as the Gujarat Ayurved University (GAU), the Banaras Hindu University (BHU), and the National Institute of Ayurveda (NIA) in Jaipur. A Siddha practitioner pointed out that there should be a mandatory periodic inspection of the existing colleges (I-P7). Fourthly, there is weakness in enforcement. For example, a Unani practitioner mentioned that the registration of a qualified practitioner is for a lifetime in India (I-P30). The practitioner is not required to renew his practising certificate or license annually. In the absence of vigilance, many unqualified practitioners escape the regulations. She stated that CCIM might consider re-evaluating the practitioners once every five years since the Central Register of Indian Medicine is revised and published on a five-yearly basis. A Siddha practitioner suggested that if possible the authorities concerned should consider formulating and implementing policies and regulations to also register ISM clinics and hospitals (I-P7). Finally, the persistence of illegal practice is due to the absence of close collaboration between the Central Council with all the other state boards in implementing the Act. A Siddha practitioner said that many state governments act independently without communicating with the central government in attempting to control quackery (I-P21). The former Director-General of the Indian Council of Medical Research, Bangalore (ICMR) stated that if every state could collaborate and implement the Act properly and enforce registration and licensing, illegal practices and quackery would be minimised, and the public would receive high quality ISM healthcare services (I-M11).

A senior officer from CCIM, who is a Unani expert, acknowledged that under the IMCC Act, ISM comprises Ayurveda, Siddha, and Unani (I-M13).³⁴⁷ His colleague stressed that Homeopathy has been accepted as a system of medicine, but is not

³⁴⁶ “‘MCI Corrupt’, Says Health Minister but Misses on CCIM,” *Sanjivani Medical Times*, August 2005, 1.

³⁴⁷ IMCC Act, 1970 S 2(e).

considered a traditional system of medicine even in India (I-M3).³⁴⁸ Both officers mentioned that the Act has regulated the qualified practitioners of ISM, but not 'registered medical practitioners' (RMP).³⁴⁹ In other words, as a senior officer from the CCRAS elaborated, unregistered practitioners who have acquired their ISM knowledge through apprenticeship education are not protected under the Act (I-M6). Even though some of these unregistered practitioners are doing good and serving their communities, there is an absence of a legal framework of practice for this category of practitioners. However, the senior officer from AYUSH Department, MOH & FW, affirmed that the present IMCC Act neither allows nor prohibits them from practising in India (I-M 8). He commented that the Act and regulations should offer flexibility, for example, RMPs should be allowed to practise in the particular state where they have been registered before 1970. A senior Ayurvedic practitioner who works for FRLHT in Bangalore is of the view that regulation is drafted to govern the institutional qualified practitioners of ISM and is not directed towards healers who don't use manufactured medicine (I-P23). Holding the same view, another officer and the academic from the Manipal College of Pharmaceutical Sciences, Bangalore (MCOPS), stated that RMPs and apprentices who have been in practice for years should not be prohibited from practising because of any legislation in India (I-M12 & I-A8). Both respondents suggested that they should be trained and upgraded to serve their community. If possible, as another respondent from the policy makers group stated, the young apprentices should be encouraged to go for institutional training and registration (I-M1). As for the senior masters, the senior officer from CCRYN suggested that they should be recognised by being given a valid certificate in view of their commitment and maintenance of tradition (I-M4). He also stressed that the continued existence of ISM is due to the hard work of these senior masters, and not because of the

³⁴⁸ In India, under the Homeopathy Central Council Act, 1973 (No. 59), the Central Council of Homeopathy was established in August 1974 to regulate the education and practice of homeopathy.

³⁴⁹ 'Registered Medical Practitioners' are those who learned their traditional medical knowledge through apprenticeship from their masters or ancestors and had also received one year's training in modern medicine. They were allowed to prescribe modern medicine to patients and even give injections if required. They provided their services mainly within their communities in the remote areas.

present institutional graduates of ISM. Therefore, they should be credited with a certain amount of respect.

In order to maintain the professionalisation of ISM, two senior officers from CCIM stated that the IMCC Act has to maintain minimum standards of the institution which impact the training of ISM practitioners and regulate the awarding of degrees as well as post-graduate degrees in ISM (I-M2 & 13). They explained that CCIM frames the curriculum for ISM so as to streamline the standard of education in ISM and recognises the qualifications of the ISM graduates. For further clarification, their colleague said that according to the constitution of India, the respective state government is responsible for undergraduate education and the central government looks after the postgraduate education (I-M3).³⁵⁰ However, a congruent agreement among both the central and state governments is required to establish a new medical university.

Nevertheless, a Unani surgeon indicated that the regulations have failed to outline the future prospects of the graduates of ISM, especially without a clear demarcation between Unani surgery and modern medicine surgery (I-P24). Another Unani specialist expressed her disappointment by saying that at this point in time, the regulatory authorities are only concerned about registration and pay little attention to the problems and difficulties faced by the practitioners (I-P17). This might be due to the lack of communication between the people in the regulatory body and the practitioners. In particular, there is a failure to convey information pertaining to ISM practitioners on time. She suggested that the authorities concerned should consider distributing the information to the practitioners through monthly newsletters or magazines. The fees for the above services could be collected from the practitioners.

From a study of responses from all three focus groups, it seems clear that the Act has emphasised improving the quality of TM practices and its professional

³⁵⁰ IMCC (Amendment) Act, 2003 S 13.

development through institutional education and qualification. There is a trend to request the concerned authorities to reorganise regulatory bodies and strengthen enforcement, draft a uniform national regulation for integrated medicine, and consider accommodating and upgrading traditional practitioners trained through apprenticeship.

5.3 Formal Organisations

Under the formal organisations, the following concerns are addressed: establishment and development of the TM professional bodies; determination and definition of the education structure; and the setting up of integrated healthcare hospitals.

5.3.1 Formation of the Professional Bodies for Traditional Medicine

In order to promote and develop ISM, the practitioners of ISM have formed professional bodies. There are many professional ISM bodies distributed all over India, for example, the All India Ayurvedic Congress (AIAC); the Hakim Ajmal Khan Memorial Society (HAKMS); the Tamil Nadu Siddha Graduates Association (TSGA); the Siddha Medical Literature Centre Alumni Association (SMLCAA); and the All India Integrated Medical Association (AIIMA). However, according to a Unani practitioner, AYUSH Department has not delegated its functions to any of the professional associations of ISM with regard to ISM (I-P30). ISM is completely under the control of the Indian Government.

AIAC was established in 1907.³⁵¹ Its members consist mainly of Ayurvedic practitioners from all states of India. Its main mission is to develop, promote, and protect the science of Ayurveda; secure Ayurveda as one of the national medical systems; improve its educational standards and training facilities; and encourage research. Based on these objectives, Ayurvedic practitioners work hard and

³⁵¹ See <http://allindiaayurvediccongress.org/ATAGlance.html> (accessed April 19, 2009).

succeed in fighting for the establishment of a separate department for ISM which is led by ISM experts in regulating, educating and researching ISM. For example, the CCRAS in 1969; CCIM in 1971; and the NIA, Jaipur 1976. Moreover, it also fights for equal rights for Ayurvedic practitioners as enjoyed by their allopathic counterparts, organises scientific conferences, and publishes magazines to update its members on ISM news and knowledge. The pertinent point is that it consistently presents memoranda to the authorities concerned with regard to allowing ISM to participate in all the national health schemes and opening of ISM wings in modern medicine hospitals.

HAKMS was founded in 1989.³⁵² According to a senior Unani practitioner, who holds an important post in the HAKMS, it is a non-profit organisation (I-P11). Its members are composed of practitioners in Ayurveda and Unani. The main mission of the organisation is to develop and promote ISM, especially Unani and Ayurveda, and work towards unity in Ayurveda and Unani. It helps in addressing the problems of students or practitioners of ISM in relevant matters and communicates with the Indian Government in times of need. In order to maintain professionalisation of ISM, the same practitioner mentioned that CME for practitioners of ISM is conducted. Occasionally, key personnel from the central or state governments are invited to inaugurate the society's programs. Certain projects are supported or funded by AYUSH Department. Moreover, he also stressed that the society started the 'All India Hakim Ajmal Khan Award' in 1995 for practitioners who have contributed in various fields of ISM and also in the promotion of ISM nationally and internationally. It has introduced a global award since 2006. Practitioners of ISM in several countries have obtained this award. Dato' Dr Dorai Raja, for example, the president of MATIM from Malaysia, was presented with this award in 2007 for his enthusiasm, support, and promotion of ISM³⁵³

³⁵² The HAKMS was founded on the grounds of the Tibbia College of Ayurveda and Unani in New Delhi, see http://www.unaniherbal.org/hakim_ajmal_khan.htm (accessed April 18, 2009).

³⁵³ This award was presented by Dr Aslam Javed, the General Secretary of the HAKMS in the First Forum on Ayurveda, Unani, and Siddha Systems of Medicine at Hotel Grand Seasons, Kuala

One of the respondents from the practitioner group, the former president of the TSGA, mentioned that the main objective of the TSGA is to promote Siddha medicine (I-P21). Presently, Siddha medicine is popular in the state of Tamil Nadu only. The Siddha practitioners wish to extend it to all the states in India. They would like to move forward by upgrading themselves and publishing material on Siddha medicine. They collaborate with other NGOs to organise workshops to educate the public. For example, conducting a workshop focussing on the nutrition for those living with HIV and other body wasting disorders.³⁵⁴ The same practitioner noted that SMLCAA is another Siddha association which comprises mainly Siddha diploma holders.³⁵⁵ Its main objective is to uphold the value of Siddha medicine and promote professionalisation among Siddha diploma holders. SMLCAA helps them to register with the Government of Tamil Nadu and to fight for their rights. In fact, according to K.K.S.S.R. Ramachandran, the Health Minister of Tamil Nadu, the authorities concerned are keen to regularise and streamline Siddha practice.³⁵⁶ Hence, he encourages all Siddha practitioners to pass a certificate course prescribed by the government, obtain a recognised certificate and then register themselves.

AIIMA was established in 1988.³⁵⁷ It is formed by groups of integrated medical practitioners, qualified Ayurvedic practitioners who have undergone training in modern medicine. AIIMA wishes to bring registered integrated medical practitioners to a single platform and protect their rights. In particular, it represents all the integrated practitioners in their negotiations with the authorities with regard to various issues concerned and in the development of integrated medicine. AIIMA gives awards to eminent integrated medical practitioners as encouragement. Its members participate in various activities such as medical camps on Hepatitis-B vaccination, including community medical camps for charity.

Lumpur, Malaysia on 18th March, 2007. See HAKMS, "Hakim Ajmal Khan Global Awardees-2007," *Ajmal-2007*, 2007, 6.

³⁵⁴ "Native Rice 'Good' for People with Wasting Disorders," *The Hindu*, December 6, 2004.

³⁵⁵ "Profile of Thanu Foundation," see <http://www.siddhamedicine.com/> (accessed April 18, 2009).

³⁵⁶ "Siddha Doctors Must Pass Course," *The Hindu*, September 24, 2007.

³⁵⁷ See <http://www.aiimaayurveda.com/AboutUs.aspx> (accessed April 20, 2009).

It clearly appears that all ISM professional bodies are fighting for the rights of their members by communicating to the Indian Government the challenges faced by their members. Academically speaking, each professional body organises training programmes for CME.

5.3.2 Universities of Traditional Medicine

In India, there are nine national institutes, seven universities, and 437 undergraduate and 100 post-graduate colleges under the AYUSH Department.³⁵⁸ Every college has to be affiliated to one of the seven universities. They can be government or privately run medical colleges. For example, the NIA in Jaipur, the National Institute of Unani Medicine (NIUM) in Bangalore, and the National Institute of Siddha Medicine (NIS) in Chennai are national educational institutions run by AYUSH. Four academics from Chennai acknowledged that the main objectives of the national institutes are to offer postgraduate education and conduct research in ISM to develop and promote ISM (I-A10, 11, 12, & 13). All national institutes and colleges follow the curriculum prescribed by the CCIM. In order to improve the quality of ISM education, the senior officer from the Directorate of AYUSH, Bangalore, mentioned that CCIM has started to standardise and strengthen the education system of ISM, both at undergraduate and post-graduate levels (I-M10). The bachelor's degree course for ISM is for a duration of 5½ years (4½ years for three professional courses of 1½ years each and 1 year for internship). The postgraduate course is a three-year master's degree course (M.D.) the first year of which is for a preliminary course and the subsequent two years are for speciality courses.³⁵⁹ She stated that development of ISM education was highlighted further in the 10th 5-Year-Plan (2002-2007) and funding had been allocated.

³⁵⁸ FRLHT, *Initiatives for Promotion of AYUSH Intervention in the Public Health Systems of the Country: A Report on Stakeholders Workshop on 'AYUSH Interventions in Public Health' Held on 8th and 9th February 2008, at Foundation for Revitalisation of Local Health Traditions (FRLHT), Bangalore* (Community Health Cell & FRLHT, 2008), 48.

³⁵⁹ IMCC (Postgraduate Ayurveda Education) Regulations, 2005, S 7.

An academic from RGUHS stated that ISM education has been established in India for many years. For example, TC was built in 1889 (I-A9). Unfortunately, these days, ISM education has lost its link with its original sources (fundamental principles), which are 'unified fields' and consciousness,³⁶⁰ found in most ISM universities. This was also pointed out by another academic (I-A2). He felt that the students should be taught about the sources of ISM, and allowed a deeper level of understanding of the nature of medicine. In other words, he strongly recommended the maintenance of a totally unified and consciousness-based education, rather than a herbal-based education. A second academic even pointed out that ISM is not taught in the original language of the texts, such as Sanskrit for Ayurveda, Tamil for Siddha, and Urdu for Unani (I-A9). The medium of instruction could be other languages, for example, Unani could be taught in Arabic and English. The regulations allow the subject of the original language to be an optional subject.³⁶¹ He was of the opinion that this might result in poor understanding of the fundamental knowledge of ISM which remains in the original language. Subsequently, the practitioners of ISM might not be able to apply the knowledge confidently during their practice.

Furthermore, three other academics highlighted that there is a dominance of modern medicine in most of the colleges of ISM (I-A8, 9 & 15). Hence, the teaching of ISM is overwhelmed by the pressure from modern medicine which then results in an uncertainty in the direction of ISM. The same academics stressed that lack of clinical exposure among the students of ISM is another shortfall in ISM education. They elaborated that in the early days, in the absence of a structural curriculum, there was a so-called 'Guru System' in India whereby students followed the experienced masters for years to learn their medical knowledge and skills. Unfortunately, this master-apprentice relationship has been

³⁶⁰ The unified field is a super-symmetric field of all the laws of nature comprises unification of the four fundamental forces of nature, namely electro-magnetism, weak interaction, strong interaction, and gravitation. See Pirc, L., "Ancient Vedic Science to Solve the Problems of Modern Times," *Ajmal-2007*, 2007, 26-27.

³⁶¹ IMCC (Minimum Standards of Education in Indian Medicine) Amendment Regulations, 2006, S 3.

lost and the current education system of ISM has become mechanical in nature. They were of the opinion that TM is unique and well designed, and therefore, it should be taught via a different method especially in clinical teaching. A lecturer from the Siddha Medical College, Chennai (SMC) stated that the 'Guru System' should be re-implemented and maintained (I-A14). He stressed that ISM education should be 'disease or clinical based education' whereby the signs and symptoms of the disease in a patient are observed, and theoretical knowledge is applied at the same time. To enhance the clinical skills and experience, an Ayurvedic practitioner stated that upon graduation, the Ayurvedic students can opt for another year of clinical training through the traditional Indian system of education, *Guru Shishya Parampara* (I-P5).³⁶² This education system is recommended and promoted by the 'Rashtriya Ayurveda Vidyapeeth', an autonomous organisation under the AYUSH Department, MOH & FW.³⁶³ The main objective of this system is to transfer Ayurvedic knowledge from distinguished scholars and masters of Ayurveda (with or without formal qualification), to the younger generation. Under it, there are two courses, namely (a) *Acharya Guru Shishya Parampara* – a two-year course for Membership of Rashtriya Ayurveda Vidyapeeth (MRAV) to learn Texts of Ayurveda, and (b) *Chikitsak Guru Shishya Parampara* – a one-year course for a Certificate in Rashtriya Ayurveda Vidyapeeth (CRAV) to learn Ayurvedic clinical skills.

Undoubtedly, there is a shortage of trained qualified lecturers in most of the ISM colleges and universities. A professor from TC remarked that this shortage is mainly due to the complicated recruitment criteria in the government sectors (I-A3). He explained that as the teaching posts are under the 'A' category, it takes a longer period for a vacant post in this category to be filled after one professor or officer retires.³⁶⁴ It can even take up to two years. Hence, the academic from the

³⁶² *Guru* meaning teacher, *shishya* meaning student, and *parampara* meaning tradition. In general this refers to the master-student apprenticeship system.

³⁶³ Rashtriya Ayurveda Vidyapeeth, *Manual under Right to Information Act, 2005* (National Academy of Ayurveda, 2008).

³⁶⁴ In India, the level of employment could be categorised into 4 groups: A – Secretary and gazette post, B – Administrative post, C – Ministerial/Clerical post, and D – others.

RGUHS, who is a consultant in curriculum development, suggested that the authorities concerned might consider strengthening the regulations and controlling the number of colleges or ISM post-graduate courses as well as student admission numbers so as to have a balanced student-lecturer ratio (I-A9). In particular, the NIUM, which is even allowed to admit post-graduate students although without trained professors and guidelines on qualifications (examination and passing criteria). He again suggested that formal lecturer training programmes and refresher courses on teaching methodology and examination systems should be organised and conducted so as to update the quality of ISM teaching. Holding the same view, his colleague who is the former dean of the RGUHS, stated that ISM practitioners interested in the teaching profession should be assessed, recruited selectively, trained and put in charge of different disciplines of ISM and administration based on their eligibility and capability (I-A7). Apart from training lecturers, more than 50% of the respondents from the academic group (8 out of 15) also suggested the installation of infrastructure such as digital teaching tools, herbal gardens, herbariums, hospitals with the requisite bed strength (training centres),³⁶⁵ and research laboratories in the existing ISM colleges. In fact, AYUSH Department has realised the shortage of trained personnel and infrastructure and has emphasised strict regulations and the rejection of sub-standard colleges.³⁶⁶ Moreover, the National Medicinal Plant Board has initiated the project of setting up herbal gardens in colleges, to ensure sustained availability of quality raw materials and for students' research purposes.³⁶⁷

Despite a lack of trained lecturers and infrastructure, a small number of academics would like to extend the field of ISM and establish new courses at the post-graduate level. Three academics pleaded with the authorities concerned to allow a certain level of freedom on curriculum modification and the development of sub-specialist disciplines of ISM, to improve the education system of ISM so as to be

³⁶⁵ Based on the minimum standards of the CCIM, the teaching hospital must have a minimum number of beds in the ratio of 1:3.

³⁶⁶ MOH & FW, *Annual Report 2006-2007: National Rural Health Mission* (MOH & FW, 2007), 324.

³⁶⁷ The National Medicinal Plant Board was established by the Indian Government in November, 2000. The main objective was to cultivate and conserve medicinal plants. See *Ibid.*, 373-375.

on par with modern medicine (I-A3, 4 & 15). They stated that the establishment of sub-specialist branches to extend a particular field of ISM could avoid the unnecessary referrals to allopathic professionals, and allow interdisciplinary collaboration especially related to research since it is oriented towards modern science. If the rules and regulations are too restrictive, it may deter the development of ISM. A Unani practitioner, who holds a high post in the HAKMS, agreed to the idea of amendments or modifications of the curriculum so that ISM could be in line with the advancement of the modern sciences and the greater demands around the globe (I-P11). In responding to this, a retired academic from the RGUHS argued that the authorities concerned should strengthen ISM through its own field of expertise by conducting research and documenting it instead of opening up varieties of new disciplines for postgraduate master's training such as radiology and maxillo-facial surgery in Ayurveda, and obstetrics and gynaecology in Unani (I-A9). These disciplines are not mentioned and documented in the texts of ISM. He stressed that without an expert in these fields of Ayurveda or Unani, all these programmes should not be approved. Improper implementation of programmes might result in the misuse of the medical system. Moreover, he was of the opinion that the regulatory body has to be strengthened with a group of experienced academics in ISM in order to draw up an appropriate curriculum for ISM. Holding the same view, an academic from TC and a senior Ayurvedic practitioner from the MAH suggested that the CCIM should consider identifying and publishing authentic practices of ISM, for example, specific family or community medicine (pulse diagnosis), and including them in the ISM curriculum through curriculum modification instead of establishing sub-specialist disciplines in ISM development (I-A6 & I-P1).

Referring to the suggestion of his colleague on the strengthening of ISM mentioned above, the former dean of the RGUHS said:

In order to improve the quality of education in the ISM up to mark, the entire body - CCIM, as an apex body should be dissolved and reconstituted. Then, the dialogue of improving the quality of education in the right direction with this proper prospective and retrospective could be made in a better way. As a consequence, an active apex

body comprised with high calibre people who had an interest in developing ISM is highly recommended. (I-A7)

The same academic elaborated that senior personnel occupying higher positions have refused to step down. This means that juniors capable of holding such posts and performing the task are deprived of the opportunity. He stressed that the junior practitioners or academics who are elected to be the members of CCIM are highly qualified and capable. The important point is that they are very much interested in developing ISM. He was therefore of the opinion that they should be considered and given the opportunity to bear the responsibility of governing ISM education. He emphasised further that the lack of a framework of strict rules and regulations for improving the quality of education and infrastructure of institutes could delay the progress of professionalisation of ISM. Holding the same view, a senior academic from the private sector stressed that the authorities concerned should be more innovative in their thinking for a more confident approach towards ISM; they should set a universal education standard for ISM; and prohibit religious involvement and monopolies (I-A8). For example, Unani medicine should not be restricted to the Muslim community only. Two officers from CCRAS stressed that educating and training herbalists should be established, maintained and regulated as well (I-M5 & 6).

Another challenge in ISM education is the introduction of integrated medicine. A majority of the respondents from the academic category (11 out of 15) agreed to the introduction of basic biomedical sciences into the undergraduate curriculum of students of ISM. According to an academic, biomedical subjects (anatomy, physiology and pathology) have been introduced into the ISM undergraduate curriculum since 1986 (I-A1).³⁶⁸ It is in the ratio of 3 to 1, which meant 75% of ISM to 25% of biomedicine. He also disclosed that in Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra, Punjab, and Sikkim, 'Condensed Courses' are available in

³⁶⁸ Integrated medical education was introduced following the implementation of the National Health Policy 1983 that aimed to address the weakness of the curative model of healthcare. Dummer, T.J.B., and Ian G. C., "Health in China and India: A Cross-Country Comparison in a Context of Rapid Globalisation," *Social Science and Medicine* 67 (2008): 590-605, 601.

medical universities for integrated medical practitioners. He explained that 'Condensed Courses' are also known as 'Upgrading Courses' that help to upgrade modern medicine knowledge of ISM practitioners. Upon completion of the course a degree in Bachelor of Medicine and Bachelor of Surgery (MBBS) is awarded and graduates are allowed to practice modern medicine.

Two academics observed that it is good to have an integrated medical education so that practitioners of ISM could understand the fundamental principles of modern medicine and its surgical techniques (I-A4 & 7). The knowledge of integrated medicine allows them to handle emergency cases with confidence and to interpret the reports of the different modern diagnostic tools. With knowledge of modern medicine, ISM practitioners could be placed on the same platform as allopathic doctors. One of them remarked:

Medical knowledge should not have a boundary. It is not the geographical, religious, or linguistic boundary which could be defined and drawn out easily. All the practitioners of ISM should not hesitate to learn other medical systems, for example, the approach of emergency cases in modern medicine. It is a life-saving technique. Medicine has become a globalised village; we just cannot divide it into modern or traditional medicine. (I-A4)

Similarly, two of his colleagues stressed again that there should be a linkage between ISM and modern medicine and all medical personnel should be encouraged to broaden their knowledge in other medical systems (I-A5 & 6).

Nonetheless, a professor from MCOPS highlighted that the incorporation of modern medicine into the curriculum of ISM should not be at the cost of substituting TM (I-A8). He was of the view that modern medicine should be supplementary knowledge to students of ISM. Two other academics who hold a similar view stated that every medical system has its strengths and limitations and ISM students should be aware of this and be guided to address the limitations through a good referral system (I-A9 & 15). Two practitioners stated that about 10-20% of the registered practitioners of ISM practise and prescribe modern medicine without proper training and sound knowledge of it (I-P4 & 20). Both the

practitioners were of the opinion that this category of practitioners is deemed as quack practitioners. This suggests that ISM practitioners with a limited knowledge of modern medicine have a tendency to practise modern medicine instead of ISM. The senior academic from the RGUHS expressed his view that there is an absence of a clear demarcation between modern medicine education and ISM education (I-A9). Without a clear boundary, it might result in the misuse of modern medicine and deter the development of ISM.

Conversely, a senior academic suggested starting a new medical college or university to teach integrated medicine instead of it being taught in a conventional ISM college (I-A2). He believed that with proper planning and design a new college would allow training to be conducted in a more balanced way.

Undoubtedly, in the near future, ISM will be incorporated into the undergraduate curriculum of modern medicine. An academic from TC acknowledged that Dr Anbumani Ramadoss, the Indian Health Minister, has recommended the incorporation of the Ayurveda syllabus into the final year for modern medicine students in 2007 (I-A3). In responding to this, the former dean of the RGUHS disclosed further that the Indian Government is very much interested in promoting certain short term diplomas for allopathic doctors (I-A7). For example, the BHU has started post-graduate courses in the different disciplines of Ayurveda for allopathic doctors. Four academics highlighted that the incorporation of ISM into the modern medicine curriculum is a challenge for both the lecturers and students, (I-A10, 11, 12 & 13). Particularly, the modern medicine students have to know how to read and write in the original language of ISM such as Tamil language for Siddha medicine. This is because many of the terminologies and the texts remain in the Tamil language.

CME is essential for the continuous improvement of skills and knowledge for practitioners of ISM, the maintenance of professionalisation, and to promote the development of ISM. Hence, the senior officer from the AYUSH Department, MOH

& FW, encouraged medical institutions to conduct continuing medical training programmes for ISM practitioners (I-M7). Particularly, with the intention of integrating ISM into the mainstream system, an officer from CCIM suggested that it is necessary to organise short term courses to train practitioners of ISM especially to update them with information on the national health programme (I-M2). A lecturer from the SMC stated CME could be conducted through reorientation courses, seminars, workshops, and conferences (I-A14). In responding to this, an academic explained that the reorientation courses for institutional qualified practitioners could be for two purposes: updating the knowledge of newly qualified ISM practitioners, and introducing ISM to practitioners from other countries such as countries in South East Asia (I-A3). For example, the GAU has organised a six-month to one-year introductory courses on Ayurveda and yoga. Similarly, another academic expressed his view that allopathic doctors should consider attending these courses to study the identification of herbal plants and the properties of herbs (I-A5). With this knowledge, a senior Ayurvedic practitioner said that they could appreciate the science of ISM and its benefits better (I-P28). Two senior academics also stressed that CME allows interdisciplinary interaction in herbal systems of medicine at both the national and international levels (I-A5 & 10).

What about the continuing medical training for apprentices of ISM? A majority of the academics (13 out of 15) supported the development of reorientation courses for apprentices – traditional practitioners who are trained through apprenticeship. In comparison, two academics strongly felt that it is unnecessary to upgrade the apprentices who have acquired their ultimate knowledge and clinical specialities from their masters or ancestors, and practised medicine through rote-learning (I-A4 & 15). According to the Ayurvedic practitioner who was President of the Advisory Committee of ISM, the apprentices could start practising with the recognition from their masters or communities (I-P8). The academic from MCOPS, Bangalore, acknowledged that the apprentices could be RMPs, healers, ‘tribal

medicine men',³⁶⁹ and 'dais' in India (I-A8).³⁷⁰ Another academic noted, "Presently, all the registered practitioners of ISM are institutionally qualified. In order to be on par with them, reorientation courses are needed to upgrade the basic knowledge of apprentices (I-A2)". Holding the same view, a policy maker stated that apprentices should upgrade their knowledge of basic theory of ISM and modern medicine (I-M1). The basic concept of Ayurveda, namely the constitutional attributes of the person, the status of doshas in the body, and the constitutional attributes of the medicine (which was used to treat the patient) and nature (according to the seasons: summer, winter, and the monsoons) have been documented in texts such as *Charaka Susruta*. This was acknowledged by an academic from TC (I-A6). Moreover, certain arrangements could be made to train the ISM apprentices on basic modern scientific theories with the help of the allopathic fraternity groups. The former dean of RGUHS emphasised:

Apprentices of extra ordinary intelligence, who have obtained self knowledge or taken knowledge from their grandfather, could be helpful in future development of ISM. They would deliver the conscious knowledge of medicine to you. Hence, reorientation courses for them are essential. Following the completion of training, they could be awarded certificates of merit and completion. This will make their minds turn towards you and gradually request of their ideas and secrets for curing the diseases with their herbal remedies. (I-A7)

In other words, the above academic pointed out that the authorities concerned should appreciate the apprentices and reward them, so that they show interest to develop ISM further with support from the qualified practitioners. Taking the same view, the former Director of ICMR stated that special practising licenses should be issued to the apprentices upon completion of their continuing medical training (I-M11).

³⁶⁹ 'Tribal medicine men' practise 'tribal medicine'. Tribal medicine was a kind of medicine which was practised in the family or community of the apprentices. It fell under the category of folk medicine, an unofficial health-related practice in a family or community. It was mainly based on the belief of using natural materials especially herbal remedies in disease treatment (borderline faith healing). They did not prescribe drugs or deal with complicated cases.

³⁷⁰ 'Dais' are known to be traditional birth attendants who conducted home delivery in the rural areas.

A senior officer from the AYUSH Department, MOH & FW said that the Indian Government should organise reorientation courses for the apprentices (I-M8). Unfortunately, only a limited number of courses have been organised in certain states to date. An academic stated that the Indian Government has initiated training for the traditional attendance at births and distributed 'Home Remedy Kits' or 'Accredited Social Health Activist Kits' containing Ayurveda, Siddha, Unani and Homeopathy medicines (I-A9). For example, an Ayurveda medicine, 'Punarnavadi Mandoor' is used for treatment of anaemia in pregnancy.³⁷¹ Another example was elaborated by an academic from Chennai who said that in the Tamil Nadu State, 2 lakh rupees³⁷² are allocated by the state government in conducting a 14-day reorientation course for the RMPs twice a year (I-A10).³⁷³ Each batch in the reorientation course could accommodate 50 RMPs. Only food, but no accommodation, is provided during the course. However, participants are given a daily allowance of 220 rupees including 120 rupees for accommodation. They are taught about identification and properties of herbal plants, and the usage of herbal plants in different formulas for the treatment of various diseases since all plants have their own medicinal values. In addition, they might also be taught modern diagnostic methods. Additionally, the senior officer from CCRAS indicated that NGOs have taken the initiative to collaborate with the government in organising reorientation courses for the apprentices (I-M6). NGOs such as FRLHT has organised programmes to train RMPs.

An academic from the SSCASRH indicated that ISM professionals do not acquire knowledge on evidence-based studies and lack training in conducting research (I-A15). Realising that research into ISM is not well developed, he opined that the authorities concerned should consider introducing the basic concept of clinical research into the undergraduate curriculum, encouraging ISM professionals to

³⁷¹ MOH & FW, *Annual Report 2006-2007: National Rural Health Mission* (MOH & FW, 2007), 395.

³⁷² 'Lakh' is a unit in the numbering system in Indian English, which is equal to 100,000 rupees or \$2250.00 U.S. dollars.

³⁷³ The registration of RMP stopped in 1970, but training for the RMP, who had obtained their practising certificates prior to 1970, is still on-going in Tamil Nadu until today. The Government of Tamil Nadu had started to issue practising certificates for the trained RMP since 1926.

perform research through funding, and establishing well-equipped infrastructure research centres or units.

It can be observed that with the implementation of the Act, ISM practitioners attempt to professionalise their profession gradually through institutional education. The rapid progress of ISM education is possible if all shortfalls could be addressed. In particular, refresher and re-orientation courses are encouraged for all categories of practitioners by the Indian Government in order to ensure continuity in medical education. It updates the knowledge of qualified ISM practitioners and upgrades the RMPs. Ultimately, the qualified practitioners' rights and public safety are protected under the IMCC Act.

5.3.3 Integrated Healthcare Hospitals

Integration of ISM into the mainstream healthcare system is very essential for “developing a more comprehensive healthcare system” as highlighted by Dr. Anbumani Ramamdoss, the Minister of Health and Family Welfare, at his valedictory address to the national workshop on homeopathy for mother and child care in New Delhi on November 6, 2007.³⁷⁴ In responding to this, two senior officers from AYUSH Department, MOH & FW, expressed the view that globally there is a paradigm shift in the quest for good health whereby people look for lifestyle modifications and TM for health maintenance and disease treatment (I-M7 & 8). This is because TM (such as ISM and TCM) is mainly herbal based. Herbal medicine is popular because of its relatively harmless nature in comparison to the side effects of most modern medicine drugs. About two thirds of the practitioners stated that herbal products are bio-friendly to the body since they are natural in origin and they possess similar chemical components as the human body. In comparison, modern medicine drugs are alkaline in nature. A synthetic version of

³⁷⁴ MAK, “Integration of AYUSH with Mainstream Health Care Stressed,” *CCRUM Newsletter*, November-December 2007, 1.

drugs produced in a modern laboratory with a similar chemical structure to that of herbal drugs can damage the body tissues and affect the functions of the organs.

The senior officer from CCIM stated that many intractable cases cannot be resolved by modern chemical medicine, and hence natural herbal medicine has become an alternative (I-M13) remedy. He stated that some allopathic doctors have also used natural products in their practice. Regarding drug-less therapy, the senior officer from CCRYN claimed that yoga detoxifies the body and allows the body to heal itself (I-M4). Yoga promotes health and harmony. Hence, the respondents from the policy makers' group were united in the view that healthcare is a complex system and it can be improved by careful implementation of an applicable healthcare policy. Ultimately, they again emphasised that in order to improve the quality of health, there should not exist a dichotomy between modern medicine and TM.

In responding to the positive responses from the Indian Government, the majority (23 out of 30) of ISM practitioners agreed to the integration of ISM into the current healthcare system as long as the basic principles of ISM are maintained. The President of the Advisory Committee of ISM, who is an experienced Ayurvedic practitioner, stated that integrated medicine had been practised in India in the early 1970s (I-P8). However, it was stopped in 1975 by the Indian Government due to the dominance of modern medicine. An Ayurvedic general practitioner stated that the allopathic fraternity groups still felt threatened by the traditional professionals (I-P13). Hence, there is a high possibility they may have a negative attitude. Another senior Ayurvedic practitioner mentioned that a proper formulated healthcare policy should be able to indicate the importance of the role of each medical system in the healthcare system so as to ensure the building and growth of a healthy human race (I-P12).

With regard to the definition of integrated medicine, the respondents had different interpretations and comments. One respondent from the policy makers' group

emphasised that an integrated healthcare system should be a system with a holistic approach (I-M1). A senior officer from AYUSH Department, MOH & FW, stated that at the present moment, integrated medicine is able to address the emergence of new diseases of different patterns which cannot be handled by modern medicine alone (I-M8). He explained that modern medicine is required for assisting disease diagnosis and management of emergencies, whereas TM such as Ayurveda focuses on curing chronic disorders and maintaining health throughout life. Taking a similar position, two of the practitioners, an Ayurvedic practitioner and a Unani practitioner, agreed to the simultaneous prescription of herbal remedies and modern medicine drugs by trained integrated medicine practitioners (I-P 12 & 15). In short, the senior officer from the Directorate of AYUSH in Bangalore said that integrated medicine is a medical system which is focussed on treating illnesses and maintaining health (mind and body unity) through the mainstream and traditional system of medicine (I-M10).

At this juncture, it is helpful to refer to a recent comparative study on integrated medicine carried out in India which is based on cross referral practices between traditional and modern systems of medicine.³⁷⁵ The objective of this study is to integrate Ayurveda with modern medicine on pain management of osteoarthritis so as to improve the quality of patients' lives. The main rationale is the fact that allopathic drugs fail to provide adequate pain relief in patients with osteoarthritis. Moreover, the study also allows gathering evidence-based data on integrative treatment approaches and encourages further research on integration. This project is conducted in the Department of Orthopaedic at the Safdarjung Hospital, in collaboration with CCRAS. The drug regime includes oral medication (Yogaraj Guggul tablets with anti-inflammatory activity and Ashwagandha powder with anti-aging property) and external oil massage followed by hot fermentation. The total duration of treatment is two months. This study has concluded that Ayurvedic treatment is effective in reducing the pain and side effects of allopathic painkillers,

³⁷⁵ CCRAS, *Feasibility of Integrating Ayurveda with Modern System of Medicine in a Tertiary Care Hospital for Management of Osteoarthritis (knee) – An Operational Study* (CCRAS, 2007).

such as hyperacidity, flatulence, heat, stomatitis, and loss of appetite. 95% of the 252 patients are satisfied with this treatment and 73% of them have stopped consuming allopathic painkillers.

Integrated medicine is the specific type of medicine that meets the needs of the present. As a Siddha practitioner stated, integrated medicine is of great help these days because, the current healthcare problems are mainly due to non-communicable diseases - hypertension, diabetes mellitus, cancer, and ischemic heart disease - which require the holistic approach, a change in lifestyle or dietary modifications (I-P21). Hence, he noted that the Indian Government should include ISM in all the healthcare programmes (both national and international). For example, the national immunisation programme in Himachal Pradesh and Chhattisgarh, and projects in the control and treatment of epidemic diseases such as Chikungunya and Bird Flu. Moreover, another Siddha practitioner recommended the inclusion of ISM into the 'Employees State Insurance Hospital' (E.S.I.Hospital) (I-P20).³⁷⁶

The officer from the WHO Country Office for India in New Delhi understood integrated medicine as physical integration in which there is the integration of the facilities of modern medicine and ISM under one roof to complement each other (I-M9). A senior Ayurvedic practitioner from the SJIMH mentioned that an integrated healthcare hospital or a common door entry hospital composed of different systems of medicine, allows patients to access different medical systems under a single roof (I-P19). For example, the service for shara-sustra can be made available in all general and district hospitals, and primary healthcare centres and units.³⁷⁷ If patients suffering from a particular disease fail to respond to modern medicine, they can shift to some other systems of medicine under the same or common roof. As an officer from CCIM and a senior Ayurvedic practitioner

³⁷⁶ In India, the Employees State Insurance Hospital is the hospital that provides free and comprehensive medical care to all the insured persons and their families under the Employees' State Insurance Scheme. See http://india.gov.in/spotlight/spotlight_archive.php?id=19 (accessed 15th March, 2009).

³⁷⁷ Shara means medicine and sustra means thread. Shara-sustra is for ano-fistula and piles.

stressed, each system of medicine has its limitations (I-M3 & I-P12). Moreover, it is impossible for a person to master all the systems of medicine and know all the subjects within the five years of the institutional degree course. In brief, integrated medicine benefits patients and also promotes interdisciplinary research. A senior Ayurvedic practitioner indicated that the research in integrated medicine is a challenge (I-P13). A Unani practitioner (I-P11) noted that after integration, ISM will be placed on the same platform as modern medicine, instead of being treated as subsidiary to modern medicine.

Looking at disease diagnosis, 80% of the practitioners felt that modern scientific diagnostic technology improves the accuracy of diagnosis and enhances the efficacy of treatment in ISM. For example, stethoscopes and sphygmomanometers support pulse diagnosis on hypertension and X-rays confirm and locate fractures. They were of the opinion that the complementary or supportive concepts will not alter the origin and nature of TM in disease diagnosis. However, the senior Ayurvedic practitioner from MAH disagreed with this view and argued that the diagnostic methodology of ISM is based on both subjective (experience of practitioners) and objective referrals whereas modern medicine is only based on objective referrals (laboratory reports and medical equipment) (I-P1). He explained that pulse diagnosis detects the disease prior to the appearance of signs and symptoms of the disease, abnormal results of laboratory tests on urine and blood, and malfunction of organs. Therefore, the treatment can be initiated earlier prior to the proven manifestations. Holding the same view, another Ayurvedic practitioner said that accurate diagnosis is obtained through proper pulse palpation, and the modern diagnostic parameter is just the paper documentation of certain figures (I-P10).

On the other hand, a policy maker who disagreed with integrated medicine, interpreted integrated medicine practice as a 'cocktail practice', a mixture of all medical practices (I-M4). He was of the opinion that every system of medicine should be allowed to prove its efficacy and manage itself so as to retain its identity.

He explained that all the systems should be allowed to grow, expand, and develop independently since they have been proven for thousands of years. It is impossible to integrate both the drug and drug-less systems of medicine. He did not believe that anyone can become an expert in all the systems of medicine especially by just attending some short courses which he described as 'package or capsule courses'. Similarly, it is impossible to have an allopathic doctor who is an expert in all the disciplines. Moreover, there are drawbacks with integrated medicine. First, integrated medicine which involved several medical systems increases the treatment cost and hence increases the financial burden on patients. Next, there is a degree of uncertainty about which system of medicine is effective in curing the disease and at the same time which ones prove complicated and harmful to patients. Finally, integrated medicine may end up being commercialised whereby a single patient may be taken care of by multiple doctors instead of by a single doctor. Hence, the respondent recommended respecting the patient's choice and allowing him to receive treatment from one medical system at a time, in spite of multiple medical systems being involved. He stressed on the importance of disease prevention, and felt medicine consumption should be the last resort. His view of holistic health is treating patients as a whole in the total emotional, spiritual, domestic, economic, and physical aspects.

Based on the view that both the medical systems, modern medicine and ISM, are of different fundamental principles, seven of the practitioners suggested a parallel system of healthcare instead of integration. One Ayurvedic practitioner from MAH stated that ISM is able to stand on its own and serve the public (I-P2). In particular, Ayurveda is the science of living which has a long tradition and includes physical, mental, social and spiritual well-being. Health comes from the wholeness of life. Ayurveda provides systematic treatment and not symptomatic treatment. Moreover, Ayurvedic herbal remedy is a medicine whereas modern medicine involves drugs which may lead to addiction and drug dependence. Hence, felt that integration would be a 'suicidal step to Ayurveda'. Another two senior Ayurvedic practitioners from the same hospital highlighted that if the two medical systems are integrated,

ISM will be dominated by modern medicine (I-P1 & 4). They believed that it is better to allow ISM to grow on its own, at least till it has achieved its full glory. The different interpretations of integrated medicine by the three focus groups are illustrated in table 5.1.

Table 5.1: Different Interpretations of Integrated Medicine by Respondents from India

Features	Focus Groups	Policy-makers	Academics	Traditional Practitioners
Full partnership with modern medicine		Parallel / Complement	Complement	Parallel / Complement
Cross-referrals		+	Nil	+
Modern medicine for diagnostic and acute conditions		+	+	+
Traditional medicine for preventive and chronic cases		+	+	+
Common consensus on treatment		+	Nil	+
Option of treatment (no boundary)		Optional	Optional	TCM/Optional
Knowledge sharing and exchange		+	+	+
Unity (a person who possesses knowledge of 2 medical systems simultaneously)		+	+	+
Basic theory combination		Nil	+	+
Cultural combination /Social science		+	+	+
Multidisciplinary Medicine		Nil	Nil	Nil
Repetitive Medicine		- (Cocktail practice)	Nil	Nil
Evidence-based medicine		+/-	Nil	-
Plurality and Easy accessibility		Nil	Nil	+
Public or patients' interests		Nil	Nil	+

(In the table above, the symbol + indicates agree, - indicates disagree, and Nil indicates no comment respectively)

The senior officer from AYUSH Department, MOH & FW further stressed that integrated medicine promotion is for the vertical and horizontal development of the healthcare system, so as to strengthen the healthcare delivery strategy (I-M8). He explained that at this point in time, the integration of ISM into the mainstream healthcare system in India is only structural, not functional. It is under one roof, and entails the coexistence of both allopathic doctors and traditional practitioners and practices. For example, there is the setting up of the ISM clinics at the primary healthcare centres, district hospitals, and central government hospitals such as Safdarjung Hospital, Lady Hardinge Medical College and Associated Hospitals (LHMC), and Dr. Ram Manohar Lohia Hospital (RML). The ISM clinics in the above mentioned hospitals are being run by practitioners of ISM from CCRAS, the Central Council of Research for Homeopathy (CCRH), and the Central Council of Research for Unani Medicine (CCRUM). A senior officer from CCRYN mentioned that the yoga and naturopathy out-patient department (OPD) and lifestyle intervention centres are also established in the above hospitals (I-M4). These centres are directly under the care of CCRYN. A yoga practitioner stated that there are cross referrals between the allopathic doctors and yoga practitioners (I-P6). A simple referral letter is written. The patient's details such as name, age, main diagnosis, prescribed treatment and referral for life-style modification are noted on letters with the hospital's letter head. In order to respect the patient's choice, patients have to sign and give consent for the life-style modification at the end of the case sheet.

A senior officer from CCIM stated that in-patient services are available in district hospitals with 10, 25 or 50 beds (I-M3). He affirmed that the Indian Government encourages all the systems of medicine to justify their own merits and be aware of the limitations of the system of medicine, for example, heart attacks need immediate modern medicine intervention. The undoubtedly welcome news from a senior officer from AYUSH Department, MOH & FW was that herbal medication without chemicals can be obtained from the dispensaries in the primary healthcare centres (I-M7). His colleague stated that an integrated healthcare system helps to

promote medical tourism in the country (I-M8). Moreover, Leena Nanda, the Joint Secretary to the Government of India, Ministry of Tourism, observed that in order to facilitate and promote medical tourism, medical visas have been introduced.³⁷⁸ This allows three entries for visitors within a 12 month period. The authorities concerned also realise the importance and necessity of an international legal regulation of medical tourism to handle the issue of legal recourse for unsatisfactory treatment across international boundaries. According to the Confederation of Indian Industry:

With Yoga, meditation, Ayurveda, allopathic, and other systems of medicine, India offers a unique basket of services to an individual that is difficult to match by other countries. India has the potential of attracting 1 million tourists per annum, which could contribute up to 5 billion US Dollar to the economy.³⁷⁹

It could be observed that India has incorporated ISM into modern medicine through advocating the coexistence of two medical systems under one roof, but in different wings which signifies that it is a parallel system rather than an integrated system of medicine.

5.4 *Cognition and Support*

The question remains: Do all the stakeholders have the desire or intention to support the development of TM in India? Political will does play a significant role in upholding and developing TM. Political will includes the support from the government, academics, traditional practitioners, allopathic doctors, and the public.

5.4.1 Governmental Support

Peer Mohammad Hussain, the State Health Minister for Jammu and Kashmir, indicated that "ISM has not received due care in the past but now the government

³⁷⁸ "Medical Visa Introduced by India," *Sanjivani Medical Times*, January-February, 2008, 12.

³⁷⁹ "Ayurveda and Yoga Future of Alternative Medicine in India," *Sanjivani Medical Times*, March-April, 2008, 4.

has given added attention to this field of medicine for its high reputation.”³⁸⁰ The senior officer from AYUSH Department, MOH & FW, stated that a bigger budget allocated for the development of the ISM includes education in ISM, incorporation of ISM into mainstream medicine, and drug standardisation and quality control (I-M7). As mentioned earlier, traditional medical colleges in India can be government or privately run medical colleges. Some private colleges are government aided and some are not. According to the four respondents from the academic group, adequate funds, approximately three times higher than the previous budget, are provided to government and private medical colleges at both the central and state levels to help traditional practitioners in their education and research (I-A4, 6, 7 & 8). A senior officer from AYUSH Department, MOH & FW, who is a member of the planning committee, acknowledged that in the 11th 5 year plan (2007-2012), 4,000 crore rupees have been allocated by the central government for education in ISM (I-M8).³⁸¹ This amount was acknowledged by two practitioners too (I-P5 & 23). The central government has utilised the budget for its own educational programmes and also subsidised the other states for upgrading the AYUSH institutions through 15 to 18 schemes. These schemes are related to education, research such as the ‘Extra Mural Research Scheme’,³⁸² publication, and international cooperation such as sending experts to conduct ISM courses in foreign countries. In particular, the officer said that there are grants-in-aid for the International Fellowship Programme for foreign nationals for undertaking AYUSH courses in premier institutions in India. On further clarification, he explained that eligible candidates are those who have been shortlisted and recommended by the Embassy or High Commission of India in the relevant country. Every year, a limited number of 20 applicants are recruited under the programme. In addition, a senior officer from the CCIM mentioned that under the ‘Centrally Sponsored Scheme for Development of AYUSH Institutions’, funds are provided by the government for strengthening the infrastructure of ISM education so as to meet the infrastructural norms and minimum standards of

³⁸⁰ “J&K: Tributes Offered to Lord Dhanwantri,” *Sanjivani Medical Times*, January-February, 2008, 12.

³⁸¹ ‘Crore’ is a unit in the numbering system in Indian English, which is equal to 10,000,000 rupees or \$225,000 U.S.dollars.

³⁸² MOH & FW, *Annual Report 2006-2007: National Rural Health Mission* (MOH & FW, 2007), 370.

education set by the CCIM (I-M13).³⁸³ Together with his colleague from AYUSH Department, MOH & FW, they stressed that every state has their individual budget, mainly targets towards healthcare, education and research (I-M13 & 7).

According to the senior officer from the Directorate of AYUSH, Bangalore, the expenditure on the medical education sector for 2007-2008 was 1113.30 lakh rupees in the state of Karnataka (I-M10). She stated that the allocated budget for ISM education in Karnataka State is 2716 lakh rupees. This budget is for different projects on education such as conducting courses or examinations. This allocated educational budget includes the budget provision under the Centrally Sponsored Scheme for Development of AYUSH Institutions. She stated that the ISM education budget allocation for this scheme in the year 2007-2008 in Bangalore State was 626.86 lakh rupees and only 111.12 lakh rupees was utilised. She was of the opinion that it is very difficult to spend the full allocation in the budget. The under-spending is due to the inefficiency in formulating and implementing the educational projects in accordance with the recommendations of the *National Policy, 2002* for the development of ISM education. Hence, she emphasised that the close national collaboration, between central and state governments on the development of education and related projects is essential.

A senior officer from CCRYN explained that for yoga and naturopathy, the central government has allocated approximately 20 crore (2,000.00 lakh) rupees to the CCRYN, Morarji Desai National Institute for Yoga in New Delhi and National Institute for Naturopathy in Pune (I-M4). Marginal grants are allocated to the yoga and naturopathy colleges in the five states where yoga and naturopathy practice is regulated, by their respective state governments. The yoga and naturopathy colleges in Andhra Pradesh get more funds since they are popular colleges established 35 years ago whereas other states have only limited numbers with comparatively new colleges and hospitals or even clinics.

³⁸³ AYUSH Department, *Guideline on the Centrally Sponsored Scheme for Development of AYUSH Institutions* (MOH & FW, 2007).

An academic stated that the Indian Government has funded colleges, both government and private, to conduct CME courses (I-A1). Within two years the budget is increased from 2 to 2,000 crore rupees. For example, in Uttar Pradesh, the state government has funded 30 reorientation courses for both the undergraduate and postgraduate practitioners of ISM annually. The courses for each of the categories range from 15 to 30 days. However, the funds are still insufficient to cover the expenditure for developing ISM education especially in the government colleges. He reiterated that private colleges can obtain funds from students through donations. His view was supported by the former consultant in Curriculum Development of the RGUHS who felt that the budget for education is never sufficient (I-A9).

Similarly, an academic from TC stated that the health budget for the development of ISM is inadequate even though there is an increase in the total national healthcare budget from 0.5% to 3% (I-A3). He disclosed that a major part of the budget is allocated to develop modern medicine. He was of the opinion that at least 25% of the healthcare budget should be allocated to develop ISM because it is the main healthcare system in the rural areas. Respondents such as a Siddha practitioner and a senior academic from SSCASRH even pointed out that the budget allocation should be equal for the development of the two medical systems (I-P28 & I-A15). For example, ISM practitioners interested in finding out the latest developments in the herbal system of medicine should be given the funds.

A senior officer from AYUSH Department highlighted that the government has upheld the value of ISM and attempted to place it on the same platform as modern medicine by integrating ISM into modern medicine (I-M2). Along with allopathic doctors, ISM practitioners are encouraged to participate in primary healthcare services such as in the National Rural Health Mission (NRHM) and other national health programmes such as the National Diabetes Control Programme. All the respondents from the policy makers group understood that in the NRHM, 2005-2012, integrated medicine is promoted to optimise the utilisation of ISM

practitioners (either through relocation or contractual appointment), ASHA and other health workers who have trained in ISM health concepts and remedies to meet the needs of the Indian population.³⁸⁴ NRHM was launched by the Prime Minister of India on April 12, 2005, and it was likely to be extended beyond its seven years.³⁸⁵ Approximately six lakh qualified ISM practitioners serve in the public health sectors after undergoing training.³⁸⁶ The proper distribution and utilisation of ISM personnel help to strengthen the country's public health system. The authorities concerned also ensure the development of the infrastructure to support the involvement of ISM, for example, the setting up of ISM out-patient clinics, wings, and dispensaries in modern medicine hospitals. They even encourage and fund the upgrading of the existing Ayurvedic hospitals. The most welcome news comes from the chairperson of FRLHT who stated that in order to promote ISM and integrate it into the mainstream healthcare system, schemes for grant-in-aid to NGOs were suggested and approved in the 11th 5-Year-Plan. For example, approximately 33 crore rupees have been set aside for the supply of essential ISM drugs to more than 13,000 dispensaries (I-M14). This was emphasised further by Mrs. Panabaka Lakshmi, Minister of State for Health and Family Welfare, who said that more funds, a four-fold increase from the funding in 10th Five Year Plan, has been allocated to the AYUSH Department for development of ISM in the 11th Five Year Plan.³⁸⁷

This suggests that trained ISM practitioners are treated as equals to allopathic doctors in the preventive, curative and promotive aspects of health. An officer from the CCIM felt delighted to share the government's announcement that salaries of both allopathic doctors and ISM practitioners are now the same since ISM has

³⁸⁴ *National Rural Health Mission (2005-2012): Mission Document*, <http://mohfw.nic.in/NRHM/Documents/NRHM%20Mission%20Document.pdf> (accessed February 18, 2009).

³⁸⁵ MOH & FW, *Annual Report 2006-2007: National Rural Health Mission* (MOH & FW, 2007), 17.

³⁸⁶ Nesari, M., "Indian Systems of Medicine (Ayurveda, Siddha, Unani) and Issues for Regulating Traditional Medicine at International Level," (paper presented at the WHO Congress on Traditional Medicine, Beijing, China, November 7, 2008).

³⁸⁷ MAK, "Integration of AYUSH with Mainstream Health Care Stressed," *CCRUM Newsletter*, November-December, 2007, 1.

been incorporated into the mainstream healthcare system (I-M13). He felt that the equal pay scheme for both teams of medical professionals shows that the government upholds the value of ISM and places it on the same platform as modern medicine. A senior officer from AYUSH Department, MOH & FW, stated that qualified ISM practitioners will be listed in the 'electronic porter' (E-Porter) and be popularised in the near future (I-M7). He elaborated further that in order to upgrade and validate herbal medicine, the government has funded drug manufacturers under certain special schemes. Particularly, about 15 to 20 small units of the AYUSH industry are encouraged to group together and one million rupees is offered to help them to set up 'Special Purpose Vehicle' (SPV), with world-class laboratories and other common facilities of high standards.

Based on the united view of all the 14 respondents from the policy makers' group, ISM has a bright future in India. Therefore validation and revalidation of ISM practices and drugs are emphasised. The senior officer from the CRIS was impressed by the initiative of the authorities concerned in establishing the national research councils for AYUSH such as CCRAS, CCRUM, CCRH and CCRYN to develop research in all streams of Indian medicine (I-M12). The former Director-General of ICMR, Bangalore, stated that these days, each stream of Indian medicine has identified priority areas for intensive study and research, for example, Ayurveda focuses on geriatrics; Unani on skin diseases (psoriasis and eczema); Siddha on cancer; and yoga and naturopathy on mental health problems (I-M11). The senior officer from CCRAS mentioned that many organisations concerned have identified the different areas of Ayurveda for validation and included them into practices under the Golden Triangle Partnership Project (I-M5). This public-private partnership project involves the simultaneous working of TM, modern medicine, and modern science on developing knowledge of Ayurveda and herbal formulations. It is funded by CCRAS and supported by two other organisations, namely ICMR which allows their laboratories to be used and for their scientists to participate, and the Council for Scientific and Industrial (CSIR) which conducts the

clinical research. Under this project, there are studies on Ayurvedic genomics,³⁸⁸ botanical standardisation, and a safety study of the 8 most widely used text-based Bhasmas (herbo-metallic compounds prepared in accordance with the classical texts). In addition, the present Institute of History of Medicine has been upgraded to National Institute of History of Medicine. In short, the same respondent stressed that Ayurveda has now been scientifically proven and will become globally acceptable in the coming decade. As for Siddha medicine, a Siddha practitioner stated that research on literature, drugs and clinical cases are conducted in CRIS whereas only clinical research is conducted in the other research centres at Pondicherry and Trivandrum (I-P7). The CCRYN encourages hospitals to conduct research in naturopathy and yoga by funding them. According to the senior officer from CCRYN, grants are offered to about 120 hospitals all over India (I-M4). Currently, CCRYN has given research grants to about 10 to 15 hospitals on a regular basis and published the research monographs so that information can reach the relevant institutions, practitioners and other relevant individuals or organisations. NGOs have also collaborated with the Indian Government in developing ISM education and research. For example, FRLHT in Bangalore and Kottakkal in Kerala have been conducting training and research.

According to the senior officer from AYUSH Department, MOH & FW, while upholding the value of ISM, the government has also started to look into the protection of TM and its practices (I-M7). One respondent from the policy makers' group disclosed that in order to protect the tradition of ISM, the government recognises certain experienced senior traditional masters (I-M1). Selected qualified *vaidya* (Ayurvedic practitioners) are sent to learn clinical skills and to specialise. Scholarships are offered to encourage the learning process. The former dean of RGUHS mentioned that the government should approach the senior TM masters in a polite manner and act in such a way so as to convince them that they will be helped in their profession (I-A7). He suggested that they be

³⁸⁸ Patwarddhan, B., & G. Bodeker, "Ayurvedic Genomics: Establishing a Genetic Basis for Mind-Body Typologies," *Journal of Alternative and Complementary Medicine* 14(5) (2008): 571-576.

funded through various schemes. In particular, for the master practitioners who are well known in their society, the government can consider providing a housing allowance or land for the cultivation of herbal plants and in setting up their herbal gardens. The younger generation can be funded for institutional education. This indicates that in order to uphold the value of ISM, the experienced masters of 'folk medicine' are invited to share their experiences with the institutionally qualified practitioners of ISM. This knowledge sharing allows the incorporation of folk medical knowledge into the known traditional textual medical knowledge, after a scientific evaluation. For those states which have many folk traditions, for example, Arunachal Pradesh, the government has approved the setting up of separate institutions for folk traditions. The authorities concerned want to document, record, and validate these traditions. As long as these traditions are systematically documented and validated, they are protected and passed on to the younger generation. For example, the CCRUM investigates the folk claims and looks for medicinal plants or herbal compounds of potential therapeutic values for diseases which are not amenable to modern medicine treatment.³⁸⁹ The honorary advisor to the Planning Commission on ISM stated that the TKDL is designed to conserve and protect the knowledge of ISM in India (I-M14).

In view of the strong trend in the responses towards a hopeful future of ISM in India, a policy maker stressed that students are encouraged to enrol in medical courses upon completion of their high school education (I-M3). This is because figures obtained show that the admission rate in the science stream such as in nursing schools and medical colleges had declined in the last two to three years. To encourage students to take up the sciences, Palaniappan Chidambaram, the Indian Finance Minister, has allocated a budget for scholarships for students who wish to enrol in science courses.³⁹⁰ A majority of the students are attracted by the disciplines offering short courses such as finance and management. According to the policy maker, students believe that short courses result in less mental stress

³⁸⁹ CCRUM, *Unani Medicine in India* (AYUSH Department, 2006), 25-26.

³⁹⁰ Toi, Team, "PC Catches Them Young in the Lab," *The Times of India*, March 1, 2008.

and more options for employment upon graduation, while the medical discipline involves a longer learning period (6-8 years) and limited employment opportunities since the authorities discourage professions based on the policy of the 'self-reliance course', for example, private general medical practice.³⁹¹ Another academic stated that 30% of the institutionally qualified *vaidya* remain unemployed in both the government and the private sectors (I-A1). They practise as general practitioners. He was of the opinion that central and state governments have allocated fewer funds to create job opportunities for ISM practitioners. He also raised the issue of the salary discrepancy between the government (16,000-20,000 rupees per month, as opposed to a permanent employee's earnings of up to 24,000 rupees per month) and private employees (5,000-10,000 rupees per month). The senior officer from the CCRAS who holds a similar view explained that the discrepancy in the payment is because of the nature of the work and organisations (I-M5). He stated that beyond doubt government servants have a more uniform pay scale.

5.4.2 Traditional Support

The support from all traditional practitioners, including the institutionally qualified practitioners of ISM and apprentices is obtained through registration and upgrading of selves. An academic suggested that qualified practitioners of ISM may consider approaching the apprentices to learn from them and then incorporate this traditional knowledge into their practice (I-A15). In particular, an Ayurvedic practitioner said that apprentices or healers are often invited to team up with the qualified practitioners and allowed to treat patients with their herbal remedies under supervision (I-P13). Subsequently, they are encouraged to collaborate with the government in documenting and researching their family or community medicine.

³⁹¹ The 'Self-reliance course' was the course which had been taken up by the students based on their interests. Upon completion of the course, they had to establish their business based on their own knowledge and capability. The government would not provide job opportunities for them.

With regard to research, as a senior Siddha practitioner pointed out, it is high time for all the ISM practitioners to study the chemical components of each herb in the context of science (I-P7). Through the knowledge obtained practitioners can provide patients with the extracted pure and active components to enhance treatment efficacy and minimise side effects. However, a Siddha practitioner highlighted that certain components in herbal remedies should not be separated from other components since this affects the therapeutic effect of the herbal remedies and may even cause harm to the body with the single component instead of multi-components (I-P20).

A senior officer from the CRIS, Chennai, pointed out that there are other challenges in developing and popularising ISM (I-M12). The conservative category of ISM practitioners is orthodox and declines the use of modern technology in the preparation of herbal decoction, for example, cow dung or wood are still being used as fuel. In such a scenario, production is limited to only a small quantity and fails to meet the high demand. Many practitioners also realised the advantages of using machines in mixing and packing herbal compounds which render the process more hygienic, and fulfil the high demands and public expectations. However, according to Ayurvedic practitioners' technological preparation affects the efficacy of herbal remedies since there is a loss of contact between the Ayurvedic practitioner and the herbs (I-P4 & 5). This is because herbal medicine which is prescribed and prepared by the Ayurvedic practitioner who meditates, can have his high level of consciousness and purity passed into the medicine which in turn helps in the healing process. A senior Ayurvedic practitioner with the same view emphasised that freshly prepared herbal remedies (on the spot preparation, following the consultation) is much more effective than pre-packed herbal remedies, but practitioners often fail to cope with the increase in demand (I-P8). Hence, a Unani practitioner from the SJIMH stressed that modern technology is good provided it can preserve the identity of the herbal compound formulation in ISM, for example, its specific therapeutic activity, and the synergistic or detoxified effect of each of the components after the mixing (I-P17).

5.4.3 Allopathic Support

The majority of academics realised that research into ISM is not well developed compared to research in modern medicine. A senior academic remarked that poor research activity is one of the shortfalls in the development of ISM in India (I-A9). Research in ISM on the treatment of most diseases has yet to be conducted. A Siddha practitioner stated that allopathic fraternity groups can offer their help in the field of scientific research and medicine standardisation (I-P7). A professor from TC stated that research relevant to ISM should be conducted, and not diverted, from the basic knowledge of ISM (I-A6). She suggested that research on ISM should focus on the development of traditional modes of diagnosis such as pulse diagnosis. She believed that pulse diagnosis offers an accurate diagnosis when compared to diagnosis by modern medical equipment.

A senior academic indicated that research on Ayurveda began in ancient times and has continued to develop to the present day (I-A1). However, a senior academic from TC stated that although ISM has been practised for thousands of years, it is still lacking in scientific data (I-A4). Hence, the senior academic from SMC stated that support from the allopathic fraternity groups is important for the research on ISM (I-A10). Unfortunately, they refuse to come forward to popularise this system of medicine. He noted that there is a combined modern medicine and Siddha Medicine treatment for HIV in the Tambaram Sanatorium Tuberculosis Hospitals, Chennai. Siddha medicine is the main component of the combined medicine. Its outcome has been encouraging. Hence, collaboration between allopathic doctors or scientists and traditional practitioners is essential in ensuring the further development of ISM. Taking the same position, four respondents from the policy makers' group were united in the view that team work between the allopathic fraternity groups (allopathic doctors or scientists) and *vaidya* is pertinent (I-M4, 5, 7 & 14). While experienced *vaidya* explains the therapeutic effects of herbal medicine at length, the scientist designs and conducts research with modern technology after consulting the *vaidya*. Another respondent explained that

the indigenous practitioners have ethno-botanical, ethno-pharmacological, and ethno-toxicological knowledge (I-M5). This knowledge has been recorded and documented by interviewing them in a survey. Later, the knowledge is utilised to develop a new herbal formulation.

Furthermore, as indicated by the former dean of the RGUHS, the authorities concerned should encourage and promote more research for the development of ISM by allocating sufficient funds and giving due publicity in different media (I-A7). He added that the government should also insist that doctors, research scholars, and paramedical workers and health personnel go for research within a time-frame without wasting time and public funding. If possible, the researchers could be sent to a country where herbal medicine is very much advanced and developed to its fullest extent, for example, China. Through technology transfer latest ideas and philosophies of practising herbal medicine can be exchanged internationally. A policy maker stressed that in fact, India has a high potential to become the major producer in herbal cultivation, in its processing, manufacturing and exporting just like China which is among the pioneers of herbal medicine (I-M12). Currently, the income generated from the export of herbal preparations is only 48% in India. He predicted that in 10 years' time India will be a competitor to China in marketing herbs and herbal preparations if every stakeholder (government, practitioners and scientists) participates responsibly. This was emphasised in the inaugural speech of Dr. Anbumani Ramadoss, the Union Health Minister, who said that "at present India's exports of Ayurveda, Siddha, and Unani products is seven billion rupees which is roughly two percent of the global market for natural products" during the inauguration of the buildings of Homeopathic Pharmacopoeia Laboratory and Pharmacopoeial Laboratory for Indian Medicine.³⁹² The fact remains that the large scale of interest generated by India and China could make them major in 10 years' time. This will aid the promotion of the herbal system of medicine globally.

³⁹² "Health Minister Urges to Take Indian Traditional Medicines Marketing Worldwide," *Sanjivani Medical Times*, March-April, 2008, 11.

The strong trend in the response regarding the common problem of TM research lay with the standardisation of the herbal remedies in the clinical trials.³⁹³ In the contemporary context, all the medicine has to undergo clinical trials prior to marketing and prescribing. Moreover, in India, many *vaidya* still lay claims to effective family formulations. In order to minimise the harmful effects from ISM, two officers from CCRAS stated that proper identification and assessment of herbal medicine is mandatory (I-M5 & 6). That is to say, laboratory validation and clinical trials are required to ensure the safe and high quality of herbal medicine being marketed. The two officers highlighted that allopathic professionals must understand that under certain circumstances, subjective evaluation is required rather than a laboratory evaluation. In particular, self-limiting diseases need multi-centric studies which may not fulfil the criteria of RCT studies. The officer from CRIS, Chennai, stated that with the validation (from plants to end-products), extravagant claims of the efficacy and misconceptions can be avoided (I-M12).³⁹⁴ Then the herbal compound would be recognised officially and protected. This was similarly highlighted by another officer (I-M11).

To further clarify whether direct adoption of modern medicine research methodology is feasible in ISM research, a professor from MCOPS, who has developed many research programmes in ISM, expressed his view that first and foremost, evidence-based medicine should be defined and understood by all ISM practitioners and scientists (I-A8). The research methodology for ISM is different from modern medicine, RCT and double blind studies. He elaborated that TM has different philosophical theories and principles which cannot be proven and concluded using modern medicine research methodology. The research methodology has to be designed based on the patients' constitutions and be pharmacologically controlled. Hence, he recommended using pharmaco-epidemiology as traditional research methodology. It has been used for many

³⁹³ In the Drugs and Cosmetic Act, 1940, Schedule 'M' is for modern medicine and Schedule 'T' for Ayurveda, Unani, and Siddha medicine.

³⁹⁴ In Tamil Nadu, Siddha practitioners and drug dealers claim that every disease can be cured by Siddha medicine. In fact, every system of medicine has its limitations, hence there should not be over the top claims.

years whereby data for TM is created by using field information and static skill information. He ended the interview with the statement that “true scientists should not make comments such as Ayurvedic medicine is mumbo-jumbo, if they are not familiar with this science.”

Finally, an Ayurvedic practitioner mentioned that the outcomes of the research which has been conducted in India may not be applicable to other countries such as European countries because of the differences in climate, earth, and culture (I-P25). Hence, the research outcomes cannot be generalised globally. To sum up, one of the academics highlighted:

Ayurvedic knowledge is most ancient and nearer to the truth. After thoroughly examining and understanding it, we will realise that it is composed of different kinds of clinical, spiritual, experimental, and internal constitutional evidences. Moreover, modern medicine is not supported by randomised controlled clinical trials in totality. Hence, nobody is actually practising evidence-based medicine. (I-A2)

5.4.4 Public Support

A practitioner from MAH pointed out that herbal medicine is easily accessible and affordable by the people, especially in rural areas (I-P3). Particularly, in India, a spice such as turmeric powder, is used in almost every household, and known to have medicinal value. Hence, his colleague emphasised that women – the grandmother or mother – is the person who takes care of the diseased person in a poor family (I-P1). He suggested that the authorities concerned should consider educating the women and children. In responding to this, the former Director-General of ICMR, Karnataka State, highlighted that the public, especially the ordinary housewives and school students are educated on the type of food which have nutritious value as well as medicinal properties, basic traditional knowledge that is authentic and non-controversial, and provides with up-to-date information on TM (I-M11). Public education can be done through media such as radio, television, and newspapers; workshops, seminars, and short courses; and through charity medical camps and clinics. Particularly, the AYUSH Department has

organised Health Melas such as Arogya, a comprehensive international health fair on AYUSH, to educate the public about preventive medicine, and efficacy of medicinal plants and its products.³⁹⁵ In the Arogya, there are free consultations by experienced practitioners of ISM, free dissemination of educative and informative pamphlets, and exhibitions to display educational material, medicinal plants, products, and equipment for ISM. The same officer was of the opinion that the public should attend and support the above programmes. She also encouraged the community to cooperate with the authorities concerned on compilation of community knowledge of local health traditions and the establishment of museums or libraries on household remedies of ISM. This suggests that the public participate in the professionalisation of ISM.

In addition, the officer encouraged the population in both rural and urban areas to aim for healthy lifestyles (I-M11). To promote life-style modification, five yoga and naturopathy OPDs have been established since 1997 by CCRYN. A yoga practitioner stated that this project has been welcomed by the public in the last 10 years, for example, there are 300 people attending the yoga class in the yoga OPD headquarters, CCRYN, daily (I-P6). The main objective of this yoga class is to create public awareness and take care of the chronic disorders, for example, osteoarthritis and other degenerative chronic illnesses for which modern medicine has failed to offer good outcomes. A practitioner from MAH said that herbal medicine or ISM could benefit the public if it is used properly, especially in the treatment of chronic cases (I-P5).

An Ayurvedic surgeon pointed out that the public is unable to judge who the genuine practitioners are and can be misled and cheated (I-P29). Hence, his colleague stressed that the public should be informed about the availability of the Act and regulations, and who the listed qualified practitioners of ISM are (I-P15). In this way, quacks will not be entertained. Under normal circumstances, action will not be taken without a complaint from the public. An Ayurvedic practitioner

³⁹⁵ MOH & FW, *Annual Report 2006-2007: National Rural Health Mission* (MOH & FW, 2007), 387.

therefore encouraged the public to come forward to report illegal practitioners if they know of them (I-P23). Once there is a complaint, action can be taken to investigate and acted upon according to CCIM procedures. For example, a registered Ayurvedic practitioner stated that an unqualified practitioner in Hubli, Karnataka State, was caught in November 2007 after a complaint had been lodged by the public (I-P27). This unqualified practitioner claimed to be a qualified Ayurvedic practitioner and had prescribed modern medicine to a female patient. The patient had developed anaphylactic shock after receiving the treatment.

5.5 Recommendations to Malaysia

In this subsection, the recommendations provided by India on ISM education and healthcare system are examined.

5.5.1 Experiences in the Establishment of Traditional Medicine Education

According to a policy maker, India is the first country in the world whose parliament has passed regulations on the education and establishment of universities/national institutions as well as research councils for ISM (I-M13). Hence, India with the authenticity and set standards in its education system is a good model for Malaysia to follow for the development and propagation of ISM. A policy maker advised Malaysia to learn the real holistic value of TM from a parent country, for example, ISM from India and TCM from China, since it is well preserved by the masters of TM (I-M1). He has the impression that the holistic value of TM has been suppressed by modern medicine in Malaysia for many years. A senior academic from TC suggested that Malaysia may consider setting up a regulatory body to look into the education of TM, for example, for the approval of the establishment of ISM colleges and for drafting the rules and regulations for education (I-A4). As for establishing the infrastructure of a college or university, Malaysia can refer to the two well-known institutes in Uttar Pradesh, India, namely BHU, Varanasi, for Ayurveda and Aligarh Muslim University, Aligarh, for Unani.

The standard curriculum for ISM could be obtained from CCIM. A policy maker emphasised further that standardisation of education is important and it should not be compromised, for example, the fundamental principles of TM should be taught and learned (I-M3). In responding to this, a senior academic expressed his view that Ayurveda is associated with the law of nature in herbal medicine, and its medical system is based on the constitution of the universe and mainly comprises preventive medicine. (I-A2). Knowledge on herbs, which naturally varies in potency with seasons, cycles of the moon, and time of day, has to be conveyed. He was of the opinion that Malaysia should not mirror India but create its own teaching programme.

Similarly, two thirds of the respondents from the academic group did not recommend a direct adoption of ISM curriculum from India into Malaysia. They advised the Malaysian Government to study the Indian system of education on ISM and consider adopting selectively the good and feasible portions of it based on Malaysian policy, for example, TM practitioners are not allowed to practise modern medicine in Malaysia. A senior academic from the RGUHS pointed out that there are shortfalls in the Indian regulation of the education in ISM (I-A9). In particular, the Indian regulation allows the *Hakim*, the qualified Unani practitioner, with 10 years' clinical experience to become a lecturer. Moreover, the worse part is that they are not trained to give lectures, especially to teach and guide the postgraduate students. He suggested that the Malaysian authorities concerned should develop rules and regulations on TM education which are suitable for traditional practitioners in Malaysia. Strict rules and regulations can minimise the commercialisation of ISM education. He was of the opinion that the development of good courses and curricula are essential for a proper and high quality education system. He also disclosed that Manipal University has a strong medical unit where a teacher orientation programme is available.

A senior academic from TC highlighted that each Indian university offers multi-specialised courses to many colleges and colleges with these different courses are

accordingly affiliated to the particular university (I-A6). In comparison, the Malaysian concept of a university is that of a solo institute that conducts several courses without any college being affiliated to it. This shows that the concept of the university set up is different between India and Malaysia.

A senior academic from TC mentioned that India is willing to assist Malaysia in establishing an ISM university and defining the criteria for admission eligibility (I-A5). India can send experts to Malaysia to teach allopathic doctors or train local ISM practitioners through a close collaboration between the two countries. The professor from MCOPS, Bangalore, stated that collaboration between the two countries could be either government to government or government to NGOs (I-A8). He suggested that the Malaysian Government could identify 10 top Ayurvedic practitioners or researchers in India and then form an advisory board. Subsequently, Malaysia should construct its own TM educational structure based on the advice or suggestions from the experts on the advisory board. He indicated that in order to professionalise ISM, Malaysia should consider producing more qualified practitioners of ISM. In responding to the concerns of the above academics, a policy maker agreed to the establishment of TM units in government hospitals which can be the teaching or training centres; inviting TM experts from parent countries and also scientists to allow education and research to go hand in hand; standardisation of TM education; and registration of TM and ensuring good medical practice (I-M1). The second policy maker stressed that India is willing to share knowledge of ISM with any country in the world, unlike China where, in the respondent's opinion, TCM knowledge is jealously guarded by Chinese practitioners among themselves (I-M3). In particular, a senior officer from AYUSH Department, MOH & FW, stated that under the 'Parachute Scheme', the Indian Government has offered an International Fellowship Programme to foreign nationals for undertaking AYUSH courses in premier institutions in India (I-M8). Students can therefore be sent to India to study ISM. International collaboration of

government to government allows for a continuous exchange of education programmes, regulatory information, technology and even research scientists.³⁹⁶

With regard to the establishment of ISM institutions, the former dean of RGUHS stated that he will undoubtedly support the intention of the Malaysian Government to establish an ISM university in Malaysia (I-A7). He recommended the Malaysian government to adopt preliminary steps to conduct different types of workshops and meetings to promote ISM, and obtain feedback from the public on the establishment of TM institutions and hospitals. The Malaysian Government should consider drafting the ordinances which are required to approve the opening of the ISM colleges and hospitals. Likewise, parliament should appoint an autonomous body referred to as the 'Council' to govern and implement the ordinances promoting ISM colleges in Malaysia which might be subsequently called the Central Council of Traditional Medicine and which would have a close collaboration with the Ministry of Higher Education, Malaysia. He elaborated that for starting a university, a public conference has to be convened in a prominent public place. Moreover, he emphasised that people from all walks of life, including politicians, should be invited to initiate the dialogue and establish a university which could foster the setting up of various medical colleges and hospitals based on the herbal system of medicine (ISM) in Malaysia and could encompass the requirements and needs of the people of Malaysia. Guidelines on handling the administration of such a university and hospitals could be obtained from India to be customised.

It seems obvious that the Indian academics stress on customising the ISM curriculum from India based on Malaysian policy. The pertinent point is to set up a regulatory body for ISM education, and formulate rules and regulations to help in the professionalisation of ISM in Malaysia. National and international collaboration are highly recommended.

³⁹⁶ Nambiar, P., "Tie-up on Indian Traditional Medicine," *New Straits Times*, July 22, 2009.

5.5.2 Experiences in Integrated Medicine

Nine out of fourteen respondents from the policy makers' group supported the establishment of integrated medicine especially in a multi-ethnic country like Malaysia. One respondent mentioned that if Malaysia is serious about integrating TM with modern medicine, recognition of TM should be the preliminary step (I-M2). Following that, based on the Malaysian *National Policy on Traditional and Complementary Medicine*, legislation must be prepared to regulate and monitor the traditional practitioners and their practices. Otherwise, an integrated healthcare system will not be feasible in Malaysia. Holding the same view, his colleague said that Indian guidelines and regulations for practitioners of ISM can be adopted and customised in accordance with Malaysian policy, for example, reference can be made to the CCIM (Central Register of Indian Medicine) Regulations, 1979, and Guidelines for the Registration of Naturopathy Practitioners and Accreditation of Naturopathy Institutions (I-M4). He explained that the Guidelines are well prepared by a group of experts qualified in their respective fields to meet the needs of the present scenario, and approved by CCIM. The senior officer from AYUSH Department, MOH & FW, emphasised strict enforcement following the implementation of the laws (I-M8). This would ensure proper ethics and discipline. Moreover, he stated that periodic evaluation of the laws and regulations is mandatory while periodic evaluation of regulations should allow appropriate amendments. He was of the opinion that laws should be people and system friendly to benefit the public. Two other officers affirmed that practitioners should not be allowed to practise without registration and licensing (I-M11 & 12). Moreover, they stressed that practitioners should practise professionally and ethically.

The former Director of ICMR, Karnataka, advised Malaysia to integrate TM into the mainstream healthcare system in a gradual manner, and not jump into it prematurely (I-M11). She stated that integration should be started from the preventive level of medicine. In particular, the Indian Government has initiated

special schemes, namely 'Treatment-Cum-Propagation Centre Scheme' and 'Patient Care Centre Scheme' in which some yoga and naturopathy centres are selected and funded to serve the public, especially the poor in the rural areas. This is to disseminate the value of TM among the common public especially at the primary healthcare level. Following that, there should be brainstorming of the integrated medicine system by an expert in the particular field of medicine, whether ISM or modern medicine, who explains the strengths of that particular medical system. Finally, she suggested a committee meeting for decision making on the type of healthcare system to be selected. Holding the same view, the President of the Advisory Committee of ISM, who is an experienced Ayurvedic practitioner, suggested establishing Ayurvedic medicine clinics in modern medicine hospitals in the initial stage of integrated medicine (I-P8). Then, an experienced and competent Ayurvedic practitioner be employed to start the practice. A positive outcome will gain the public's acceptance and trust. Gradually, other components of ISM can be introduced into the modern medicine hospitals.

An officer from CCIM mentioned that Malaysia can collaborate with India and China in order to achieve the goal of complete integration of the healthcare system (I-M13). As with the other respondents, the officer from the Planning Commission agreed with Malaysia's move towards integrated medicine (I-M14). However, it is a big challenge to Malaysia especially in breaking through the barrier between allopathic doctors and traditional practitioners. Dispelling the allopathic doctors' fears of competition from traditional practitioners is another barrier to be overcome. Subsequently, the fear of traditional practitioners having their basic knowledge in TM being reorganised by the allopathic doctors is another major concern.

5.6 Summary of the Findings in India

In a final analysis of the findings in India the study identifies that Scott's institutional elements in legal regulations, formal organisations, and cognitions

together with support are all closely tied up in regulating the practice of ISM in India.

What needs to be stressed, however, is further improvement of ISM practice in both the preventive and curative aspects of medicine. Improvement and professionalisation of ISM occur within an organisational structure. Under the IMCC Act, there is the establishment of CCIM, recognition of the qualification, and registration of ISM practitioners. All courses conducted in university approved colleges are recognised by CCIM. Only registered practitioners are allowed to practise. Hence, the Act protects practitioners' rights as well as public safety. Meanwhile, the study also highlights the conflicts and confrontations of regulating ISM practice in India. In particular, the lack of discipline in the regulatory body and the delays to reorganise, as well as the failure of the Indian Government to uphold the value of ISM, instead of increasing its demands. There also exists non-uniformity of regulations and discrepancy in the development of the three streams of ISM which contravene the professionalisation of ISM. In addition, there are special requests for the flexibility of rules and regulations for apprentices for the preservation of traditions without official recognition, and gaps between the higher authorities and practitioners due to poor communication. As Scott's analytic argument states, existence of a rule does not indicate that it is fair especially when competition occurs within the same organisational field.

Under the formal organisation of institutions, the findings in India demonstrate that there are many privately organised professional ISM bodies. AYUSH Department does not have any power over ISM curriculum setting and the drafting of regulations. However, the Department has helped to professionalise and promote ISM, and fight for practitioners' rights and this is in keeping with the main objective of the Act. A pertinent finding of this study is that the Indian Government stresses the development of the AYUSH institutions and hospitals. With regard to integrated medicine, there are ISM clinics or wings established in the modern medicine hospitals, accessibility of essential ISM drugs in primary healthcare

centres' dispensaries, accreditation of courses, and CME. Integrated medicine allows plural therapies under a single roof and inter-disciplinary research. However, there is fear of increasing treatment costs and commercialisation, and interaction among drugs. Based on Scott's concept, the desired medical service is achieved through modification of the education system and infrastructures of hospitals.

It appears that a political will is crucial in contributing towards the actual success of policy and regulation. Following the legal recognition, the authorities concerned uphold the value of ISM by funding its development in education and research, healthcare service provision, drug standardisation and quality control. Presently, integrating ISM into the mainstream healthcare system is emphasised and practitioners of ISM are placed on the same platform as their allopathic counterparts. The experienced masters of TM (without formal qualifications) are invited to share their clinical experiences with the institutionally qualified practitioners of ISM. Similarly, the allopathic fraternity groups are requested to evaluate ISM scientifically together with ISM practitioners and professionalise the traditions. This is because ISM is time tested although without adequate scientific data. One of the recommendations might well be to study how to standardise the herbal components in the RCT studies. Two groups of professionals might consider sharing the knowledge and understanding that subjective evaluation is essential under certain circumstances instead of a laboratory evaluation. Otherwise, TM research could easily fail. Identifying the fact that each of the communities has their own common beliefs and cultures, they are encouraged to share their cultural beliefs with qualified practitioners, attend public education sessions, and lodge complaints on illegal practices or malpractices. In accordance with Scott's analytic argument, common culture, experience, and views are believed and shared within the community.

The implementation of the Act and the enforcement mechanism on the practice of TM are applicable to countries that have a well structured system for TM. Prior to this, it would seem a necessary step for Malaysia to recognise TM officially, modify

rules and regulations based on the country's healthcare policy on TM, gain public support, collaborate with professional bodies to professionalise TM, and establish international collaboration. This is because complete institutions necessitate the coalition of all three elements: regulative, normative, and cultural-cognitive elements. Finally, it would seem appropriate for Malaysia to initiate integration of TM into the mainstream healthcare system in a gradual manner.



A Chinese medicine practitioner applies acupuncture over the lower part of the neck of a female patient in a charity activity in Bukit Mertajam, Malaysia. This charitable clinic is organised by a religious society (宗教慈善团体) known as 'Bukit Mertajam Moral Uplifting Society' (大山脚德教会). (Photo courtesy of E.L. Sim)

Chapter 6

ANALYSIS OF THE FINDINGS IN MALAYSIA

6.1 Introduction

Chapter 6 reviews the analysis of the data collected in Malaysia, and as with the previous chapters it incorporates findings gleaned from published materials. The analysis is, again, based on Scott's organisational ideas. The potential obstacles in regulating traditional practitioners in Malaysia are examined prior to summing up the analysis on data collected in Malaysia.

6.2 Legal Regulations

As in the earlier case, governance is identified as one of the tools used to monitor TM practice.

WHO is aware of the important role of policy in TM practice by introducing rules and regulations to monitor the profession of TM. Hence, WHO encourages and assists all its member countries to formulate their respective national policies. The MOH of Malaysia has also taken a positive and proactive approach in drafting and formulating the national policy for T&CM. All nine respondents from the policy-makers' focus group acknowledged the existence of the *National Policy on Traditional and Complementary Medicine* and its launch in the year 2001.³⁹⁷

The *National Policy* dictates that registration of all T&CM practitioners is seen as necessary to ensure safe practice. While a majority of the 'registered' Chinese practitioners were uncertain about the exact percentage of unregistered traditional Chinese practitioners in Malaysia, the 'registered' Indian practitioners claimed that

³⁹⁷ The second edition was printed in 2007. It can be obtained from the T&CM Division, MOH. The electronic source could be obtained from the Global Information Hub on Integrated Medicine (GLOBinMED) or the website of the T&CM Division. See <http://www.globinmed.com/IMRContent/aboutUs.aspx> (accessed January 6, 2009).

unregistered Indian practitioners could be in the range of 50-60%.³⁹⁸ A senior executive officer of MCMA, who is also a senior TCM practitioner, noted, “it is very difficult to estimate the exact number of unregistered practitioners since many of them refuse to register in the absence of a valid university degree” (M-P10). A senior executive officer of MATIM confirmed that without paper qualifications a majority of them were reluctant to register (M-P17). Their inferiority complex made them reluctant to come forward as they feared being prosecuted by the authorities.

The information provided by the registered practitioners’ on the question of the percentage of unregistered practitioners in Malaysia suggests that even though there are many unregistered traditional practitioners scattered all over the country, they continued to provide service to their communities. From my observations, the uncertainty of the number of unregistered traditional Chinese practitioners among the Chinese practitioners could also be due to the absence of unity and collaboration among themselves. There are three Chinese associations that register their own members respectively; some of their members even have ‘dual registrations’.³⁹⁹ Hence, some of the unethical or unqualified Chinese practitioners manage to evade registration. On the other hand, Indian practitioners have to register themselves with their single practitioners’ association.

In order to establish total control over the registration of all the traditional practitioners, the T&CM Bill has been drafted. All nine respondents from the policy-makers’ group were aware that once the Act is in place, the T&CM Council, chaired by the Director-General of Health, will be established. It comprises 20 members from the following agencies: the T&CM Division, the MMC, the

³⁹⁸ The registered practitioners are the practitioners who have registered with their respective practitioner bodies such as FCPMDAM, FCPAAM, and MCMA for Chinese group of practitioners; and the MATIM for the Indian group of practitioners.

³⁹⁹ Prior to the disbanding of the Umbrella Bodies by the Health Minister, Datuk Dr Chua Soi Lek in July 2004, there was only one Chinese body, FCPMDAM, which was recognised as representative of genuine TCM practitioners in Malaysia. All Chinese practitioners have to register with FCPMDAM. Following its disbanding, two more Chinese associations were established and formally recognised as practitioner bodies. They are the MCMA and the FCPAAM. The members in MCMA or FCPAAM might have registered with FCPMDAM earlier.

Pharmaceutical Division, public industry, T&CM practitioner bodies, and the local community. The officer from HMRC remarked that the MOH is predominant among all the committees in the Council, but the regulation of T&CM practitioners cannot be handled by the allopathic personnel since they do not understand the subject matter of T&CM and this can lead to prejudice and bias (M-M8). An officer from the T&CM Division explained that the Council acts as an advisory agency to the Minister of Health in matters pertaining to T&CM (M-M5). All future policies of T&CM are formulated at this Council. The senior officer from MOH stated that the main agency in the administration and implementation of the Act is the Council and the T&CM Division, MOH, respectively (M-M7). He highlighted that the Council will take over the roles of practitioner bodies such as developing the registration criteria and registering the practising practitioners (M-M7). However, he stressed that the Council will delegate some of its functions when practitioner bodies are certified to be professionalised and able to take up the regulatory role. In particular, these functions include, issuing annual practising certificates to registered practitioners; specifying a mechanism for complaints by the public; and developing the rules of referral patients to allopathic colleagues. He further explained that the T&CM Division carries out training, develops regulation, carries out enforcement and research of practices (research of product is by the Institute for Medical Research (IMR) and Universities), and other activities related to T&CM.

It appears that the respondents had somewhat differing views about which body administers the Act. All these respondents are drafters of the Bill. Although they are familiar with the Bill, they presented differing views on it. How can the T&CM profession be expected to understand and comply if the drafters themselves are unclear about the Bill? This suggests one implication at least: the need for clear explanation in Chinese, Tamil and Malay language versions of the Act. Also, a team of officers should embark on a road show to meet and explain to the training institutes and members of associations about the Act. An ongoing process of communication of the details of the Act related to the profession, and conveyed to

the public is important so that they know how to select a practitioner based on their official status.

In order to clarify the above contradictory views, the Deputy Director-General of Health (Research and Technical), Datuk Ir. Dr. Mukundan Sugunan Pillay, was contacted by email on January 8, 2009. Datuk Pillay is the chairperson for the committee drafting the Bill. According to his response, the T&CM Council, like the MMC, is the highest body that makes policies and decides on how they should be implemented. Once decisions are made, the T&CM Division will implement these decisions in a way similar to the functions of the MMC Secretariat. The senior officer from the HMRC also clarified that the T&CM Division will act as the Secretariat for the T&CM Council. In short, the Council is the policy making body and also the highest body for the administration of the Act, while the T&CM Division is the implementing agency. The Division assists the Council in carrying out its functions under the Act.

Based on the views of the senior officer from the MOH, the contents of the Act can be listed out as follows:

- Definition of registered practitioners and their qualifications
- Definition of continued professional development
- Definition of the recognised areas and the scope of practice
- Setting standards for the practice of a particular discipline of T&CM
- Definition of enforcement and its implementation (M-M7)

A senior officer from the T&CM Division explained that all practitioners are required to register with the T&CM Council (M-M1). The registration of practitioners includes registration of the practitioners' qualifications, modality (field of practice) and the premises for practice. Registered practitioners are required to submit and renew their certificates of practice annually.

The same respondent acknowledged that by the end of 2008, online registration services would be available.⁴⁰⁰ Online registration is meant to be voluntary. This voluntary online registration started prior to the gazetting of the T&CM Act. This could cause confusion to the traditional practitioners and lead to a repetition in registration (dual or triple registration). Currently, the registration of traditional practitioners is still being handled by the respective practitioner bodies. Traditional practitioners who are computer illiterate will not comprehend the details of the site and the objective of the registration. They will also wonder if they have to re-register themselves with the T&CM Division even if they have registered with the practitioner bodies. They may begin to doubt the validity of their registration with the respective practitioner bodies. This online registration procedure may keep academically unqualified practitioners from coming forward for registration.

Meanwhile, the same respondent and his colleague affirmed that the law will not stop the traditional practitioners who are trained through apprenticeship, from practising (M-M1 & 5). Both of them explained that under the T&CM Act, the 'Grandfather Clause' and 'Sunset Provision' are adopted to accommodate traditional practitioners who are trained through apprenticeship. In the 'Sunset Provision', the older group of practitioners of 50-55 years old and above are allowed to continue their practice to the end of their lives. They are experienced and skillful practitioners who have practised for more than 20 years, endorsed by the practitioner bodies or any body approved by the T&CM Council. They have been exempted from attending university courses or examinations. However, they have to attend short courses relevant to CPD. The two officers went on to explain that the younger generation who do not have formal qualifications to practise, are taken care of by the 'Grandfather Clause'. The younger generation who are between 30-40 years old, who have learnt their skills from their ancestors or masters, and have experience, will have to attend certain courses or undergo full

⁴⁰⁰ The official launching of online T&CM registration was by the Health Minister of Malaysia, Datuk Liow Tiong Lai on November 4th, 2008 in the 1st Asia-Pacific Traditional and Complementary Medicine Conference 2008. See http://www.moh.gov.my/opencms/export/sites/default/moh/download/Asia_Pacific_Conference_2008new.pdf (accessed December 15, 2008).

structured training as determined by the Council and then sit for examinations. They are given a grace period of possibly three years to get their qualifications, for example, for diplomas in acupuncture, or five years for degree courses. However if they fail to acquire their qualifications within the said period, extensions are possible and the time frame may be lengthened after working closely with the practitioner bodies. The details of the grace period are listed out in the regulations.

From the survey, it seems clear that the law has emphasised on improving and developing TM practice because of concern for public protection and professional development. Moreover, under the 'Grandfather Clause' and 'Sunset Provision', the law accommodates traditional practitioners who are trained through apprenticeship. This is one way to build up the human capital in the TM system in Malaysia.

6.3 Formal Organisations

Under formal organisations, concerns regarding professional bodies, education structure, and integrated healthcare hospitals are addressed.

6.3.1 Formation of the Professional Bodies for Traditional Medicine

In order to achieve the objectives of the National Policy such as to ensure the provision of safe TM practices and its integration into the mainstream healthcare system, five T&CM Umbrella Bodies (PUTRAMAS, FCPMDAM, MATIM, MPHM, and MSCT) were set up in 1999 to regulate the TM practitioners in the country. In 2004, another two Chinese associations, MCMA and FCPAAM, were recognised (table 6.1). Overall, 30% of the registered traditional Chinese practitioners and 60% of the traditional Indian practitioners were satisfied with the self-regulatory system since officers at the management level in the association have knowledge of TM and understand its fundamental principles. The body of associations were of the opinion that traditional practitioners be allowed to practise in their traditional

settings but in a more professional standing. Moreover, these bodies have a set of rules and regulations, constitutional regulations from the association, which are reasonable. The practising certificate is issued annually by the respective practitioner bodies to their members after a thorough assessment. These bodies are under the supervision and monitoring of the government. A senior officer from MOH was quite happy with the system of self-regulation of TM since there is a lack of experts in the field of TM in the ministry machinery (M-M6). This issue was highlighted by an experienced Chinese practitioner, who is also the senior executive officer of the MCMA, as he felt that in the T&CM Division, MOH comprises officers from the allopathic fraternity groups such as allopathic doctors and pharmacists (M-P10). They do not understand the fundamental principles of TCM and this possibly cause conflicts in handling traditional practitioners and their practices. He suggested that the government consider allowing the practitioner bodies to monitor the Chinese practitioners' academic performance, clinical skills expertise, and medical ethics. That is to say, experts in TM or experienced practitioners are required to pave the way towards TM professionalisation.

The only drawback of self-regulation is that it does not have any legal power. As a senior Ayurvedic practitioner who is also the executive officer of the MATIM put it:

As self regulation is governed by the constitutional policy of the practitioners association, regulatory policy as such can be advocated but at the same time there are areas that it can't be enforced without the total empowerment or instruction from the active government (present government) of the day. Hence, there are a lot of grey areas whereby practitioners can choose to flout the requirement of self regulation. Whereas with the empowerment of the governmental endorsement with a Traditional and Complementary Healthcare Practices Act, chances of eluding the regulation would not occur. With being regulated, various policies can be advocated simultaneously with legal rights to upgrade the standards of T&CM in the country. The premises of this practice can be controlled for proper hygienic standards and safety (M-P17).

Understandably, each practitioner body has its own set of rules and regulations. He highlighted that the constitutional rules and regulations of the practitioner bodies may not be complied with by their respective members since they are not statutory and unethical practitioners cannot be legally prosecuted. According to the

statements made by the other respondents, traditional practitioners, who seem to be without a unified voice among them, would negatively affect the development of TM. As a senior Chinese practitioner remarked that self-regulation is good if every practitioner follows the rules and regulations of the practitioner body and if it is not based on individual preferences or benefits (M-P8).

It seems clear that some practitioners still wish to maintain the system of self-regulation. Self-regulation allows flexibility and better level of commitment within the TM profession as well as in the utilisation of knowledge and expertise in their field of practice. However, it is less likely to meet statutory objectives and act in the public interest since there are many loopholes within the system. Perhaps the authorities concerned should consider strengthening self-regulation via modifying the *National Policy on Traditional and Complementary Medicine*. A strong National Policy can be used to collaborate with the constitutions of the associations and act as a strong guideline in the implementation of self-regulation by the practitioner bodies. With a well-developed and more firm guideline, the practitioner bodies will be able to impose stronger disciplinary actions against practitioners who practised illegally or unethically. A self-regulation system is essential until the profession of TM in Malaysia is ready for statutory regulation.

Table 6.1: TCM Associations & Privately Organised TCM Colleges in Malaysia

<i>Particulars</i>	<i>FCPMDAM (Federation of Chinese Physicians & Medicine- Dealers Associations of Malaysia)</i>	<i>MCMA (Malaysia Chinese Medical Association)</i>	<i>FCPAAM (Federation of Chinese Physicians & Acupuncturists Associations of Malaysia)</i>
1. Year established	1955	1948	2002
2. No. of years established (colleges)	> 10 years	53 (since 1955)	5-15 years
3. Number of colleges	9	1	11
4. Location	Distributed in most of the states in Malaysia	Kuala Lumpur (Traditional Chinese Medical Institute Malaysia)	4 – Kuala Lumpur 2 – Johor 1 – Selangor 1 – Perak

			1 – Penang 1 – Melaka 1 – Sarawak
5. Sources of funding	Individuals and contribution from FCPMDAM. Charity organisations.	The MCMA. Certain budget from students' tuition fees. Members are voluntary involved in teaching. Charity organisations (中华施诊所) offer centres for clinical training.	Individuals
6. Number of practitioners	2019 (till December 2009)	963 (till December 2009)	2340 (till December 2009)
7. Affiliated University	Guangzhou University of Chinese Medicine (广州中医药大学); Beijing University of Chinese Medicine (北京中医药大学); Shanghai University of Chinese Medicine (上海中医药大学); Nanjing University of Chinese Medicine (南京中医药大学); Chendu University of Chinese Medicine (成都中医药大学); China Academy of Chinese Medical Sciences (中国中医科学院); Heilongjiang University of Chinese Medicine (黑龙江中医药大学); Shamen University of Overseas Education Institute (厦门大学海外教育学院); Tianjin University of Chinese Medicine (天津中医药大学); Shanxi University of Chinese Medicine (陕西中医学院); Fujian University of Chinese Medicine (福建中医学院); TCM Institute in Taiwan (中国医药学院 - 台湾); and Singapore TCM Institute (新加坡中医学院)	Tianjin University of Chinese Medicine (天津中医药大学); and Sandong University of Chinese Medicine (山东中医药大学)	Guangxi University of Chinese Medicine (广西中医药大学); Guangzhou University of Chinese Medicine (广州中医药大学); Jiangxi University of Chinese Medicine (江西中医药大学); Nanjing University of Chinese Medicine (南京中医药大学); and Shandong University of Chinese Medicine (山东中医药大学)

8 . Political Support	In the early days, was supported by a former Health Minister.	Has been supported by some political figures such as the Deputy Minister, Ministry of Higher Education.	Has employed several political personnel as advisers to the Association. They assist in approaching the ministries of relevant departments for resolving issues.
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6.3.2 Universities of Traditional Medicine

In Malaysia, there is a TCM institute, but no traditional Indian medicine institute.⁴⁰¹ The training programmes in TCM are run by private institutions and national TCM associations. The three Chinese associations disagree with each other on various academic concerns, especially on the standards of training and qualifications.⁴⁰² This is secondary to the absence of the standard education system and formal accredited TCM courses in Malaysia. The secretary of the FCPMDAM, Thong Choong Khat, elaborates that practitioners are considered qualified only if they have completed five years of a bachelor's degree course, or approximately two thousand credit hours and then pass the Unified TCM Qualification Examination. The absence of a standard qualification results in creating difficulties in identifying the genuine practitioners and the public could be misled by bogus practitioners.

A Member of Parliament, Datuk Yew Teong Look, who is also the adviser to the FCPAAM hopes that the dispute among the three Chinese practitioner bodies can be resolved soon to standardise the training of TCM in Malaysia for future development.⁴⁰³ He is willing to act as a mediator between the three associations. Recently, the three Chinese associations showed unity by organising a 'Traditional Chinese Medicine's Union Dinner' on August 11, 2008.⁴⁰⁴ The Health Minister, Datuk Liow Tiong Lai, was invited to inaugurate the function. Datuk Liow in his

⁴⁰¹ In Malaysia, the first TCM institute was established on 1/10/1955. It is known as Traditional Chinese Medical Institute Malaysia. See Li, J.L., *The Historical Development of Traditional Chinese Medicine in Malaysia* (Traditional Chinese Medicine Publications, 1996), 55.

⁴⁰² "Standardisation in the Qualification of Traditional Chinese Medicine Practitioners," *Sin Chew Daily*, April 17, 2006.

⁴⁰³ "Yew Teong Look is willing to act as a mediator," *Nanyang Siang Pau*, March 13, 2005.

⁴⁰⁴ "Drafting of the Traditional Chinese Medicine Examination System," *Sin Chew Daily*, August 12, 2008.

opening speech stated, “I am very pleased to see all the members from the three Chinese associations gather in this hall for tonight’s function. This indicates that TCM practitioners in Malaysia are united. All of you should work as a team in developing TCM.” He reiterated that the MOH would like to dedicate the drafting of the TCM qualification examination structure to the three associations in order to have a standard examination system and uniformly recognised qualifications. Datuk Liow further emphasises that it is impossible for the Health Ministry to appoint three Examination Accreditation Boards for TCM; there can only be one such board for Chinese medicine. Hence, unity among all the Chinese practitioners is essential. Five out of a total of fourteen respondents from the academic focus group also pointed out that TCM education and training in Malaysia can be upgraded if there is a single leadership and team work among all the Chinese associations and agreement on a uniform education standard and qualification (M-A4, 8, 10, 12, and 14). Unfortunately, discord among the three Chinese associations still persists.⁴⁰⁵ The main obstacle of unity is the disparity in the training standard during this transitional period. The only solution is to have a common standard for all TCM disciplines and the professionalisation of TM. It seems clear that an open concept in wanting to promote TCM without self-interests is crucial to foster unity among the Chinese practitioners.

TCM education in Malaysia has existed for almost 50 years. It comprises mainly part-time courses and yet covers more than 80% of the TCM syllabus.⁴⁰⁶ It still follows the traditional methods of teaching. A senior faculty member from the Kuala Lumpur Academy of Traditional Chinese Medicine (KLATCM) elaborated that that students are taught the basic theories of different schools of thought and their application (M-A9). The confidence in applying these different theories in the diagnosis of diseases and their treatment is established through practice. Students

⁴⁰⁵ In a telephone conversation with the author on January 6, 2009, advisor of FCPMDAM, Prof Leng Wa Nam revealed that discord among the three Chinese associations still persisted.

⁴⁰⁶ In Malaysia, all the TCM institutes or colleges conduct part-time courses except the TCMIM. This Institute had converted its courses into full-time courses from January 8, 1990. See Li, J.L., *The Historical Development of Traditional Chinese Medicine in Malaysia* (Traditional Chinese Medicine Publications, 1996), 56.

are allowed to think and analyse in a holistic and cautious manner without bias. Another academic emphasised that in Malaysia TCM students are exposed to clinical practice early in their training (M-A4). This helps in the maintenance of traditions and continued development of TCM.

Unfortunately, a majority (ten out of fourteen) of the respondents from the academic group were dissatisfied with the current TCM education and training system, such as in the areas of students' enrolment or lecturers' recruitment and the examination system, since these are not professionalised. As a senior faculty member from the Traditional Chinese Medicine College in North Malaya (TCMC) put it: "The government should help us to establish a standard TCM education system" (M-A2). He further stressed that formal recognition of TM is a preliminary step for TM to move towards professionalisation. In particular, the TCM colleges in Malaysia adopt their TCM syllabus directly from China and affiliate with different universities in China. Another academic said that some students go to TCM universities in China to complete their bachelor's degree in the final academic year without difficulty since they are familiar with its education system (M-A3). In China, these students are mainly taught TCM clinical skills and basic theories of modern medicine. Apart from gaining clinical training, students also wish to obtain a degree qualification since TM education has yet to be recognised in Malaysia.⁴⁰⁷ The same respondent explained that the standards of training and qualification vary in different provincial universities in China. This suggests that accreditation of courses and standardisation of TCM education is necessary.

The issue of giving recognition to courses in T&CM was raised by the former Health Minister, Datuk Dr Chua Soi Lek two years ago who said while officiating at the opening of the Women's Health and Asian Traditional Medicine Conference and Exhibition, "Even the Royal Melbourne Institute of Technology in Australia is

⁴⁰⁷ Updated information - TCM degrees could be obtained in Malaysia upon completing the 4 year TCM course in the INTI University College that started in 2009. See "INTI University College – The First to Offer TCM Degree in Malaysia," <http://www.newinti.edu.my/v2/global/news-events/group-news/inti-university-college-%E2%80%93-the-first-to-offer-traditional-chinese-medicine-degree-in-malaysia/> (accessed August 6, 2009).

offering courses in T&CM. Local universities should look into this.”⁴⁰⁸ The (then) Deputy Minister of the Ministry of Higher Education, Datuk Ong Tee Kiat, stated that following the recognition of the qualifications in the three universities in China, the Ministry of Higher Education will work with MOH to establish a complete module for TM and an accreditation system for evaluating overseas qualification. With regard to this, 60% of the respondents from the academic group were united in the view that the Ministries of Health, and Higher Education, should facilitate the establishment of a system in TM education and come to an agreement on the training system for TM. Recently, the much anticipated news has been received from the Health Minister, Datuk Liow Tiong Lai, that the Malaysian Government is considering recognising two more universities in China, namely GUCM and TUCM, since many Malaysian students have obtained their basic qualifications on TCM from the above two universities.⁴⁰⁹ This proves that the Malaysian authorities concerned may have developed a mechanism to look into the accreditation of education in TM.

In the process of the survey, the matter of accreditation of courses was highlighted by the senior officer from MOH (M-M7). He reiterated that MOH would consider accrediting the foreign universities which seek approval for TM courses in Malaysia, popular universities of TM where many of the graduates are Malaysians, and universities which have affiliated with Malaysian institutes of TM. The standard of the courses are evaluated based on the educational guidelines for T&CM, which have been drafted by the National Accreditation Board in collaboration with the MOH. The officer stressed that this is important as Malaysia only allows students who study at an accredited university of TM to practise once they graduate without taking any qualifying examinations upon their return. In responding to this, the senior officer from the T&CM Division elaborated that the Division has worked together with the MQA in preparing the syllabus for T&CM,⁴¹⁰ and practitioner

⁴⁰⁸ “Move to Regulate Traditional Medicine Courses,” *New Straits Times*, July 29, 2006.

⁴⁰⁹ “Two more Universities to be recognised,” *Sin Chew Daily*, November, 6, 2008.

⁴¹⁰ They had completed 13 syllabuses of which 7 were degree courses (Acupuncture; Traditional Chinese Medicine; Malay; Ayurveda; Homeopathy; Natural Medicine; and Chiropractic) and 6 were

bodies as well as the Ministry of Higher Education in categorising or defining courses at certificate, diploma, and degree levels (M-M1). He further explained that systematic education allows specifying the qualification and years of training or experience of traditional practitioners. A strong trend in the academics' responses implies that instead of part-time courses the authorities concerned should advocate full-time university courses. Then, full-time lecturers have to be employed as per student ratio since the majority of the Chinese academics believe that studying TCM does not only apply to the learning of basic theory but also includes following the masters for clinical training. If there is a necessity, qualified experienced professors or lecturers have to be invited and employed to tutor and guide students so as to enhance the standard of their academic performance and upgrade the level of TCM education.

The Chinese academics are united in their view that establishment of training centres for both students and lecturers is essential for the professionalisation of TM. They suggested the setting up of a TM department in all the government hospitals as this would increase the number of training centres for students. The president of the FCPAAM, Ng Seow Hooi, said that "deficiency of a TCM hospital or clinic is always a major problem in the training of students. We have to depend on the charity organisations. The opportunity for students to practise will increase only if there are charity activities."⁴¹¹ Many charity organisations offer their centres for training TCM students. For example, a senior faculty member of a TCMC stated that "I have worked closely with other charity associations to enable students to be exposed to various clinical cases." He explained that experienced senior traditional practitioners are invited to give lectures and share their clinical experiences (M-A1). Moreover, a small number of the local practitioners also allow students to practise under supervision at their centres. TSH, as a non-profit private

diploma courses (Acupuncture; Malay massage; Islamic medicine; Naturopathy; Aromatherapy; and Reflexology).

⁴¹¹ "Establishment of Traditional Medicine Hospital," *China Press*, February 2, 2005.

hospital, provides clinical training to a limited number of students from the TCMIM who cannot afford to pursue their studies in China.⁴¹²

One quarter of the academics believed that students who study TM in Malaysia are more familiar with local diseases. Once qualified, they are capable of handling the treatment of these diseases more confidently and easily. Climatically, Malaysia is a tropical country and thus different from other countries which experience seasonal changes in climate. As a senior faculty member from the Johor Academic of Traditional Chinese Medicine (JATCM) explained, TCM treatment is based on syndrome differentiation and varies in accordance with the nature and individual body constitutions (M-A3). Hence, treatment and prescription differ from one case to another and become individualised. The familiarity with the country's nature and culture enhances the improvement of TM practice.

One academic pointed out that one of the major challenges in the development of TCM is the training of good, qualified, TM lecturers (M-A1). He mentioned that many local TCM graduates are willing to become lecturers. Unfortunately, they are not trained to be lecturers, owing to the lack of experts and facilities for training. According to a senior faculty member of the TCMC, they will adopt the curriculum from China in the near future with the availability of the existing lecturer training facilities (M-A1). Holding the same view, another academic said, "we are planning to invite professors from TUCM to train our TCM lecturers" (M-A14). On the other hand, the Vice-president of the FCPAAM, Dr Chang Yoon Sang stressed that many of the qualified TCM practitioners, including those who have masters and doctoral degrees refuse to lecture because of the low profit and income.⁴¹³ His view was supported by an academic from the KLATCM, "the majority of them are engaged in a very busy clinic" (M-A9). This may compromise the teaching and the progress of students if they are employed in busy clinics even though they agree

⁴¹² TSH composes of experienced local and foreign TCM practitioners (from BUCM and NUCM). See "Tung Shin Hospital," *China Press*, February 23, 2005.

⁴¹³ "Qualified Practitioners Refuse to Assist Development of Traditional Chinese Medicine," *China Press*, February 2, 2005.

to give lectures. Dr Chang further emphasised that some of the TCM institutes even employ under-qualified practitioners from overseas as lecturers. It is therefore not surprising that foreign lecturers are employed under such circumstances when in fact Malaysia has enough TCM practitioners since there are many students who graduate from TCM colleges annually, for example, 20 graduates from the TCMIM. Perhaps the authorities concerned can consider encouraging them to pursue a masters or a doctoral degree which enables them to become lecturers in the near future. This will overcome the shortage of lecturers and improve the teaching quality of TCM.

Additionally, other institutional infrastructure support such as libraries, laboratories, and other tools for assisting teaching (computers) are required to facilitate the teaching of TM. This was highlighted by 50% of the respondents from the Chinese academic group. An academic stated that government may want to consider providing funds and land for the establishment of TCM universities, hospitals, and other infrastructures (M-A1). He was of the opinion that if possible, the authorities concerned should assist the existing TCM institutions in the process of upgrading them to university level. As a senior academic highlighted, whoever wants to establish a university in Malaysia has to observe certain rules and regulations (M-A13). Otherwise, in accordance with section 76(2) of the Private Higher Educational Institutions Act 1996, they risk a fine of MYR200,000 (Malaysian Ringgit) or imprisonment of up to two years or both.⁴¹⁴

Good infrastructure facilitates professionalisation of TM and integrated education. The senior officer from the T&CM Division, who had visited the authorities concerned with TM education in China two years ago, stated that Malaysia might consider adopting the integrated medicine education system in China and customising it (M-M1). More than 90% of the respondents from the Chinese academic group agreed to the introduction of modern medicine in the

⁴¹⁴ Legal Research Board, ed., *Private Higher Educational Institutions Act 1996 (Act 555) and Regulations* (International Law Book Services, 2007), 58.

undergraduate curriculum of TM. However, a senior faculty member of the JATCM expressed his view that “Malaysia can adopt the education system directly from China if the Malaysian Government could allow the existence of integrated doctors in government hospitals like the hospitals in China” (M-A3). Unfortunately, TM practitioners in Malaysia are prohibited from practising modern medicine and vice-versa.⁴¹⁵ Hence, he was of the opinion that the authorities concerned should modify the education system in accordance with the demands and policies of our country. The understanding of integration among the respondents was the combination of knowledge in the usage of new technology in the physiology of modern medicine and the human body structure in anatomy, and treatment based on TM. With that, an integrated system combining modern diagnostic methods and TM treatment is established. It can be said that in order to successfully conduct courses in integrated medicine of TCM education, either the adopted Chinese integrated education system has to be customised or Malaysia’s policies and regulations have to be reformed.

A Chinese academic expressed his view that knowledge of modern medicine allows TCM students to open their minds to the pharmacopoeia of both the systems of medicine (M-A13). That is to say, integrated practitioners who know the pharmacopoeia in both systems can minimise the risk of herb-drug interaction. Equally, both sets of professionals are trained in the use of existing databases to make this determination. They become more confident in their ability to manage patients who come for a second opinion. In addition, registered qualified traditional practitioners can work in government sectors.

Nevertheless, in the minds of TCM academics, there is anxiety about the possibility of bias and neglect of TCM which may end up in it losing its structure. In particular, the basic principles of treatment in TCM may not be compatible with the diagnosis of modern medicine. As a senior faculty member from the JATCM

⁴¹⁵ The Director-General of Health, Malaysia, Tan Sri Dr Ismail Merican, has announced that “medical doctors practising conventional medicine cannot practise traditional and complementary medicine.” See “Why the Sudden Turnaround of T/CM Practice?” *The Star*, May, 2008.

stressed, occasionally, one or two components of the decoction formula considered as toxic in modern medicine may be possibly removed to synchronise with modern medicine treatment (M-A3). He further explained that the toxic content of the material renders it harmless when it is concocted in a multi-formulation. Understandably, the toxic effect of the component gets neutralised by other components and ultimately is efficient in treating patients. The removal of certain components of such a formula reduces its efficacy or renders it totally ineffective. Ultimately, modern medical treatment is offered instead of TCM. Hence, traditional medical treatment may be rendered ineffective.

Furthermore, Chinese academics have identified several other challenges in conducting integrated education. There is a conflict in the philosophical theory of modern and traditional systems of medicine. The Chinese academic explained that while TM emphasises a holistic approach to the human body based on nature or culture, modern medicine stresses disease treatment based on scientific theory (M-A3). Students may become confused since both the systems of medicine have different basic theories. Based on information from Chinese academics, the authorities concerned in China have begun to change the lecturing sequence in the system of integrated education whereby students are taught TCM fundamental theory and subjects prior to touching on the modern medicine subjects in the first two years to avoid initial conflict and confusion. Hopefully, this method will lead students to think and treat patients in accordance with the fundamental principles of TM. In line with the strategy changes in China after more than 50 years of the integrated education system, Malaysia may need to consider this consequence prior to adopting and implementing the courses in the integrated medicine education system. It can be more challenging or complex in Malaysia especially because Malaysia has a multi-ethnic composition with a mixture of Malays, Chinese, Indians, along with more than 60 indigenous ethnic groups who have their own traditional systems of practice.

A majority of the academics could foresee that some of the fundamental TCM subjects may not be taught in depth due to time constraints. An academic was of the view that the addition of modern medicine has shortened the credit hours for TM and increased students' burden (M-A4), particularly for students who do not have a good foundation in other languages (apart from Mandarin), such as English, and in science. The opinions of the respondents that emerged was that in an integrated medicine education, there should be a proper ratio of both the systems of medicine such as 8:2, and a maximum of up to 7:3 (70% TCM and 30% modern medicine). On top of this, an academic suggested that reorientation courses in biology, chemistry, and other science subjects should be conducted to increase knowledge of science as a pre-requisite for TCM students who are taking modern medicine subjects (M-A4). As another academic put it, with this basic knowledge, TCM practitioners can work together with allopathic professionals in undertaking scientific research (M-A6).

The respondents considered the determined usage of an appropriate medium of instruction as another challenge. Mandarin is the preferred language to tutor TCM students since their familiarity with the language facilitates a good, in-depth understanding of the subjects. The pertinent point is that the core spirit of TCM is based on Chinese culture. Besides, it is very difficult to express the deeper contents of TCM in other languages such as English or Malay. This was elaborated by a senior faculty member from the TCMC who felt that at this moment in time, TCM cannot be fully explained and its knowledge cannot be clearly projected in a different language (M-A2). Moreover, there is a risk of losing valuable inherent knowledge of TCM in the process of translation into other languages. To a large extent, English is the next best medium to teach students/doctors of allopathic medicine about TCM (the introduction portion). They can understand TCM better with the availability of clear explanations. Some terminologies have been interpreted by translators to make the terms clearer and easier to understand compared to the original terminologies. However, it is possible that some of the meaning may be lost in translation. Students of modern

medicine are only able to grasp superficial aspects of TCM knowledge since they do not have a sufficient command of Mandarin to allow them to proceed to a higher level. This suggests that having a command of languages such as Sanskrit, Urdu, and Tamil is essential in Ayurveda, Unani and Siddha courses respectively as well. There had been arguments about the recognition of an appropriate language as the medium of instruction for TCM for years until 2008.⁴¹⁶ Ultimately, MOH agreed and supported the use of the Chinese language as the medium of instruction for TCM.

Overall, the respondents from the TCM academic group were united in their opinion that conducting integrated medicine education is a big challenge. A senior executive of the Chinese Physicians' Association, Johor, who is also a faculty member of the JATCM stated:

Malaysia should not jump into integrated medicine since TCM education is still at an immature stage. TCM may be suppressed by modern medicine without provision for the full maturity of TCM. This is because allopathic doctors will not be able to appreciate the excellence of TCM since they are biased. Even in China, 80% of the TCM students practice modern medicine after graduation. Now, the concerned authorities in China have realised the risk of near extinction of TCM. Government Acts will decide the direction of the healthcare system in a country (M-A4).

Without exception, every respondent from the academic group agreed with the Malaysian Government on the establishment of a local traditional medical university. This would not only allow students to pursue TM education locally, it would also reduce the outflow of Malaysian currency. In order to establish a TM university, it was strongly suggested by a Chinese academic that the T&CM Division should work in collaboration with TM associations which are composed of many experienced TM practitioners (M-A10). Involvement of professional traditional groups helps to avoid bias, especially since the entire administration of the Division is handled by the allopathic fraternity. The holistic aspect of TM philosophy is of utmost importance and in this respect their training should not be

⁴¹⁶ *The Minutes of the Standing Committee of Traditional and Complementary Medicine Bil 2/2008*, August 22, 2008.

compromised or viewed simplistically. An Associate Professor from the KLATCM stated that “too much modification to suit western standards may affect the value of TCM” (M-A7).

There is agreement among the respondents that the Malaysian Government should design a proper plan for the establishment of a TM university. This was further emphasised by a senior faculty member of the TCMC, “Malaysia should not engage in overnight conclusions” (M-A2). Possibly, the government can allow the existing TCM colleges to work in collaboration with other colleges recognised by the MQA, as this can fast track and enhance the development of TCM education. He further emphasised that TM education in Malaysia should focus mainly on TM subjects. Upon graduation, students should be allowed to practice in government hospitals or establish their own private practices. Because of limited funds, the authorities concerned can consider introducing TCM courses in existing universities. Moreover, the TM universities in Malaysia can affiliate with universities in China, India or other countries. With this international level of collaboration, experts could be sent to Malaysia to share their experience with the local lecturers. This was noted by one faculty member from the KLATCM (M-A7).

The Chinese academics took the view that under a well-designed plan, Malaysia has great potential to become the global centre for the practice of T&CM because it is composed of TCM, ISM, Malay medicine, complementary medicine, and homeopathy. All these practices are already available in Malaysia. In the opinion of an academic, with proper development and inter-transference of knowledge, TM can be developed and popularised (M-A6). Hence, a senior officer from the MOH remarked that Malaysia should be the model for training for the rest of the world (M-M7).

It may be observed that TCM education does not have a standard curriculum, but there are many colleges in Malaysia. On the other hand, ISM now has a standard curriculum although there are no colleges. The fact that a standard curriculum for

Ayurveda and Unani is available means that standardisation already exists prior to setting up colleges, thereby overcoming the obstacles of agreement on curriculum such as those now being faced in the TCM sector. The process of achieving approval for the acceptance of the Ayurveda curriculum has been described in the literature review chapter of this thesis (under the section 'Literature on Work Done in Malaysia'). In the email correspondence with the president of MATIM, Dato' Dr Dorai Raja on the successful accreditation of the Ayurveda and Unani syllabuses, he explained that right from the first stage, accreditation is initiated with the committee members of MATIM. Since they have a positive and common understanding that the syllabus will open new frontiers in the professionalisation of Ayurveda in Malaysia, the committee members of MATIM give the required support to the president to proceed. The president makes arrangements with the AYUSH Department, New Delhi for an appointment with the director of Ayurveda and Siddha medicine. In the meeting, he makes a formal request for support in creating an Ayurveda syllabus for Malaysia. On the subsequent visits, he meets and has ongoing dialogue with various Deans of government-run Ayurveda universities and colleges to obtain a draft syllabus on Ayurveda and Unani. After having studied the contents, a draft syllabus of Ayurveda for Malaysians is drafted by him. This is sent to the Director of the AYUSH Department for his comments. The finalised draft is presented at the MATIM committee meeting. The committee members then approve the proposed syllabus.

At the next stage, the director of the T&CM Division is informed that the draft is ready for deliberation. The Division acknowledges and invites a working committee comprising professionals from various government agencies, including seven professionals from the Ayurveda fraternity. During the workshop various issues are raised with regard to credit hours and the use of Sanskrit as part of the teaching medium in the module. The use of the Sanskrit language is opposed by the members of the Division. Dr Raja, together with the other Ayurveda practitioners, express the opinion that it is of the utmost necessity as a lot of terms are still in Sanskrit and hence it is an essential tool required to study Ayurveda. After a series

of dialogues, it is finally agreed by the committee to have Sanskrit as part of the syllabus. Dr Raja acknowledges that in order to have a concrete syllabus one needed to work with the foreign government departments which are the authorities in such subjects. In order to successfully complete the programme and gain local support it is essential that the personnel involved in the preparation of the syllabus need to collaborate, think and speak with one voice. He was of the opinion that the Chinese colleagues should liaise with the higher authorities in China, the SATCM, Beijing. Next, three Chinese associations/groups should agree and have a common understanding on the syllabus. The three groups working with three academic authorities in China have produced various views which have led to different opinions over the TCM syllabus. Due to these differences, it has raised an element of confusion with the T&CM Division to the effect that even the Mandarin language which is a very important component of the TCM syllabus, is discouraged from being used. Dr Raja finally says that they should work as a single group so as to have a unified platform to propagate TCM successfully in Malaysia.

6.3.3 Integrated Healthcare Hospitals

The project of integration of TM into mainstream medicine has been continually promoted by Datuk Dr Chua Soi Lek who was Minister of Health, Malaysia in 2004. In order to have a better understanding of integrated medicine, Datuk Dr Chua visited TSH.⁴¹⁷ During the visit, Datuk Dr Chua mentioned that the plan for the establishment of an integrated hospital had been discussed in the meeting for the 9th Malaysian Plan. Prior to the establishment of an integrated hospital, several issues have to be taken into serious consideration: the provision of services in an integrated hospital; qualifications of the traditional practitioners; legislation; insurance; the employment of foreign practitioners; ethics of practitioners and so on. Again, the Health Minister stressed that the government has upheld the value of TM since both the modern and traditional medicine systems complement each

⁴¹⁷ "The Availability of Integrated Medicine in Three Hospitals," *Sin Chew Daily*, August 13, 2005.

other. Pilot projects for integrated medicine would be carried out in three public hospitals, namely Kepala Batas Hospital (KBH) in Penang, Putrajaya Hospital in the Federal territory, and Sultan Ismail Hospital in Johor. Upon the success of these pilot projects, it is the intention of the MOH to extend these services to other public hospitals. During the inspectorate's visit of the T&CM Unit in KBH, the Parliamentary Secretary of MOH, Dato' Lee Kah Choon, disclosed that MYR1.80 million is allocated to the development of TM and its integration into mainstream healthcare system in Malaysia.⁴¹⁸

The former Prime Minister of Malaysia, the Honourable Dato' Seri Abdullah Haji Ahmad Badawi, noted, "it is timely for T&CM to be optimally integrated into the Malaysian healthcare system."⁴¹⁹ He launched the first T&CM Unit in KBH. In this hospital, TM is practised along with the modern medicine. A senior officer from the MMC stated that traditional practitioners, who possessed the pre-requisite qualifications as stipulated by legally constituted governing bodies, are allowed to practise side by side with the allopathic physicians (M-M3). However, caution has to be exercised to ensure that there is no infringement by the traditional practitioners into the practice of allopathic doctors. The senior officer from the T&CM Division, who attended the above event, mentioned that the authorities concerned wish to introduce T&CM services in government hospitals of other states in the near future (M-M1). Then, T&CM branches will be established in the respective states to monitor the progress of integrated medicine. This would involve devolution of authority from the Federal to the State levels. The senior officer from MOH stated that the power of enforcement and surveillance will be delegated to the State levels once the Act is in place (M-M7). Moreover, in the Budget for 2009, the government announced that tax exemption is given to those

⁴¹⁸ "Provision of the Traditional Medicine Services in Three Public Hospitals," *Sin Chew Daily* (North Malaysia), July 8, 2006.

⁴¹⁹ "Kepala Batas Hospital first to integrate traditional and modern medicine," *The Star*, July 18, 2007.

who have incurred expenses on TM treatments such as acupuncture and Ayurvedic treatment.⁴²⁰

A full integration is possible with the high level of mutual understanding, knowledge and openness. A senior officer from the MOH, who has a very high expectation of TM, stated:

TM should function alongside modern medicine. Allopathic doctors should enhance the knowledge on T&CM and become familiar with it. The doctors should be able to decide the most suitable approach for patients, be it modern medicine or T&CM. T&CM practitioners should know their limitations and refer patients to a hospital if there was an indication of an emergency. For any ailment, the best approach in management should be decided and agreed upon by both allopathic doctors and T&CM practitioners (M-M7).

The same respondent remarked that patients are able to get guidelines on which hospital and doctor they can consult by surfing through the relevant websites, and through networking among T&CM centres, preferably in a hospital setting, as choices for the public. Hence, he emphasised that integration is possible only through education, knowledge sharing, and ensuring scientifically proven T&CM practices. Similarly, the majority of respondents from the policy-makers category (66%) expressed their understanding of integrated medicine as evidence-based medicine, which is offered based on patients' choices and best interests. Both TM and modern medicine should complement each other.

On the other hand, an officer from the MMC expressed the opinion that at this juncture, perhaps integrated medicine is not applicable in Malaysia. Instead of integrated medicine, 'cooperative medicine' is more appropriate (M-M2). He agreed to a discussion between allopathic physicians and traditional practitioners after seeing a patient, before making a conclusion or decision on the treatment. However, he did not agree with cross referrals across the systems. There has been a tendency for negligence since traditional practitioners are not enquired to check the types of drugs patients consumed and vice versa. This increases the

⁴²⁰ "Benefits for Employees," *The Star*, August 30, 2008.

risk of drug interaction. In brief, integration should be a matter for discussion. It is still a long way before Malaysia can move on to a system of total integrated medicine.

The Chinese academics pointed out that total integration is impossible at present since TM and modern medicine are different in terms of basic theory. They were of the opinion that TCM focuses on a holistic aspect whereas modern medicine focuses on the specific body parts; or that TCM treats the origin of the disease but modern medicine, in the TCM view, treats only the symptoms of the disease. TCM diagnosis is subjective, potentially un-repeatable by a third party, qualitative and subjective, and not objectively measurable, hence diagnosis is often inconsistent. A newly graduated Chinese practitioner added that most of the diseases are diagnosed through the basic diagnostic principle of TCM, namely detailed history taking, listening, inspection, and palpation (M-P5). Then, treatment is given based on patients' constitutions. In most of the occasions, TCM practitioners examine and treat patients based on their collective experiences and perceptions. Moreover, it is impossible to deal with the decoction formulas by computer since the formulas are never in a standard format. Perhaps with both systems complementing each other, there is a higher chance of acknowledging medical needs since both systems of medicine have the common objective of looking after human health.

Half the number of the registered traditional practitioners claimed that the incorporation of scientific technology into TM practice alters the origin and nature of TCM. A senior traditional Chinese practitioner from TSH commented that TCM itself is a science and modern technology should not be used to analyse it (M-P11). In particular, TCM has succeeded in treating and controlling the epidemic of infectious encephalitis B in the region of Shi Jia Zhuan (石家庄流行性乙型脑膜炎) in China, which could not be treated and controlled by modern medicine.⁴²¹ This view was further supported by an Ayurvedic practitioner who holds a senior

⁴²¹ Kong, F.H., "Present Chinese Medicine Practitioners Should Enhance the Development of Traditional Chinese Medicine," *Guangming Journal of Chinese Medicine* 23(4) (2008): 526-528, 527.

executive post in the MATIM (M-P17). He stated that at present, a total incorporation with scientific technology in the diagnosis and therapeutic aspects of traditional medicine is impossible if the concept of holistic approach wishes to be maintained. He explained that only when this holistic approach of their methods can be translated into scientific methodology without altering the curative origin of TM, could a total incorporation be achieved without losing the original value. This holistic value may be preserved as the essential part of the efficacy, as all practitioners have the responsibility to provide the best diagnostic and therapeutic methods to their patients. He emphasised that this does not mean that they should neglect the traditional methods.

Understandably, traditional practitioners interpreted integrated medicine as a system of medicine comprising modern investigative and diagnostic methods together with the most appropriate treatment method opted for, whether it be modern medicine or TM at this point in time. There is a long way to go before total integration can be achieved. Integration is possible if both the allopathic doctors and TM practitioners see a patient simultaneously, and diagnose and treat the patient based on their system of medicine. Once again, the practitioners stressed that it is essential for both of them to have knowledge of each other's systems of practice and share the same objectives in treating the patient. This would help to avoid any questionable reactions towards the ideal treatment of patients. Total integration is possible if each practitioner possesses the knowledge of both the systems of medicine, traditional and modern. As a Siddha practitioner stated, integration is possible only if there is proper unity between both the systems of medicine (M-P19). That is to say, total integration is possible only with the total combination of knowledge obtained from fundamental levels. Hence, a senior Chinese practitioner from the TSH emphasised that China does not have an integrated system of medicine, but it has a system of modernised TCM (中医现代) (M-P11).

If integration happens, the knowledge of both the systems of medicine, traditional and modern, can be used by practitioners to assess the severity of diseases. A TCM practitioner, also a senior faculty member from KLATCM, offered examples to illustrate the benefits of integrated medicine (M-A 9). In the treatment of oedema, TM practitioners satisfy the resolution of oedema without knowing the underlying aetiologies. Oedema may recur if the underlying cause is not treated. With the help of new investigative methods and technology, diagnosis is further refined. On the other hand, TCM can treat sub-clinical cases which modern medicine fails to address. As a further example, TCM helps to reduce the side effects of first line cancer treatment such as chemotherapy or radiotherapy, and acupuncture helps a stroke patient in rehabilitation. Clearly, there is an increase in the efficacy of treatment if both the TM and modern medicine are to be used to treat a patient simultaneously.

A group of traditional practitioners believed that modern technology increases the accuracy of the traditional diagnosis of diseases. For example, the glucometer is used to monitor the blood sugar level and reconfirms the diagnosis of diabetes. Apart from helping in the diagnostic accuracy, technology also shortens the diagnostic period and further enhances the confidence patients placed on traditional practitioners. The pertinent point is that the risk of misdiagnosis and delays in treatment is avoided or minimised. Moreover, integrated medicine allows safe accessibility to various systems of medicine by the public. Hence, integration fulfils the demands of the society and also helps in the further development of TM. With regard to the alteration of the origin and nature of TM, it will not happen if traditional practitioners maintain and utilise the philosophical thinking practised in TM.

Malaysia, with its good infrastructure in the T&CM unit in public hospitals, can be a hub for integrated health tourism. Registered practitioners' names are placed in a centralised data bank and hosted in a website where the general public can gain access and go for treatment under these practitioners with confidence. The

importance of professionalisation of TM and its beneficial effects was highlighted by the senior Ayurvedic practitioners as well as the executive officer of MATIM (M-P17).

Overall, integrated medicine does have its pros and cons. However, it seems that until today, the definition of integrated medicine is still unclear and ambiguous. Each category of respondents has their own way of defining integrated medicine. The allopathic fraternity groups interpret it as scientifically proven medicine, whereas traditional practitioners consider it as a mixture of two medicine systems with the fundamental philosophical theory of TM as its base. The different interpretations of integrated medicine by the three focus groups are illustrated in table 6.2.

Table 6.2: Different Interpretations of Integrated Medicine by Respondents from Malaysia

Features	Focus Groups	Policy-makers	Academics	Traditional Practitioners
Full partnership with modern medicine		Parallel / Complement	Parallel	Complement
Cross-referrals		+/-	Nil	+
Modern medicine for diagnostic and acute conditions		+	+	
Traditional medicine for preventive and chronic cases		+	+	+
Common consensus on treatment		+	-	+
Option of treatment		Optional	TCM	Optional
Knowledge sharing and exchange		+	+	+
Unity (a person who possesses knowledge of 2 medical systems simultaneously)		Nil	+	+
Basic theory combination		Nil	+	+
Evidence-based medicine		+	+/-	-
Plurality and Easy accessibility		+	Nil	+
Public or patients' interests		+	Nil	+

(In the above table, the symbols + indicates agree, - indicates disagree, and Nil indicates no comment respectively)

6.4 Cognition and Support

The question arises as to whether all the stakeholders have the desire or intention to support the development of TM in Malaysia. Political will does play a significant role in upholding and developing TM. Political will includes the support from the government, academics, traditional practitioners, allopathic doctors, and the public.

6.4.1 Governmental Support

The former Health Minister of Malaysia, Dato' Chua Jui Meng, promoted TM.⁴²² Dato' Chua stated that "the ultimate objective is to cure the patient, regardless of whether it is modern or traditional."⁴²³ Following that, the Malaysian Government became serious in upholding the value of TM. In responding to this, one respondent from the focus group of policy-makers said that within a period of five years, the authorities concerned have demonstrated a significant and earnest intention in setting up the T&CM Division under the auspices of the MOH; made genuine efforts in organising traditional practitioners into their various groups; implemented the introduction of the T&CM Bill; and made the effort to weed out errant practitioners (M-M3).

The Deputy Health Minister of Malaysia, Datuk Dr Abdul Latiff Ahmad, has encouraged the capital development of qualified traditional practitioners in order to face the increasing demand for TCM.⁴²⁴ As an officer from the T&CM Division acknowledged, the government has allocated funds to establish the infrastructure for T&CM in the 9th Malaysian Plan (2006-2010), and T&CM services in all

⁴²² Dato' Chua Jui Meng was the Health Minister in Malaysia from 1995-2004. See "Track Record of Dato' Chua Jui Meng," <http://www.chuajuiheng.com/english/trackrecord.html> (accessed November 24, 2008).

⁴²³ Quek, David, "Traditional Medicine in Hospital....Progress or Regress," <http://www.vadscorner.com/editorial0397.html> (accessed November 24, 2008).

⁴²⁴ "Half of the Population in the World Seek for Traditional Chinese Medicine," *Sin Chew Daily*, August 10, 2005.

'government hospitals with specialisation' in the 10th Malaysian Plan (M-M5).⁴²⁵ Another senior officer from the MOH stressed that even though there was no specific grant or budget for the T&CM Division to set up education facilities under the 9th Malaysian Plan, a certain amount of funds could be extracted from the budget for developing human capital in government service to sponsor an officer from the T&CM Division or government hospital, who wished to educate himself on T&CM (M-M7). This same respondent acknowledged that the government also supports the training of traditional practitioners indirectly by inviting experts from overseas to give lectures, through the Higher Public Learning Institutions or Higher Private Learning Institutions. His colleague stressed the fact that since the government intends to regulate TM and incorporate it into the mainstream healthcare system, funds should definitely be provided to support education in TM (M-M6).

It can be concluded that the Malaysian politicians and the government are very supportive. Public funds are allocated to develop the T&CM Division and support the government officers. But what about supplementing the practitioner bodies which are a collaborative body in the professionalisation of TM? What about supporting graduates in TM so that they can pursue their studies and be provided with assistance to allow them to proceed towards professionalisation? They are the leaders for Malaysian TM in the near future. An officer mentioned that funds are provided to support education in TM (M-M7). Is it just an opinion? Who will they sponsor? Will all these matters be taken into serious consideration if the authorities concerned wish to professionalise TM and integrate it into the mainstream system of medicine in Malaysia?

6.4.2 Traditional Support

⁴²⁵ In Malaysia, the government hospitals with specialisation could indicate that the hospitals comprised several disciplines under the care of respective specialists or consultants directly, such as medicine; paediatrics; obstetrics and gynaecology; surgery and so on. The hospitals with specialisation could be district hospitals, state hospitals, and federal hospitals.

All nine respondents from the policy-makers group agreed to the registration and regulation of traditional practitioners. One officer from the MOH commented that the Act is to check on traditional practitioners and place them in a controlled environment especially in Malaysia, which is a multiethnic society with diverse TM practices (M-M6). The Act ensures proper legal registration, and enforces proper discipline and ethics within the practitioners. In comparison, another senior officer from the MOH expressed his view on regulation by saying:

The aim of regulation is not to catch hold of those unqualified TM practitioners and penalise them. Based on my philosophy, regulation is not for controlling people but for enhancing and promoting particular practice. With regulation, there will be a standard and policy; the practitioners could upgrade their practice to a higher professional level. That is to say, the standard of practice will improve. Regulation should be used as a promotive tool rather than a punitive tool (M-M7).

Furthermore, in responding to the matter of the professionalisation of TM practitioners, a senior officer from the HMRC mentioned that government wishes to give TM practitioners a proper status and recognise their practices legally, provided they are professionalised (M-M8). She was of the opinion that professional traditional practitioners are practitioners who abided by the ethics and the interests of the profession as a whole, and who are not so concerned about monetary or personal interests just like doctors in modern medical practice. This same respondent acknowledged that it is only with the government's recognition that incorporation of TM into mainstream medicine is possible. With this, patients will have more confidence in traditional practitioners and respect their profession. This suggests that regulation of the traditional practitioners can be carried out through persuasion and education, and it is not necessary to do this through the command and control principle, especially if traditional practitioners have a strong belief in their master-student tradition.

Almost every registered traditional practitioner was aware of the government's intent to introduce an Act to register and regulate traditional practitioners. From the reading of the Interim Report of the T&CM Bill, they believed that the Act carries provisions and allows the authorities to prosecute illegal practice, and there will be better control over any illegal establishments of practice. Moreover, the Act also

protects and raises the platform for qualified traditional practitioners. At this moment, traditional practitioners and their practices do not have any legal protection. In particular, one of the junior traditional Chinese practitioners elaborated that traditional practitioners are not protected while performing any invasive procedures such as acu punctures (M-P1). The patient's consent has to be taken prior to any procedure once the Act is in place. In this case, traditional practitioners are protected under the law. All of them gave a positive response to the introduction of the Act as long as it does not restrict the development of TM (both academic and practice) and respects the existence of traditional practitioner bodies. As a Siddha practitioner put it, the Act should not be used to reduce TM practices in the country, since they are just starting to develop (M-P19). He further stressed that the Act must have the provisions to help TM to progress in the country. In line with their obligation to the Act, the government's consideration for practitioners to maintain the origin of their systems of medicine and its development is specially requested by registered traditional practitioners.

Unfortunately, more than 50% of traditional practitioners have yet to register themselves. At this moment, in the absence of legislation to bind the practitioners, they do have the choice of not wanting to register. A senior executive officer of MATIM encouraged registration by issuing the following statement to his colleagues:

If you come forward and register with the relevant practitioner bodies, only then could allow the MOH to look into how to accept and place you in a certain category that may allow you to practice your knowledge with proper regulations so as to protect consumers. The MOH will also look into how to help you to move towards educating yourselves and obtaining the necessary paper qualifications (M-P17).

The same respondent stated that if all traditional practitioners registered themselves with the relevant authorities, they could help to weed out the unqualified practitioners. Hence, Registration therefore, would provide proper protection for the genuine practitioners.

It can be observed that with the implementation of the T&CM Act, professionalisation of TM becomes mandatory. This would include the upgrading of traditional practitioners, both qualified and unqualified, according to a standardised qualification. All 14 Chinese academics commented that apprentices do not have a sound knowledge of basic theory nor that of general modern medicine. They are only competent and specialised in certain clinical skills and aspects which are based on a particular school of thought. They have to learn and broaden their knowledge horizon in a move towards professionalisation and thereby improve TM practice. All 14 respondents also supported the idea of developing refresher or reorientation courses to upgrade apprentices. Unfortunately, the courses are not welcomed by apprentices. A senior faculty member from the JATCM explained that the FCPMDAM had attempted to conduct a 2½-year reorientation course in 2005-2007 for apprentices (M-A3). He felt that among the various reasons behind their rejection are commitment to their practice, time constraints, psychological barriers (feeling of embarrassment), insistence on maintaining only ancestral concepts and thinking (the old traditional practices which may carry a lot of fragmented incorporations of Taoist and Confucianism philosophy from abroad and locally), age factor and a low level of understanding of the language of instruction. An academic from the TCMIM suggested the reorientation courses' committee take the above reasons into serious consideration and ensure that the duration and frequency of courses does not affect their practice, and the manner of conducting the courses should be through knowledge exchange (M-A14). Another senior faculty member from TCMC stressed the fact that every academic and traditional practitioner has to bear the responsibility of maintaining continuity and success of the course once it is initiated (M-A2). That is to say, the existence of enthusiasm in establishing the reorientation courses must be accompanied by sustained, follow-up programmes. Additionally, a Chinese practitioner suggested that a grace period be given to traditional practitioners so that they can adjust to the rules and regulations prior to the full implementation of the Act (M-P8). Otherwise, both the government and the practitioners will suffer if the Act is implemented prematurely.

It is therefore clear that support from all the traditional practitioners including the apprentices, through registration and upgrading of selves, is required to professionalise and promote TM. A continued traditional academic commitment and support is equally mandatory.

6.4.3 Allopathic Support

The allopathic fraternity groups disagreed with the introduction of TM into the mainstream healthcare system even after the announcement of the setting up of a T&CM unit in selected public hospitals.⁴²⁶ The allopathic groups remarked that people should not rely on yet to be scientifically proven TM.⁴²⁷ The same disagreement was voiced by two officers from MOH (M-M2 & 8) during the survey. One of the above officers mentioned that allopathic professionals criticise the MOH for incorporating TM practices into government hospitals without an Act in place (M-M8). Many questions are asked. The questions include ‘what is the measuring tool used in saying that T&CM is evidence-based?’ and ‘how is its efficacy measured?’ And, there is the question of whether the research on acupuncture is scientific or based only on personal observations.

In comparison, a senior officer from the MyIPO agreed with the incorporation of TM into mainstream medicine by stating, “Personally, I think that no matter which system of medicine, modern, traditional, or integrated, as long as it can help or benefit patients, it should be accepted. Patients should be given the choice and offered the best system of medicine” (M-M9). Her view was supported by the senior officer from the HMRC (M-M8). In responding to the pilot projects for integrated medicine, the Director of the T&CM Division, Dr Ramli Bin Abd. Ghani, said “the MOH will amend the Medical Act 1971 in order to accommodate T&CM

⁴²⁶ Malaysian Medical Council, “The Response of the Malaysian Medical Council towards the Ministry of Health’s decision on recognition of the Traditional and Complementary Medicine Services in the Public Hospitals” (Memorandum to the Honourable Health Minister, Kuala Lumpur, April 17, 2008).

⁴²⁷ “Medicine in Malaysia, Today,” in *Pelita Negara*, March 9, 2003.

into the mainstream healthcare system.”⁴²⁸ This was further highlighted by the former Health Minister, Datuk Dr Chua Soi Lek, on his visit to the Hospital Rawang.⁴²⁹

Two-thirds of the respondents from the policy-makers focus group agreed with the fact that support from the allopathic fraternity groups is one of the determining factors for integrated medicine. With the same opinion, 30% of the respondents from the Chinese academic focus group emphasised that the support of the allopathic group of professionals is a must, especially in the aspect of research. This is because only elements of T&CM practice which have been found to be evidentially beneficial should be increasingly integrated into the healthcare system and employed by an allopathic physician. This was stressed by the senior officer from the MMC (M-M3). The officer from the HMRC emphasised that even if they are willing to work with traditional practitioners, it is very difficult, since each of them has their own theories and views (M-M8). With regard to this, the senior officer from the MOH suggested the training of more allopathic doctors so that they know more about T&CM (M-M7).

Based on the view of the Chinese academics, researchers or allopathic professionals should have a clear picture of TCM in order to opt for an appropriate research methodology. These academics explained that TCM is documented medicine and has been in practice for many years. In order to have a better understanding of TCM, academics on TM suggested that one has to have knowledge of the Four Chinese Classics of Medicine, and understand the relationships between nature (the four seasons) and the human body (constitution). In comparison, modern medicine is experimental medicine and has measurable parameters. Hence, they stressed that researchers should not apply the current scientific hierarchical methodology to test TM. They were of the opinion that in hierarchical methodology, an active ingredient is tested to be effective in

⁴²⁸ “Integrated Medicine,” *Nanyang Siang Pau*, April 25, 2006.

⁴²⁹ “Allow the Practice of Safety Traditional Medicine Therapy,” *China Press*, April 29, 2006.

alleviating a certain illness or symptom. The senior faculty member from the KLATCM highlighted the fact that the use of scientific research methodology in undertaking research may extract certain 'high risk' ingredients from the decocted formula (M-A10). For example, 70% of decoction formulas contain liquorice (Radix Glycyrrhiza, 甘草), which contains a natural steroid. If it is to be placed under the lists of prohibited herbs, then many decoction formulas will be affected. Additionally, another academic stressed that the multi-function of the natural herb is altered or lost after purifying and processing (M-A6). For example, gypsum (calcium sulphate, or CaSo₄), is a chemical product which is used to treat fever. Gypsum loses its effect in treating fever after being extracted and processed as calcium sulphate. Another senior faculty member from the KLATCM stressed "TCM research should focus on working in a scientific view so as to measure the efficacy of the system and not to ponder on the tradition of unseen energy" (M-A9).

The Chinese academics were united in the view that the current scientific hierarchical model cannot explain TCM basic theory (treatment varies in accordance with the culture, environment, seasons, and constitution of the patients). Moreover, a big sample study is not applicable in the research of TM. As suggested by an experienced acupuncturist who is also a faculty member of the TCMIM, the best method is the usage of clinical conclusions on the efficacy of TCM treatment (M-A6). With this outcome, scientists can pursue further scientific research. In responding to this, the officer from HMRC mentioned that the public research centre, the IMR of the MOH, is planning to conduct a survey on measuring the quality of life of a small group of selected cancer patients who have received the prescription of TCM along with radiotherapy or chemotherapy (M-M8).⁴³⁰ According to the above acupuncturist, an international college in Malaysia,

⁴³⁰ From the questionnaires on quality of life of cancer patients, the clinical outcome and the survival rate as well as time will be measured and noted before, during, and after the traditional Chinese medicinal products. The clinical trial protocol has been submitted and approval from the ethic committee has been obtained. If possible, this two year project will be started in 2010. This updated information was obtained through personal communication with Dr Zakiah Ismail, the head of the HMRC of IMR at the International Conference on Traditional Indian Systems of Medicine, Kuala Lumpur, Malaysia, on March 2, 2010.

INTI University College, is willing to fund the research in TCM and has also offered to share its research laboratory or facilities (M-A6). This implies that allopathic professionals have opened their doors to welcome TM. The above respondent recommended that Malaysia should collaborate with other countries in terms of capacity building and information exchange such as through government to government exchanges, bilateral programmes, the Association of South East Asian Nation Community (ASEAN community), Organisation of the Islamic Conference (OIC), WHO, and other international bodies (M-M8).

TM practitioners are willing to work with allopathic colleagues to pursue research in TM to prove its scientific worth. A junior Chinese practitioner stated “we look forward to working with allopathic doctors or scientists to conduct research in TCM” (M-P5). This would enable TM to move towards evidence-based medicine in response to the call for professionalisation. An academic explained that “research on TM is required for management of certain diseases such as TCM treatment of cancer patients” (M-A13). However, an acupuncturist in TSH showed serious opposition to scientific research by saying, “Personally, I would like to say that TCM can manage patients well based on its fundamental theory without the support of research” (M-A12).

It is essential for both traditional practitioners and researchers to perform TM research together. The senior officer from the MyIPO explained that traditional knowledge is ancient knowledge (M-M9). It has been passed down from generation to generation. During the process of passing it on, the masters may not have passed down all their knowledge and techniques to their students. Ultimately, some of the healing arts have been lost. Hence, research has to be done and tabulated together with the practitioners. Unfortunately, such collaboration has yet to be realised in Malaysia. Information from an officer of the T&CM Division indicates that that a proposal to involve and consult traditional practitioners while performing research on TM has been drawn up and submitted (M-M5). Additionally, a senior officer of the MOH stated that once the T&CM Act is implemented, funds

will be requested to initiate this collaborative research focussing on both the practice and products of TM (M-M7).

It seems clear that Malaysia lacks research scientists in TM. A pertinent question to be raised in response to the demand for research scientists, is: Does Malaysia really need to do much research on TM? Instead of spending valuable time on research, they can subscribe to good databases of Chinese, Indian and global research on TM and draw on this for reference. This can be achieved through the GLOBinMED.

Apart from conducting research, the allopathic fraternity can help in teaching modern medicine subjects in integrated medicine education if this is preferred. This welcome note was voiced by two academics during the survey (M-A3 & 11). A senior Chinese academic who is also the executive officer of the MCMA acknowledged that since 1970 certain modern medicine subjects in the TCMIM have been taught by qualified allopathic doctors trained in China, Taiwan and Japan (M-A14). These categories of allopathic doctors are Malaysians but unfortunately their qualifications are not recognised by the MMC. Hence, they are not allowed to practise in Malaysia. However, another academic pointed out that the modern medicine lecturers are strongly advised to undergo introductory courses in order to acquire the knowledge of TM and widen their understanding of the teaching methodology (M-A12). He stressed that it will not be a major problem for allopathic doctors who have graduated from China since the TCM study is included in their undergraduate courses (10-20% of credit hours).

6.4.4 Public Support

In Malaysia, access to TM services had not been funded or subsidised by the government prior to the establishment of T&CM unit in public hospitals (under the pilot projects). Realising the plight of out-of-pocket patients as far as payment is

concerned, a senior traditional Chinese practitioner from TSH explained that the charges for the provision of TCM services are reasonable and low in TSH, with the intention of offering charity (M-P11). Specifically, patients have to pay MYR5.00 for each session of acupuncture and MYR2.50 for each formulation of herbal medicine. Patients have to pay more in other hospitals or TCM centres or TCM shops.⁴³¹ Generally the charge is from MYR20.00 onwards per consultation in the majority of the Chinese medicine shops, which is slightly higher than for those seeking the services of allopathic doctors in clinics.⁴³²

Approximately 80% of the respondents from the policy-maker focus group emphasised the importance of public safety through regulation in terms of practices and products since there is a call for consumer protection. Similarly, all the registered traditional practitioners believed that the Act will deter illegal practice and prevent bogus practitioners from cheating the public. The registered traditional practitioners suggested that the public should be educated in selecting genuine qualified practitioners, for example, through advertisements. The public should be provided with adequate information on qualifications and professional records etc. The public should also be encouraged to lodge complaints to the T&CM Division on illegal practices whenever they come across them. Even though patients of traditional practitioners have no legal rights, there is always the common law tort of negligence.⁴³³ The traditional practitioners elaborated that an enforcement team comprising experts in TM be sent to investigate and verify the qualifications of practitioners. They further suggested that the authorities concerned should draft guidelines or a protocol of strict standards and criteria in evaluating all the foreign traditional practitioners. In responding to this, a senior officer from the T&CM Division stated that the drafted Bill addresses this issue of

⁴³¹ In Malaysia, other private hospitals which provide both modern and Chinese traditional medical services are the Lam Wah Ee Hospital in Penang and Putra Hospital (Southern Hospital) in Melaka. See "Many Hospitals are going to Set up TCM Wing," *Sin Chew Daily*, January 9, 2006.

⁴³² "Selling Grocery and Seeing Patients – Overcome the Crisis," *China Press*, February 22, 2005.

⁴³³ In Malaysia, patients of allopathic practitioners (only for private healthcare facilities and services) have legal rights. See the *Private Healthcare Facilities and Services (Private Hospitals and Other Private Healthcare Facilities) Regulations 2006* (Percetakan Nasional Malaysia Berhad, 2006).

controlling an influx of external traditional practitioners (M-M4). This brings the foreign practitioners under control and also minimises the outflow of Malaysian currency. It seems clear that the Malaysian Government cannot take on the responsibility for the patients' decisions. Hence, the public has to be educated and it is strongly recommended that only qualified traditional practitioners who are responsible and answerable to their patients should be consulted.

An academic from KLATCM, who is also a qualified practitioner, expressed his view on public recognition and contribution to the development of TM:

TCM has yet to be recognised by the government. This is a challenge to the TCM practitioners. They are very gratified with the enthusiasm and confidence in TCM among Malaysians. Without it, we believe that TCM will have vanished in a multi-cultural country like Malaysia (M-A11).

This is due to the consistent view within the community in Malaysia that TM is preventive medicine, for example, it can improve immunity and fight influenza A (H1N1),⁴³⁴ but modern medicine is considered as symptomatic medicine.

6.5 Obstacles in Regulation

The potential obstacles in regulating traditional practitioners in Malaysia would exist at all levels – politics, concerned authorities, traditional professional groups, the public and foreign T&CM practitioners themselves. Only one out of the nine respondents from the policy-makers category, a senior officer from the HMRC, pointed out that politics is one of the major obstacles in regulating traditional practitioners in Malaysia (M-M8). This is because many of the unqualified practitioners try to register themselves through political connections. In order to obtain their support, politicians have attempted to assist them in the registration through their use of political power.

⁴³⁴ "Herbal Remedies Helpful," *New Straits Times*, September 26, 2009.

Approximately 80% of the respondents, policy-makers, identified many potential obstacles at the level of management especially on human capital development. Once the Act is in place, the senior officer from the T&CM Division anticipated that there will be a shortage of manpower in regulating almost 13,000 T&CM practitioners in Malaysia (M-M1). There is a high possibility that many unqualified practitioners will claim their practices to be under the category of the 'Grandfather Clause'. A small portion of them may even claim that they have obtained their qualifications from India or China. Verifying their qualifications for registration purposes is one of the difficulties. Another officer from the same Division also anticipated difficulties in setting the criteria to register traditional practitioners (M-M5). Some of these practitioners possessed multiple qualifications such as degrees in other disciplines, and are also qualified as acupuncturists with certificates. In the above scenario, acupuncture licenses cannot be issued to an acupuncturist who is a certificate holder in acupuncture, even though he has a degree in another discipline. There is also the lack of manpower to carry out inspection and enforcement tasks once the Act is implemented. As an officer put it, "there is enormous variation in most of the practices of TM, their educational backgrounds, professional qualifications, and experiences. Under the diversity of the practices in TM, there is a lack of experts in each field of the practice" (M-M3). That is to say, there are insufficient qualified personnel involved to monitor TM practices. The issue that TM practice is very subjective and that even the WIPO finds it difficult to regulate and protect the practices (M-M9), was emphasised by the senior officer from MyIPO.

On the other hand, the registered traditional practitioners were aware of the existence of various organisations representing groups of traditional practitioners with divergent views and perceptions in their practices as well as issues related to regulations. They range from groups of practitioners without any basic knowledge, training, and educational qualifications whose practice has been handed down from their ancestors, to practitioners holding doctoral degrees in their fields. Hence, there is also a marked disparity in terms of their perceptions and reactions towards

the laws and regulations. Certain groups of practitioners do not wish to be regulated. Based on the opinion of a senior officer from the MOH, this reluctance is mainly because they believe that regulating their practice is a strategy by the government to prevent free practice or to obstruct them from practising freely (M-M3). In responding to this, a senior officer from the HMRC stressed that there is a gap between the MOH and traditional practitioners despite the many road shows organised to explain the importance of the forthcoming Act (M-M8). She was of the view that this gap in trust is created by human nature, that is, envy. This is secondary to that of non-standardised qualifications of the traditional practitioners and different intentions or agenda. Many of them consider and think only about the element of self-interest. She also stressed that there are some reservations in the government departments.

The same officer from the HMRC highlighted that the public should look for qualified practitioners. In particular, many foreign practitioners enter Malaysia as visitors under social visit passes, but begin to practise in Malaysia. These groups of foreign practitioners feel that they are more qualified to practise compared to local practitioners. Even if they are genuine, there would be an absence of continuity in the care of patients once they go back to their native countries. She believes that public consultation limited to registered traditional practitioners discourages illegal practice.

6.6 Summary of the Findings in Malaysia

The analysis of this study endorses the views of the Scott's organisational structure of legal regulation, formal-organisation, and cognition together with support in healthcare policy and regulation development.

In order to professionalise the traditional medical profession, and to protect practitioners' rights as well as public safety, the matter of registration and regulating TM practitioners has been taken into serious consideration by the Malaysian authorities concerned. At this point in time, TM practices are still under

voluntary self-regulation whereby traditional practitioners are advised to register with their respective associations and conform to these associations' constitutional rules and regulations. However, many legal problems cannot be addressed by the constitutional regulations of the practitioner bodies, for example, wrong-doing or unethical practitioners can not be legally prosecuted. On the other hand, a certain percentage of traditional practitioners agreed and supported self-regulation since it allows flexibility and is friendlier in its approach. Regulation is being drafted to monitor the TM practitioners and their practices. However, as indicated in Scott's analytic argument, that particular regulation is not necessarily fair, right, or appropriate for a particular group of professionals.

Under the National Policy on T&CM, practitioner bodies are appointed by the MOH to self-regulate their practitioners. However, these professional bodies lack the authority to develop TM in Malaysia. Moreover, Malaysian practitioner bodies have poor collaboration with government. Scott's idea on normative is that what is morally and legally appropriate for professionalising TM practitioners is institutionalised training. Unfortunately, there has been an absence of a uniform curriculum and qualifications for TM in Malaysia, and yet the aim is to move towards integrated education. There are challenges in the process of accreditation of the curriculum of TM, for example, uncertainty about the medium of instruction, lack of clinical training, and upgrading of the existing Chinese institutions. In the analysis, the opinions illustrate that Malaysia is still not ready enough for integrated medicine education. In spite of that, some pilot projects for integrated medicine were carried out in Malaysia at the end of 2007. The outcomes have yet to be ascertained.

Political will is essential to support the development and implementation of healthcare policies and regulations. Recognition and support from the government is the preliminary step in moving towards professionalisation of TM. The political support and setting up of the T&CM Division has shown that the authorities concerned have upheld the value of TM. However, there is an absence of

budgetary allocations for the education in TM, and financial support for the practitioner bodies for developing TM. In order to hasten the process of professionalisation, traditional practitioners are encouraged to register themselves with the respective practitioner bodies and upgrade their knowledge. The awareness and acceptance of training among traditional practitioners will promote the development of TM. Incentives are offered to convince and encourage the practitioners to upgrade themselves. Next, the support and assistance of the allopathic colleagues are very much anticipated, for example, for conducting TM research. Opposition from the modern medical professionals will surely create tension in the political will scenario. Finally, public recognition and contribution are very important for the existence and maintenance of TM practice. Public education is essential to alert the public on the safety of traditional medical practice. Scott's analytic argument on cognition shows that communities take it for granted that local practitioners from their own communities are more reliable and trust-able.

In summary, the main objectives for regulation are public protection, professional development and healthcare development. Safe and good practices can be achieved through comprehensive national healthcare policies and regulations. Regulation should be used to standardise and bring uniformity within all the T&CM systems in the country. T&CM can move towards globalisation with a high degree of professionalism once there is a standardised administration and with the necessary regulations in place. Team work is the stepping stone towards success in the implementation of professionalisation and regulation of TM practice.



A photograph shows one of the Indian national institutes, National Institute of Unani Medicine, Bangalore, India. (*Photo courtesy of C.S.Goh*)

Chapter 7

COMPARATIVE ANALYSIS OF POLICIES: TRENDS AMONG CHINA, INDIA, AND MALAYSIA

7.1 *Introduction*

In each of the case study chapters, namely Chapters 4, 5, and 6, in this thesis, a detailed overview of healthcare policy in the respective territories was provided. This chapter places the collected data and relevant materials from the previous three chapters in a comparative context. First, some prominent themes are addressed and discussed. Next, a comparative study is done on the differences and similarities between China and India, across key issues, namely: political power, legal system, funding, the profession of TM, public health, and healthcare provision and distribution. Thirdly, the Malaysian situation with respect to China and India is analysed and outlined. Finally, the advantages of formulating a comprehensive traditional healthcare policy through studying the Chinese and Indian experiences are discussed.

7.2 *Key Themes*

'Regulation' and 'professionalisation' of TM are identified by a majority of the respondents in this study to have an interchangeable relationship. Generally, 'professionalisation' refers to the efforts by the professional bodies themselves to upgrade standards of their members. The resultant standards of traditional professionalism that the professions develop may be passed to government. This can be requirements and referrals for professional qualifications and practice under law or regulation in the near future. Hence, 'regulation' is government-controlled adherence to professional standards.

Upon examination, three themes are evident across the three traditional healthcare systems of China, India, and Malaysia: regulating practice, establishing/ensuring beneficial effects, and providing support to healthcare.

First, in all cases, there is considerable government commitment in looking at the improvement in the TM practice through policy and regulation. This is secondary to the pressure from politics, allopathic professional groups, and the public. The government is involved in regulation and funding arrangements. Regulation includes registration and licensing, the standardisation of medical education programmes, and accreditation. Professional bodies of TM in the private sector play an active role in regulating the profession of TM in Malaysia since they are still under voluntary self-regulation. However, their role as a regulator has not been successful totally due to internal fragmentation and lack of close collaboration between the professional bodies and the government. In China and India, the professional bodies do not have direct regulatory powers, but they collaborate with the government and assist in the development of TM.

The Chinese health system faces funding inequities between urban and rural areas, for example, in the healthcare insurance system. There is also inequity in the development of TCM and modern medicine in spite of the emphasis on integrated medicine.

The Indian health system also faces similar challenges in funding inequities in the development of the two medical systems, ISM and modern medicine.

The Malaysian Government has considered tax-based health insurance system for TM.

Next, China and India have worked to ensure that traditional healthcare service is accessible to the public, especially in the rural areas, even though the service may not have completely reached all the rural areas. The Chinese Government extends

this service to the poor gradually by subsidising their expenditure on medical care. In India, the government has initiated the move to incorporate ISM into its national health programmes. In comparison, Malaysia has attempted to introduce TM into three public service hospitals, a tertiary setting, without attempting any primary healthcare models of TM delivery. If the pilot projects succeed, access to traditional healthcare can become state-funded services.

The curriculum for the traditional medical education in China and India is formulated and standardised by the SATCM and CCIM respectively. Professional associations help in continued professional education and in the discipline of practitioners. Findings from China suggest that there is close collaboration between the professional associations and the government in developing TCM. Similarly, the Indian Government works together with professional associations and other NGOs to develop ISM. In this way, TM service provision is considered to be authentic and practitioners' reputations can be maintained.

Finally, the analysis of the findings in all the case study regions indicate that TM healthcare policy is greatly influenced by political decisions, pressure from the allopathic fraternity, TM groups with professional enthusiasm, and public preferences. Governments in each of the three countries have stressed different healthcare policies for TM: an integrated system in China, an inclusive system in India, and a tolerant system in Malaysia.⁴³⁵ Historically, Maoist ideology of integration determines the future healthcare policy in China. ISM practitioners have fought for their participation in the national health schemes in India. On the other hand, public demand in Malaysia remains as one of the important forces and influences on traditional and complementary healthcare policy. The opposition from the allopathic fraternity groups can be the challenge in incorporating TM into

⁴³⁵ In the integrated system, TM is "officially recognised and incorporated into all areas of healthcare provision." Next, an inclusive system "recognises TM, but has not yet fully integrated it into all aspects of healthcare, be this healthcare delivery, education and training, or regulation." In countries with a tolerant system, "the national healthcare system is based entirely on allopathic medicine, but some TM practices are tolerated by law." See WHO, *WHO Traditional Medicine Strategy 2002-2005* (WHO, 2002), 8-9.

the mainstream healthcare system in the country with modern medicine as its national healthcare system. In short, the full support of the stakeholders changes and shapes the healthcare policy into a more comprehensive and a friendlier policy, for example, the allopathic professional association - Malaysian Medical Association - can consider organising introductory courses and regular CME in TM.

7.3 *Comparison of Healthcare Policies in China and India*

The key issues that emerged from the responses in the in-depth interviews are political power, legal system, funding, the profession of TM, public health, and healthcare provision and distribution. The comparison and contrast of TM healthcare policies in China and India were carried out surrounding these key issues based on Scott's analytic framework.

7.3.1 Legal Regulations

Legal regulation covers the key issues of political power and the legal system. In China, the will of the National People's Congress is supreme. Under China's fundamental political system, the National People's Congress represents the state power since the power in China belongs to the people of China. The Law was adopted in 1998. In comparison, parliament is the supreme legislative body in India as a democratic country. The IMCC Act was gazetted by parliament in 1970. Both legislations deal with the registration and practice of the medical professionals, and education and examination with the objectives of professionalisation and protection of both the practitioners and the public. The difference between these two legislations is that the Chinese Law governs both the allopathic doctors and TCM practitioners, whereas the IMCC Act is specifically enacted for ISM practitioners. The council is the highest regulatory body in the Chinese Law and the IMCC Act, respectively the State Council of the PRC and the CCIM. However, both the Councils are at quite different levels of governmental authority. The State Council is the very highest level in the Chinese Government

System; whereas the CCIM comes under one branch of Government – namely, the Health Ministry, an important but low power ministry. This may begin to explain the difference in the rapid globalisation of TCM and the less speedy international diffusion of ISM. TCM has top level backing, ISM does not.

The SATCM (1988) and the AYUSH Department (1971) are the departments responsible for implementing TM health policy and regulations in China and India respectively. An official from the SATCM reported that there is devolution of authority from the central to the provincial government (C-M3). Similarly, the senior officer from the AYUSH department, MOH & FW, stated that all the state boards have the power of registration and licensing (I-M8). Thereafter, the name list of the registered traditional practitioners is posted to the central department, and this is updated whenever changes are made. It is clear that political power in both these case study countries is centralised. However, they do not have the same degree of centralisation. In China, central government has higher political status and influence; whereas its Indian counterpart has lower levels of influence and impact. The governments in China and India have the formal capacity to make more rapid policy changes.

With regard to the officials in SATCM and the AYUSH department, SATCM is composed of both TCM practitioners and allopathic doctors, whereas AYUSH department comprises only ISM practitioners. Approximately half the respondents from the TCM practitioners' group were happy with the Chinese health policy. However, the other half of the respondents still preferred experienced TCM personnel to handle TCM affairs. They were of the opinion that many of the allopathic professionals or the so-called TCM regulators have only limited knowledge of TCM. In comparison, almost every ISM practitioner agreed with the current health system regulatory organisation on ISM in India.

Almost 100% of the respondents from the practitioners' group of both the case study countries agreed to being regulated in order to maintain the professionalism

of their profession and protect public interests. Unregistered practitioners, comprising mainly apprentices, practise in remote areas in both the countries. The number of apprentices remains unknown. The main reasons for many of them having evaded the regulations in China and India are similar: lack of qualified practitioners to provide health services in rural areas, weakness and inefficiency of the enforcement teams, irresponsibility on the part of the concerned authorities in assessing the qualifications, poor collaboration between central and state/provincial government, resistance from unqualified practitioners, and community support.

In China, the apprentices have not been recognised by the government since 1962 because of the existence of institutionally qualified TCM practitioners in the mid 20th Century (TCM institutes were established in 1955). With concerns of TCM professionalisation, as well as in light of conserving tradition, the Chinese Government has taken the upgrading of apprentices into serious consideration. Regulation has been drafted and implemented for this category of practitioners. The senior officer from SATCM, Beijing, indicated that the older generation of apprentices are allowed to practise under the 'Grandfather Clause' and the younger generation have to be evaluated or undergo training (C-M6). In comparison, the registration of RMP in India was discontinued in 1970 following the promulgation of the IMCC Act (It is 80 years after institutional education, for example, Tibbia College was established in 1889). Recently, the Indian Government began to show concern over RMP in view of their commitment and maintenance of traditions. As a senior officer from the AYUSH department, FW & MOH, expressed his view, RMP should be allowed to practise in the particular state where they have registered themselves (I-M8). A few respondents from all the three focus groups suggested that RMP should be upgraded and recognised. As for the senior master practitioners, the 'Grandfather Clause' can be applied; however, the younger generation have to go for training and evaluation.

50% of the respondents from the practitioners' group of both the case study countries showed dissatisfaction regarding the regulations. The rules and regulations in China were said to be rigid and unjustified. Every TCM practitioner faces restrictions regarding the registration of their place of practice. TCM practitioners who have been away from their practice for a considerably long period have to undergo the full training and evaluation in order to resume their practices. Such issues are not documented in the Indian regulations. This does not mean that Indian regulations for ISM are perfect. The Indian regulations are not uniform and have lots of uncertainties, for examples, only certain states such as Uttar Pradesh recognises integrated medicine, and only certain states such as Kerala and Karnataka register healers under the same registry board of ISM. This may be due to shortage of experts in the formulation of both healthcare policy and regulation.

Scott's regulative analytic process demonstrates that China and India have constituted formal regulatory system for the activities of TM profession. Under the regulations, all practitioners have to register with the MOH. The illegal practice is discouraged and prohibited. Regulative process contributes to professionalisation of traditional medicine. TM professionals have to abide with the formal rules without necessarily believing that they are fair and appropriate, as illustrated in the above paragraph.

Furthermore, as one of the TCM general practitioners from Guangzhou observed, complete TCM regulation should include regulating and monitoring TCM herbalists, since herbs and herbal products constitute a major role in TM treatment (C-P1). This concern was also raised and stressed by two of the Indian policy makers – herbalists need to be trained and regulated (I-M5 & 6). It is clear that the authorities concerned in both the case study countries have to take this matter into consideration. The regulation of herbalists and medicinal products is not within the scope of this study. This is only highlighted to show that both the case study countries have another similar concern regarding the professionalisation of TM.

A step away from the central government is the professional associations responsible for maintenance of professionalisation of TM. Particularly in China, the professional bodies work closely with SATCM to promote professional ethics amongst the TCM practitioners. In comparison, ISM professional bodies in India have poor collaboration with the government in upholding or promoting standards of professional practice in ISM.

7.3.2 Formal Organisations

This subsection compares and contrasts key issues of TM profession and healthcare provision, including the provision of public health services which are discussed under the subheadings of formation of professional bodies, universities, and integrated healthcare hospitals. The profession of TM addresses the licensing, education and training, quality assurance on training and practice, the salary scale of the TM practitioners, and the establishment of professional bodies by groups of medical professionals.

7.3.2.1 Formation of Professional Bodies for Traditional Medicine

With years of development in TM education in both China and India, many academic associations have come to be established. Most of the academic associations in China are under the supervision of the government, whereas academic associations in India belong to voluntary and non-profit NGOs.

All the academic associations in both the countries are formed by qualified TM practitioners, and hence they are also referred to as professional bodies/associations in this study. Every qualified TCM practitioner has to register with the professional bodies in China, whereas it is not compulsory to do so for every ISM practitioner in India.

The central and provincial professional associations in China have established a close collaboration among themselves. In comparison, the professional associations in India are independent and there is an absence of networking between one association and another, in the different states. Moreover, ISM professional associations are specific in their modalities and locations, for example, Siddha professional bodies are more popular and are more frequently located in the State of Tamil Nadu.

Scott's normative analytic framework indicates that the involvement of professional associations in regulating TM profession is limited in both the case study countries. The main function of TCM professional associations in China is to maintain professionalism of TCM through promoting CME with the incentive of gaining CME points and professional moral support. They work closely with SATCM and obtain its full support. There is a good system of communication and dissemination between SATCM and professional bodies, and hence updated news reaches every practitioner within a short period of time. In India, ISM professional associations are established with the goal of developing and promoting ISM nationally and internationally. Few professional associations consider uniting ISM (Ayurveda, Unani, and Siddha) and establishing integrated medicine as their goals. However, a majority of ISM associations fail to conduct regular training for their members, unlike the scheduled weekly academic training and paper publications by TCM professional bodies in China. Moreover, there is poor communication between the Indian Government and certain ISM professional bodies. The Indian Government provides funds to assist certain associations in developing ISM but does not share the responsibilities with them especially in ensuring matters relating to professional ethics and discipline.

7.3.2.2 Universities of Traditional Medicine

Institutional education in TM in both the case study countries has been established for more than fifty years. All the universities in China are directly under the

supervision of the respective local government, except BUCM which is directly under SATCM. In India, all the recognised ISM colleges and universities are under the supervision of the AYUSH Department.

In China, TM education comprises mainly integrated modern medicine and TCM education in response to its integrated healthcare policy. In comparison, under the parallel healthcare system, ISM education in India is still focussed on ISM, especially on clinical aspects. The ISM courses comprise one to two years of basic biomedical sciences. The duration for fundamental medical courses of both TCM and ISM is almost the same, five years for TCM and 5½ years for ISM. As for the postgraduate course, it is seven years for a combined bachelor's and master's programme for TCM, but an independent three-year master's course for ISM. For both the case study countries, the standard curriculum of TM is prescribed by the central government, SATCM in China, and the department of AYUSH in India.

Additionally, preparatory courses in the Chinese language are organised by most of the TCM universities in China. This is because the medium of instruction for TCM education is Chinese language, whereas Sanskrit (the language of classical Ayurvedic texts) is an optional subject in India. The SATCM requests students who wish to study TCM to have a good command of Mandarin in order to understand classical literature of Chinese medicine and its fundamental principles. Holding the same view as China, an Indian academic stressed that in order to have a better understanding of the fundamental knowledge of ISM, the medium of instruction should be the original language of the texts (I-A9). However, the key difference here is that while Mandarin is still the language of China, Sanskrit has long ceased to be the language of India.

In China, after completing five years of institutional education and a year of internship, TCM practitioners have to pass two national examinations (EQD & EQLD) prior to obtaining their license for practice. In comparison, ISM practitioners are issued with a practising license once they complete one year of internship

following their bachelors' degree and on passing the university board examination. It is not immediately clear here whether the system in China is stronger or weaker than the system in India. Clearly, both countries have their own established education and examination system regarding the training of medical professionals.

The other difference between the two case study countries is that in order to practise in China, TCM practitioners must have acquired the certificate of qualification, the license for practice, and the license for the job position; whereas in India, ISM practitioners are allowed to practise so long as they have their practising licence. It can be argued that China appears to be more bureaucratic, requires more paperwork from more agencies, but does not necessarily require anything more in the professional sense.

Traditional practitioners are encouraged to attend CME in both China and India to maintain professionalisation of TM and to promote its development. CME is a compulsory weekly session for TCM practitioners in China, but is an optional session for ISM practitioners in India. This is because CME attendance is mandatory for practitioners who wish to continue their practice in China, but this is not so in India. Undoubtedly, this CME point represents a real and important difference in the policies of both countries.

Despite having implemented integrated TCM education for more than half a century, China still faces many challenges in this system.

Firstly, the Chinese academics noticed that students failed to understand the holistic approach of TCM since they did not have childhood exposure to traditional Chinese culture. Moreover, integrated education is purely on the teaching of natural sciences and it neglects Asian Chinese medicine. Often, students are tempted to compare modern medicine and TCM, two totally different medical systems, and end up confused.

Secondly, undefined teaching methodology for modern medicine subjects such as statistics in integrated TCM education fails to provide proper guidance for TCM students.

Thirdly, the inappropriate ratio of credit hours between TCM and modern medicine subjects has always been a challenge in the implementation of integrated TCM education. It has become a more serious matter such that it affects the TCM teaching schedule and students' academic performance. As a policy maker pointed out, the addition of modern medicine subjects should not compromise the credit hours of TCM (C-M4).

Fourthly, and certainly not least in importance, the lack of clinical training has led to minimum opportunity in incorporating clinical and theoretical teaching. This is an obstacle to the success of integrated TCM education. Particularly, TCM graduates with their limited TCM knowledge and clinical training, tended to practise modern medicine instead. As a Chinese academic from BUCM indicated, this defies the purpose of integrated TCM education for creating a culture of TCM practitioners of high quality with modern medicine knowledge in order to develop and promote TCM (C-A4). This may be one of the reasons why China requires medical graduates to sit for two national examinations prior to practising since the clinical expertise has to be developed after graduating in supervised clinical practice.

With continued education in pure TM, the ISM education system in India has its problems as well.

Firstly, ISM education is overwhelmed by modern medicine and results in deviation from its goals of developing ISM.

Secondly, the lack of clinical training for students and trained qualified teaching staff are identified as shortcomings in ISM education. Moreover, there is the failure to upgrade facilities for improved infrastructure in teaching technology in most of

the medical colleges. The opening of new colleges and postgraduate courses has been approved even though teaching resources are limited.

This brings us to the third challenge of ISM education in India: weaknesses in regulation. This was clearly illustrated in what the former dean of the RGUHS said:

In order to improve the quality of education in the ISM up to mark, the entire body - CCIM, as an apex body should be dissolved and reconstituted. Then, the dialogue of improving the quality of education in the right direction with this proper prospective and retrospective could be made in a better way. As a consequence, an active apex body comprises of people of high calibre who have an interest in developing ISM is highly recommended. (I-A7)

Discrimination in the development of the elements of ISM (Ayurveda, Unani and Siddha) and the lack of unity in ISM is the fourth challenge in ISM education. A senior academic suggested the setting up of universal education standards for ISM and the omission of religious involvement and monopolies (I-A8). He elaborated that Unani medicine is being widely used and restricted to only the Muslim community. This reflects that Unani is being projected as of Islamic in origin and this deters the development of Unani as a universal medical system. In other words, Unani is a medical system that caters mainly for Muslim patients and not for patients of other races. In that case, Unani medical system will not be fully utilised nationally and internationally as it will be a confined system per say.

Increased student intake and insufficient clinical training is a common challenge in both the case study countries. In ancient times, traditional practitioners were trained through apprenticeship education, known as 'Shi Dai Tu System' in China and the 'Guru-Shishya System' in India. Realising this fact, the Chinese authorities concerned have taken immediate action to address the issue. Chinese universities establish their own hospitals to accommodate more students in clinical training, and re-implement the apprenticeship system of clinical training. Moreover, to enable continued clinical training, the 'Hui Lu' strategy is introduced and a three-yearly 'TCM experts' training programme' is organised by SATCM. Recently, the essentials of clinical based education have drawn the attention of the Indian

Government; a one-year clinical training course for Ayurvedic graduates to enhance their clinical skills has been implemented.

Both China and India face similar difficulties in defining a uniform TM research methodology, as disease diagnosis and treatment in TM is based on nature and the environment, patients' constitutions, and practitioners' judgements. Many traditional practitioners still lay claims to effective family formulations. Additionally, insufficient human research capital and funding and poor international collaboration have contributed to the list of challenges for research in TM. The hierarchical research methodology of modern medicine is not suitable for TM research. Basically, isolation of a single active ingredient as the marker chemical for standardisation is still a big challenge for TM researchers. Moreover, under certain circumstances such as self-limiting diseases, subjective evaluation is required rather than general laboratory evaluation. Currently, clinical epidemiology is adopted in TM research in both the countries.

With regard to the upgrading of TCM apprentices to professionalise TCM, China has taken early and active steps to address it. The preservation of Chinese traditions further stresses its necessity. For example, GAMH attempted to develop short and flexible refresher or reorientation courses. However, due to a poor command of academic understanding, the courses have been discontinued. The CME for apprentices has yet to reach the remote areas of China. In comparison, the Indian Government has just started to show their initiative in upgrading ISM apprentices. The apprentices are funded for institutional training. The Indian Government has also approved the setting up of separate institutions in states which have many folk traditions such as Arunachal Pradesh.⁴³⁶ In collaboration with the NGOs, a limited number of courses are conducted to train the apprentices.

⁴³⁶ The Indian Government has approved a proposal to establish a 'North Eastern Institute of Folk Medicine' at Pasighat in Arunachal Pradesh on February 21, 2008. See "North Eastern Institute of Folk Medicine to be Established in Arunachal Pradesh," http://www.thaindian.com/newsportal/india-news/north-eastern-institute-of-folk-medicine-to-be-established-in-arunachal-pradesh_10019818.html# (accessed October 21, 2009).

The Ministry of Education in China formulated the 'Education Improvement Plan, 2003-2007' for the quality of education to be maintained at a standardised or even higher level. Hence, certain universities have carried out the 'Education Quality Assurance System' to monitor and evaluate the administrative officials, teaching staff, and students. The Indian authorities concerned have yet to develop standardisation and quality control of ISM education to bring about transparency in ISM education.

According to Scott's analytic argument, if all the colleges and universities become involved in curriculum setting and courses accreditation, a standardised and high quality TM education system can be institutionalised. This is only possible through the involvement of faculties which have interest in teaching and are willing to take up challenges in education.

7.3.2.3 Integrated Healthcare Hospitals

Integrated healthcare systems involve formal recognition of TM and other medicines of the indigenous ethnic groups, allowing their coexistence with modern medicine and simultaneous development of all these medical systems, and offering public funding through medical insurance. This was based on the opinions of respondents that all the medical systems have their own values, and that they should be allowed to grow, expand, and develop independently. Moreover, integration of all the medical systems can make up for each others' limitations, for example, modern medicine could addresses acute illnesses and diseases diagnosis, while TM handles chronic cases and disease prevention. Each focus group also highlighted other concerns in the interpretation of integrated medicine: legal and ethical issues of cross referrals, and evidence-based practices by policy makers; theoretical and clinical integration (complete integration), dual qualifications given to practitioners by academics; common consensus on treatment, and accessibility to treatment according to patients' preferred choice by traditional practitioners.

China has had an integrated modern and traditional medical system for more than half a century, since the 1950s. Apart from merging in education, both the medical systems also merge in the provision of healthcare service. Understanding that modern medicine is dominant, often TCM is assigned just a ward in a modern medicine hospital. In 2008, the 3,115 Chinese medicine hospitals included 236 integrated medicine hospitals and 191 hospitals of minority ethnic groups. Presently, more than 90% of general hospitals and 75% of provincial hospitals have set up TCM departments. The establishment of TCM departments is based on the economic incentives for hospitals in China. In comparison, ISM and modern medicine coexist in a parallel manner in the Indian healthcare system. In the early 1970s, integrated medicine was practised in India by Ayurvedic practitioners, but it was discontinued after five years due to the dominance of, and opposition from, modern medicine. Presently, integrated medicine is encouraged, and ISM has begun to be integrated into the primary healthcare system in order to achieve a more comprehensive healthcare system. To begin with, ISM clinics are set up at the primary healthcare centres, district and several general hospitals. In-patient services are offered in certain district hospitals with 10, 25, or 50 beds. Herbal medications can be obtained from the dispensaries of the primary healthcare centres. In 2009, 1,291 hospitals in India were purely ISM hospitals: 753 Ayurveda hospitals, 262 Unani hospitals, and 276 Siddha hospitals.⁴³⁷

A common trend across the two case study countries projects the dominance of the private sector in the provision of primary medical care. In many remote and rural areas, unqualified traditional practitioners are available for basic primary care service provision. The public sector is the key provider of secondary or tertiary level of healthcare.⁴³⁸ In spite of practising integrated medicine, there is an absence of integration between different levels of healthcare in China, in both the

⁴³⁷ Rao, S., "An Overview of AYUSH in India and Global Perspectives" (paper presented at the International Conference on Traditional Indian Systems of Medicine, Kuala Lumpur, Malaysia, March 2, 2010).

⁴³⁸ Hospital services at the secondary level include general medicine, general surgery, orthopaedic, obstetrics, and paediatrics services. Hospital services in tertiary level include also advanced diagnostic technologies and rehabilitative services.

public and private sectors. By 2010, there was to be a network interlink, network between modern and traditional medical services in both urban and rural areas of which amongst all the hospitals, healthcare centres and TCM clinics to offer complete healthcare services. Similarly, a different level of healthcare integration is absent in India at this point in time.

The integration of TCM and modern medicine in China is not a complete integration. It is mainly clinical integration at the level of patient management. The fundamental theoretical integration of both the systems of medicine, holistic TCM and microscopic modern medicine, has yet to be developed. Hence, the former leader of SATCM remarked that the healthcare system in China is not integrated functionally (C-M1). Even physically, the infrastructure or facilities of the two medical systems are not completely under the same roof. For example, clinics and hospitals for TCM and modern medicine are separated. According to a senior academic from BUCM, complete integration is multidisciplinary, open, with common consensus on managing patients (C-A3). Undoubtedly, the initial stage of integrating ISM into the public healthcare system in India is implemented at the clinical level.

TM is upheld by both the case study countries especially for primary healthcare and disease prevention after understanding the importance and necessity of individualised treatment. Infectious diseases have a close relationship with nature (living environment and seasonal variation) and individual body constitutions. In other words, the primary level of health involves both the individual and the public. China and India face a list of public health challenges, such as the SARS epidemic in 2003 and the HIV/AIDS epidemic. In responding to this, the TCM preventive service system has been established in certain hospitals such as the GDPH, and 'three invasive strategies' have been implemented in China. In India, ISM is incorporated into the programme of the NRHM, 2005-2012 for health maintenance and disease treatment. This indicates that the governments of both the countries are committed to public health with disease prevention as the priority. The

infrastructure of public health services is not well developed and organised in both the countries.

At the secondary and tertiary level of healthcare centres, investigative and diagnostic services are offered, especially for complicated cases. These are chemical laboratory testing and physics methodologies (for example ultrasound). An oncologist from the GAMH acknowledged that scientific technologies can assess the patients' responses to the treatment and allow the adjustment of the dosage (C-P4). Integrated healthcare services enhance treatment efficacy and produce better outcomes. There is plurality in services and it is easily accessible to patients. Moreover, interdisciplinary research can be conducted in teaching hospitals to further develop TM. In comparison, the Indian authorities concerned have yet to look into the project of establishing integrated healthcare hospitals. With the existence of common door entry hospitals, many ISM therapies can be introduced, for example, shara-sustra for ano-fistula and piles. Moreover, research in ISM on disease treatment is conducted. However, they have to balance this with the possible drawbacks of integrated healthcare services, such as an increase of the patients' financial burden or the national health budget, uncertainty on the efficacy and harmful effects of each medical system, dominance of modern medicine, and risk of health service commercialisation.

Scott's institutionalisation process indicates how integrated healthcare infrastructures and services might be established in China and India by responding to the public's demands and expectations. The analysis highlights also the appropriateness of extending TM services into all health care levels especially the primary healthcare level in both the above countries.

The above concerns bring into focus the issue of payment for medical care in both the case study countries. Generally, payment for primary care is directly made by the users in China. However, healthcare funding in China is complicated; it can be insurance-based or tax-based or a mixture of both. In particular, hospital care in

the urban areas of China is taken care of by the urban healthcare insurance if the charge is above a certain limit. The urban healthcare insurance is funded by the employer, contributed by the employee, and supplemented by the government. As for rural areas, the local government subsidises two thirds of the healthcare expenditure for each farmer or villager in the cooperative medical scheme. On the other hand, if private general practitioners or hospital services are made use of in India, it is an out-of-pocket payment. An insurance scheme for TM treatment in India has yet to be developed, like in modern medicine. Public funding is obtained if public services for ISM are sought. Patients just need to pay a minimum registration fee of 5-10 rupees.

In both China and India, the form of payment to the traditional practitioners depends on whether they work in the public or the private sectors. Generally, the public servants receive a civil service pay scale with the basic payment of RMB3,000 - 4,000, plus a clinical supplement, and private practitioners are paid on a salaried payment basis. However, in the public hospitals in China, the salary for each practitioner varies. It is based on the grade of the hospital, posted discipline, position, and the number of patients attended to. Hence, it is very difficult to make a comparison between payments in the public and private sectors. In comparison, the public servants in India have a uniform pay scale. The comparative study shows that there is a big discrepancy between the payment of the public servants (16,000-20,000 rupees per month) and private practitioners (5,000-10,000 rupees per month) due to the nature of their work.

Quality control on TM service provision is questionable in both the case study countries. Quality of care has to be evaluated from several aspects such as professional practices, patients' safety, service organisation, and so forth. Generally, the existence of good practice standards allows doctors' performance to be judged. In China, TCM practitioners' performance is evaluated and credited annually by the higher level of the respective hospitals. The outstanding practitioner is honoured as the 'distinguished doctor' of the year. TM faces the

challenges of herbal remedies' quality measurement and proven efficacy since the treatment of TM is individualised. As a TCM practitioner from GAMH pointed out, at this point in time TCM has yet to seek a standard quality control on its prescriptions (C-P5). That is to say, a suitable evaluating system for the TCM clinical research standard has to be looked into and formulated during the modernisation process of TCM. A complete healthcare service provision system in China has yet to be established.

In India, based on their qualifications, ISM practitioners' names are listed in the E-Porter. They have to practise in accordance with the clinical guidelines prepared by a group of experts in their respective fields and approved by the AYUSH department. However, an evaluating system to assess the performance of ISM practitioners has yet to be developed. Undoubtedly, Indian authorities concerned understand the significance of validation and revalidation of ISM herbal formulations to ensure quality care. The national research councils for AYUSH have been established and grants are offered to develop research in all streams of Indian medicine. For example, under the Golden Triangle Partnership Project, a safety study of the eight most widely used text-based 'herbo-mineral preparations' is conducted.⁴³⁹ However, a complete healthcare service provision system in India has yet to be established.

7.3.3 Cognition and Support

To compare the political will in both the case-study countries, elements of equity, degree of cohesion amongst traditional practitioners, mutual respect and understanding between traditional and modern professional groups, and health promotion activities are taken into consideration. All these elements are discussed

⁴³⁹ See Patwardhan, B., and Mashelkar R.A, "Traditional Medicine-inspired Approach to Drug Discovery: Can Ayurveda Show the Way Forward?" *Drug Discovery Today* 14(15-16) (2009): 804-811; and Patwarddhan, B., & Bodeker G., "Ayurvedic Genomics: Establishing a Genetic Basis for Mind-Body Typologies," *Journal of Alternative and Complementary Medicine* 14(5) (2008): 571-576.

under the subheadings of governmental, traditional and allopathic professionals, and public support respectively.

7.3.3.1 Governmental Support

Soon after the establishment of the PRC, TCM was, as noted, fashioned from earlier forms of Chinese Medicine and placed on a similar platform as modern medicine. Politicians emphasised that the two medical systems should be offered equal recognition and development in the national healthcare system. In reality, the authorities concerned have failed to carry out this policy. For example, the ratio of investment for the development of TCM and modern medicine is 1:65. The education funds are unevenly distributed between TCM and modern medicine, since the number of modern medicine university and hospital has been approximately three to ten times higher than TCM respectively. A senior academic from BUCM commented that the modern medicine universities are provided with more funds for education and research, whereas the TCM universities still operate within old facilities (C-A3). He added that even though six new and modern universities of TCM in China have been established in the recent five years, namely BUCM, SUCM, GUCM, NUCCM, Chengdu University of Chinese Medicine, and Shandong University of Chinese Medicine, however, funds are still required to reconstruct or set up other TCM universities and hospitals, and upgrade research facilities. Moreover, the 2007 report documented that more than 95% of patients from modern medicine hospitals are reimbursed the expenditure on hospitalisation, whereas only less than 70% from TCM hospitals are given this opportunity. Poverty has prevented patients from accessing proper healthcare service with the hospital policy of higher registration fees imposed by senior consultants. Funding inequalities between the development of TM and modern medicine pose a particular policy challenge in China.

In the recent five years in India, the value of ISM has been highlighted and incorporated into national healthcare programmes in order to achieve a more

comprehensive healthcare system. A bigger budget is allocated to develop ISM. However, at this point in time, the funds are still insufficient for developing ISM education, especially in the public sectors without their being supplemented by donations from students. The budget is unevenly distributed amongst the states in India since the expenditure on medical education in certain states is overestimated, and underestimated in some. Besides, the funds are not equally divided amongst the three major streams of ISM. A senior Unani practitioner stated that the authorities show favouritism towards Ayurveda, and pay less attention to the development of Unani and Siddha (I-P11). Moreover, an academic from Tibbia College disclosed that a relatively increased health budget is allocated to develop modern medicine (I-A3). In view of the shortage of funds, a small number of NGOs such as FRLHT in Bangalore have collaborated with the Indian Government in developing ISM education and research.

In addition to the issue of lack of access to financing, there is the separate issue of geographical inaccessibility in both China and India. Remote areas in particular, are consistently under supplied in terms of skilled medical practitioners and facilities in healthcare systems. Zhang stressed that access to healthcare services and herbs and herbal products are limited in isolated rural areas in Guangdong province. Hence, he proposed a 'national TCM champion' strategy to enhance the accessibility of TCM (herbs) and ensure good quality of TCM services by qualified practitioners in rural areas. This was also stated by a TCM general practitioner from Guangzhou (C-P1). Through the NRHM, 2005-2012, a large number of qualified practitioners are to be trained and sent to serve the people in the remote areas of India. Moreover, essential ISM drugs are to be made available in dispensaries of healthcare centres.

7.3.3.2 Traditional Support

Under the integrated healthcare system, the future prospects of TCM practitioners in China are more or less decided by their knowledge of modern medicine.

Integrated TCM practitioners are in higher demand compared to pure TCM practitioners. Like the pure TCM practitioners, the future prospects of ISM graduates are uncertain in India. There are limited employment opportunities in the public sectors for the graduates since the medical profession is based on a policy of 'self-reliance course'. The self opting course enables graduates to be independent upon graduation. Hence, job opportunities are not intentionally created for them by the government. An Indian academic stated that 30% of the institutionally qualified Ayurvedic practitioners are unemployed upon graduation (I-A1). Under the pressure of shortage of human resources in the medical field, the authorities concerned have realised the problem and started to encourage students to take up science courses by offering scholarships since 2008. Moreover, the pay scale of ISM practitioners and allopathic doctors has also been standardised.

In order to uphold the value of TM and place it on the same platform as modern medicine, traditional practitioners in China and India have upgraded themselves and work closely with each other to maintain the professional status of TM. In both the case study countries, the qualified traditional practitioners have received continued education relating to their professions. CME is conducted in a more systematic way and on a regular basis in China when compared to India. This is because CME is compulsory in China since the accumulated CME points have become an essential assessing criteria for future promotion of TCM practitioners. In India, attending CME courses has no bearing on the status of ISM practitioners. A senior Siddha practitioner pointed out that it is timely to conduct frequent CME sessions for all ISM practitioners to update their knowledge (I-P7). However, the conservative category of ISM practitioners is orthodox and disagrees with the need to undergo CME.

Meanwhile, a majority of TCM apprentices have conformed to the regulations, attend courses to upgrade themselves, have agreed to be evaluated, have registered and assist in the professionalisation of TCM in China. Some of them are

generous and willingly share their clinical experiences with institutionally qualified TCM practitioners and work as a team.

In comparison, a large number of ISM apprentices have yet to respond to the short term training courses which are organised with the collaboration of the Indian Government and NGOs. Presently, some senior ISM traditional masters have accepted the proposal of the authorities to share their clinical skills and specialities with qualified Ayurvedic practitioners. As an Ayurvedic practitioner noted, ISM apprentices are invited to team up with the qualified ISM practitioners and allowed to treat patients with their herbal remedies under supervision (I-P13).

7.3.3.3 Allopathic Support

The success of integrated medicine depends on the harmonisation and cooperation between allopathic and traditional professional groups. Harmonisation, a stated policy goal, is possible only if allopathic doctors can understand TCM and vice-versa. Understanding this concept, allopathic doctors in China, especially those posted in TCM hospitals, have attended special TCM courses for allopathic doctors. They have obtained positive feedback from their counterparts, colleagues, and traditional fraternity groups. As one professor from CBIATC stated, TCM practitioners are very keen to collaborate with the allopathic doctors, and to assist them in understanding TCM through special TCM courses such as acupuncture and moxibustion training courses (C-A10). In China, many hospitals have the experience of organising these special TCM courses for many years such as GAMH which has 40 years of experience. It can be a full time two-year course or part time three- to four-year course. The TCM academics are keen to take up the challenge of teaching allopathic doctors with their minds set on modern science.

On the other hand, the Indian authorities concerned have started to show interest in organising special ISM courses for allopathic doctors in recent years. In the early days, integrated medicine practice failed to obtain formal recognition in India

because of opposition from the allopathic fraternity groups. To enhance the mutual understanding between both the professional groups, allopathic doctors are encouraged to attend special ISM courses, and to study the fundamental principles of ISM and therapeutic effects of the herbs. For example, the GAU has organised Ayurveda and Yoga courses of six-one year duration. The BHU has started postgraduate courses in the different disciplines of Ayurveda for modern medicine graduates.

Half the TCM practitioners and two-third of ISM practitioners from both the case study countries agreed with the view that enthusiastic allopathic doctors who acquired TM knowledge help TM to move into a scientifically validated world and grow with modernisation. Unfortunately, not every allopathic doctor or scientist is willing to come forward to help traditional professional groups in the field of scientific research and to popularise the traditional medical system. Indian practitioners and academics pointed out that this disharmony is very common and obvious in the Indian medical profession (I-P7 & I-A10).

By comparison, China has implemented the integrated healthcare system for more than half a century, and the majority of allopathic doctors and scientists accommodate the coexistence of TCM counterparts and colleagues. They offer TCM fraternity groups the essential assistance in research, and work as a team. Experienced traditional practitioners explain the utilisation and therapeutic effects of herbal medicine at length and scientists design and conduct research with modern technology after consulting with the relevant traditional practitioners. Therefore, as the former dean of the RGUHS in Bangalore acknowledged, China is very much advanced and developed in TCM research as compared to ISM research in India (I-A7). The teaming up of allopathic and traditional research groups is pertinent in ensuring the further development of TM. To date, though, special training programmes for TM involving traditional and modern professional groups have yet to materialise even in China.

7.3.3.4 Public Support

Unqualified traditional practitioners, including apprentices, continue to serve their communities in both regulatory countries - China and India, especially in the remote areas. The healthcare of many remote communities is still dependent on medicinal plants because of the shortage of trained medical personnel and medical facilities. Hence, apprentices are very much supported by their communities with respect and trust. However, the public can be misled and mistreated. Undoubtedly, a small number of apprentices is experienced and has their specialities. But they have not acquired the overall general knowledge on formal systematic TM, and might not be able to handle certain cases. This may result in delayed diagnosis and treatment.

The public in China and India is educated in the basic knowledge of identification of herbs and their medicinal properties, usage, and preparation. It is essential because consumption of medicinal plants is very common in both countries intentionally or unintentionally. Particularly, daily drinking herbal soup in Guangdong province, China, is a norm for health maintenance. Similarly, herbs such as turmeric powder are also frequently used by every household in India as a spice. Public education is done through media, workshops, medical camps and charity clinics. In school, students can be taught the basics of TM and its historical development. Moreover, the public is informed about the availability of regulations for traditional practitioners and their practices, and necessity of displaying paper qualifications by every practitioner who provides medical service. The public is encouraged to lodge a complaint if they think that illegal practices are being conducted. In this way professionalisation of TM hopes to be maintained.

The public from both the case study countries has played an important role in reducing the health risks of entire population groups or individuals. In China, the practice of certain customs has kept the public away from communicable diseases. For example, Boatorchids after boiling with water can be used as shower water to

protect against respiratory tract infections. In India, Garden Balsam in the house is held to remove germs. On the other hand, a large number of Indians practise yoga and consume mainly vegetarian diets to keep their lifestyles healthy.

In this subsection, Scott's cognitive framework highlights that the government from both the case study countries recognises and provides support to TM in their respective country.

However, the matter of equity is still questionable. Cognitive institutionalisation processes at upgrading practitioners occur when more and more practitioners take it for granted that CME or courses to upgrade themselves are unnecessary. This is especially the case with ISM practitioners.

An institutionalisation process occurs, also, because more and more allopathic doctors are willing to learn TM and assist or collaborate with their counterparts. Institutionalisation of public beliefs will be best analysed via a comprehensive survey based on public interviews.

7.4 The Malaysian Situation with Respect to China and India

Malaysia is the third case study country. Analysis of the current Malaysian situation in respect to China and India is the main objective of this separate section in the chapter. Accordingly, examination of the Malaysian situation will also be based on the similar key issues as mentioned in section 7.3.

7.4.1 Legal Regulations

Like India, as a democratic country, parliament is the supreme legislative body in Malaysia. In view of the popularity of T&CM in Malaysia, the T&CM Bill has been drafted for governing T&CM practitioners. The Bill is still pending parliamentary

approval. The drafting of the Bill began in 2002.⁴⁴⁰ It has similar objectives as the Law in China and the IMCC Act in India, to protect T&CM practitioners and public interests in Malaysia. According to the Deputy Director-General of Health, Malaysia (email communicated dated January 8, 2009), the highest regulatory body for the forthcoming Act is the T&CM Council, and the implementing agency is the T&CM Division, MOH. In this case, similar to China and India, there will be an independent regulatory body for T&CM in Malaysia in the near future. The political power in Malaysia is centralised. According to the senior officer from MOH, the power of enforcement and surveillance will be delegated to State levels once the Act is in place and services are extended (M-M7).

The T&CM Division was established in 2004, to collaborate with appointed professional associations (practitioner bodies) to develop T&CM in line with the Malaysian National Policy on T&CM. Malaysia has taken a step similar to China in setting up a separate department for TM prior to the enactment of the Act. Later, with the development and dissemination of T&CM practices, T&CM branches will be established in all states in Malaysia. However, the difference in Malaysia being that the officials in T&CM Division are purely modern professional personnel - allopathic doctors and pharmacists. The senior officer from HMRC remarked that regulation of T&CM practitioners cannot be handled by the allopathic personnel since they do not understand the subject matter of T&CM, and this can lead to prejudice and bias (M-M8). Her view was supported by most of the traditional practitioners. For example, an experienced Chinese practitioner stated that this can even cause conflict between the allopathic and traditional practitioner professional groups (M-P10).

At this point in time, traditional practitioners are under voluntary self-regulation, regulated by the constitutions of their respective practitioner bodies. These constitutions actually have incorporated the recommendations from the *National*

⁴⁴⁰ T&CM Unit, *Concept Paper on Regulating Traditional and Complementary Medicine* (T&CM Unit, 2002). (unpublished)

Policy on Traditional and Complementary Medicine, Malaysia. However, as acknowledged by the senior officer from MOH, once the Act is promulgated and implemented, the council will take over the roles of practitioner bodies (M-M7). Approximately 30% of registered TCM practitioners and 60% of ISM practitioners in Malaysia were satisfied with the self-regulatory system since it allows practitioners to work purely in traditional ways and to have considerable autonomy. However, it does not have any legal power. Realising the shortage of TM experts in the ministry machinery, a senior officer from MOH agreed to self-regulation of TM at this considerably early developmental stage of TM in Malaysia (M-M6).

In Malaysia, registered practitioners are those who have registered with their respective practitioner bodies. It does not mean that everyone is institutionally qualified like the registered traditional practitioners in China and India. Only a small number of registered TCM practitioners are institutionally qualified, and qualified ISM practitioners are even fewer in Malaysia. The majority are apprentices. Due to lack of paper qualifications many apprentices have refused to come forward to register. They are worried that they may be prosecuted by the authorities concerned. The high possibility of accommodating them through the adoption of the 'Sunset Provision' and 'Grandfather Clause' in the coming Act is acknowledged. Voluntary online registration was introduced in November, 2008. However, it does not seem to have received the anticipated positive response necessary to address the problem since the traditional practitioners are computer illiterate and feel threatened. The online registration programme itself has many shortcomings or teething problems. For example, one practitioner is able to register himself with two to three associations, resulting in duplication. Moreover, the online registration has been prematurely introduced without having understood the necessity of programming and implementing the system with close collaboration between government and associations.

Understandably, all registered traditional practitioners gave positive feedback and supported the introduction of the incoming Act on T&CM in Malaysia. From a

briefing on the Interim Report of T&CM Bill, they understand that the coming Act prosecutes illegal practices and protects genuine practitioners. The show of acceptance for the Act is positive, provided the Act does not restrict the development of TM. That is to say, the original value of TM is maintained and allowed to progress as such. This approach is almost similar to the ISM practitioners who fought for the values of their profession in the earlier days.

Similar to China and India, Scott's regulative institutional effect is diffused through the field of T&CM in Malaysia via a coercive mechanism. Currently, T&CM practitioners are operating under associations' constitutions and will be under T&CM legislation and regulation once the T&CM Act is enacted.

7.4.2 Formal Organisations

Under this subsection, the analysis of the current Malaysian situation is carried out in the context of the two major issues of TM profession and healthcare provision. The analytic outcomes are distributed and illustrated under the subheadings of formation of professional bodies, universities, and integrated healthcare hospitals.

7.4.2.1 Formation of Professional Bodies for Traditional Medicine

In Malaysia, the professional associations for TM are voluntary and registered as non-profit NGOs, like those in India. There are many Chinese associations scattered all over Malaysia. However, only three Chinese associations (FCPMDAM, MCMA, & FCPAAM) and one Indian professional association (MATIM) are approved by the MOH as practitioner bodies. According to the Malaysian National Policy on T&CM, appointed practitioner bodies of TCM and ISM are instrumental in setting the relevant curriculum and training institutions of TM together with the T&CM Division and the MQA. This means that practitioner bodies also bear the responsibility of professionalising traditional medicine in Malaysia. With reference to Scott's normative institutional process category, the

normative process in Malaysia can be seen to involve both the government and NGOs in looking into how to professionalise T&CM.

Different from China and India, members of practitioner bodies in Malaysia are of both categories, institutional and non-institutional. Registration of these practitioner bodies is voluntary as in India. Many other regional TM associations in different states have registered themselves under these appointed practitioner bodies, and become their associated sub-associations. Similar to the professional associations in India, all the practitioner bodies in Malaysia have their individual agendas. They conduct their own training courses or seminars or conferences to upgrade their members. Undoubtedly, they are groups of practitioners eager to develop and promote TM. They have even signed MOUs with China and India to develop the respective systems of TM in Malaysia. For example, FCPAAM signed with the Chinese Traditional Medicine Association (CTCM, 中国民间中医医药研究会), China,⁴⁴¹ and MATIM signed⁴⁴² with the Federation of Indian Chamber of Commerce and Industry (FICCI), India,⁴⁴² and the Institute of Ayurveda & Integrative Medicine in Bangalore.

The TCM institutes or colleges which come under the three Chinese associations are affiliated with the different TCM universities in China respectively. They do not collaborate with each other either with the different (ISM) or the same TCM systems in spite of their coexistence in a multi-ethnic and multi-cultural society. This attitude is very different from the TCM professional associations in China that have close collaboration with each other. Particularly, the CACM focusses mainly

⁴⁴¹ Mr Ng Po Kok, the secretary of FCPAAM and Mr Shen Zi Xiang, the president of CTCM had signed the MOU for developing and promoting TCM. See "Memorandum of Understanding between FCPAAM and China for TCM Development," *China Press*, January 12, 2009 and "The International Collaboration of China and Malaysia on Traditional Chinese Medicine", <http://www.ctcm.org/html/newscenter/ctcmgongzuodongtai/194059493.html> (accessed August 3, 2009).

⁴⁴² This updated information was obtained through electronic mail correspondence with Dato' Dr Dorai Raja, the president of MASTIM on August 3, 2009. He informed that the MOU between MATIM and FICCI was signed between him and Dr Manju Kalra Prakash, senior Director of FICCI, in the T&CM Division, MOH witnessed by Mr Jaafar Lassa, principal assistant director of the T&CM Division and Mr. B.N. Reddy, Deputy High Commissioner, High Commission of India on July 22, 2009.

on promoting TCM academically and the CMDA on professional ethics in China. Moreover, the collaboration between the Malaysian Government and practitioner bodies is limited to two meetings a year with the T&CM Standing Committee, two yearly International Traditional and Complementary Conferences (INTRACOM), and occasional road shows relating to the development of TM practices and regulations.

7.4.2.2 Universities of Traditional Medicine

Similar to China and India, TCM institutional education in Malaysia has been established for almost 50 years now. There is one TCM college under MCMA, nine under FCPMDAM, and eleven under FCPAAM respectively. Different from the above two case study countries, with the exception of INTI University College, the TCM colleges in Malaysia have yet to obtain formal recognition from the government. They conduct TCM courses with their own sets of curricula. The TCM curriculum in INTI University College obtained approval from the Ministry of Higher Education, MOH, and MQA and sessions began in September 2009.⁴⁴³ It is the only approved TCM curriculum in Malaysia at this point in time. Its programme is linked with BUCM and SUCM. Regarding ISM in Malaysia, there has been an approved standard Ayurveda curriculum since 2008 although ISM colleges have yet to be established. Within Scott's normative analytic framework an approved standardised curriculum would only be considered appropriate in the context of it directing T&CM towards professionalisation.

Under the influence of China, modern medicine subjects have been introduced into TCM education in Malaysia. However, conveying TCM knowledge and producing high quality TCM practitioners remain the main targets in TCM education until today. The integrated education system was supported by 90% of the respondents from the group of TCM academics in Malaysia. It is not a direct adoption; it has been modified by the Malaysian academics in accordance with the

⁴⁴³ Tan, S.C., "First Degree in Chinese Medicine," *The Star*, August 9, 2009.

national health policy and regulations – traditional practitioners are not allowed to practise modern medicine. Hence, Malaysian integrated TCM education is more traditional as compared to China since TCM practitioners practise TCM exclusively. However, a Chinese academic argued that “Malaysia should not jump into integrated medicine education since TCM education is still at an immature stage. TCM may be suppressed by modern medicine without provision for the full maturity of TCM...” (M-A4). The academic foresees TCM development being overshadowed by modern medicine if integrated medicine education is promoted and implemented prematurely.

Generally, the TCM course is for five years. TCM courses are not standardised like the traditional medical courses in China and India. They vary in different colleges under different Chinese practitioner bodies. Three Chinese practitioner bodies disagree with each other’s curricula and examination standards. All the colleges conduct part-time courses, except the TCMIM under MCMA which conducts a five-year full-time TCM course. As for the part-time TCM students, due to time constraints, taught courses focus on fundamental philosophical theory of TCM, and disease management is taught through their clinical practice. Hence, TCM students in Malaysia are exposed to clinical training and practice earlier than those in China. Students who can afford complete their final academic year through the affiliated TCM universities in China and obtain degree qualifications upon their graduation. However, following the approval of the TCM curriculum in the INTI University College in 2009, TCM degrees can be obtained in Malaysia upon completing the four-year TCM course. In Malaysia, none of the TCM colleges organise postgraduate programmes or conduct research.

In Malaysia, so far the TCM courses have been taken up as a challenge by only Chinese students whose first language is Chinese. Hence, no preparatory courses in the Chinese language are conducted as in China where international students have been accepted. Similar to China, the medium of instruction for TCM in Malaysia is the Chinese language. However, it is not the national language

(Malaysia's national language is Malay). There were arguments on the recognition of the Chinese language as the medium of instruction for TCM for years until 2008. Eventually, MOH agreed to the TCM groups and now supports the use of the Chinese language as the medium of instruction for TCM. However, options are given to any institute to conduct TCM courses in a second language if they choose to do so. Particularly, INTI University College uses English as the medium of instruction for most TCM lectures. This is not an issue in China at all since Chinese has been accepted as the official language for teaching TCM. In India, an option is offered with regard to the medium of instruction for ISM. In place of the preparatory courses on language, a Malaysian academic suggested conducting preparatory courses on science subjects such as biology and chemistry (M-A4). This would help to improve the knowledge of natural sciences amongst these students and facilitates their learning of modern medicine. Once human capital is established, TCM research will be planned and carried out with the allopathic fraternity groups.

While waiting for the approval from the authorities concerned on the TCM education system, TCM students are considered qualified once they have passed the Unified TCM Qualification Examination prepared by the respective Chinese practitioner bodies. It is not an official and standard national examination. The graduates are issued a practising license by the respective practitioner bodies upon their graduation without undergoing any internship. This is owing to the shortage of TCM hospitals that can provide training to TCM graduates in Malaysia. However, China and India disagree on this issue since a practising license is only issued after their students have passed the national examination and completed a year of compulsory internship.

TCM education in Malaysia has faced many problems. Similar to China, under the integrated medicine education system, deeper knowledge of the TCM subjects cannot be taught and explained clearly due to time constraints. The worst part is that Malaysian TCM courses are restricted because they are designed as part-

time courses. Moreover, a certain number of credit hours have to be allocated for the national language – Malay. Hence, the teaching of TCM in Malaysia is mainly focussed on diseases of the tropics, unlike the syllabuses in China and India which cover a wide range of diseases based on the four seasons.

Sharing the same challenges as in India, Malaysian TCM education faces difficulties in accommodating TCM students in the limited number of training centres: charity clinics, certain medicine shops, and TSH. Moreover, most of the TCM colleges lack well-equipped infrastructure facilities and trained staff due to inadequate funding. The Malaysian authorities concerned ought to consider upgrading and then recognising them instead of establishing a new college or university from scratch. There is an absence of regular CME sessions for traditional practitioners. Recently, short courses or seminars in upgrading the traditional apprentices have been initiated by the Chinese practitioner bodies. Apart from organising regular CME in T&CM, the authorities concerned in Malaysia can consider adopting the system of CME point accumulation.

7.4.2.3 Integrated Healthcare Hospitals

Similar to the respondents in China and India, all the three focus groups in Malaysia also took the view that integrated medicine is an ideal system of medicine that involves knowledge sharing between TM and modern medicine, and hence complements each others' limitations. Both categories, policy makers and practitioners, felt that integrated medicine should have a common consensus on treatment, allow plurality and look after public interests. However, there was disagreement amongst them regarding the matter of cross referrals since TM is not scientifically proven. 66% of the respondents from the category of policy makers for TM disagreed that TM is evidence-based. On the other hand, the majority of TCM practitioners argued that TCM itself is a science, proven by cases, and it should not be re-analysed. No matter which country the academics come from - China, India, or Malaysia - all of them emphasised the importance of

theoretical and clinical integration, and dual qualification of practitioners for complete integration. As a senior Chinese practitioner from the TSH stated, complete integration has yet to be achieved and although China has a modernised TCM medical system, it is a non-integrated medicine system at this point in time (M-P11). An ideal integrated medicine system should allow the original value of all the systems of medicine to be maintained.

In Malaysia, the mainstream healthcare system is modern medicine, and TM has been tolerated by law for nearly 40 years. In China and India, TM is another component of the official healthcare system and many of their hospitals provide TM services. According to the National Policy on T&CM, development of T&CM is facilitated and supported by the Malaysian Government. For a start, there are three private hospitals with a separate TCM wing offering TCM services to the public, namely the TSH, the Lam Wah Ee Hospital, and the Putra Hospital (Southern Hospital). In the last two years, TM has been allowed to be practised along with modern medicine in three appointed public hospitals, namely the Kepala Batas Hospital in the northern state of Penang, the Putrajaya Hospital at the national capital - Putrajaya, and the Sultan Ismail Hospital in the southern state of Johor. Upon the success of these pilot projects, there will be an extension of integrated medicine services to other public hospitals. Currently, they offer only out-patient services, unlike the private hospitals that provide both out-patient and in-patient services. Under the restrictions of the Medical Act, there are no cross-referrals. They work independently and respect patients' choices.

TM services are provided by the private sector, mainly at the primary healthcare level. Generally, traditional practitioners work in medicine shops, health centres or even from their homes. A small number of them work in the above mentioned private hospitals with TCM wings. With the recent implementation of the pilot projects for integrated medicine, a few practitioners are engaged on a contractual basis by the Malaysian Government to serve in the three public hospitals. Experts from China, specialised in a particular discipline such as TCM oncology, are

employed by both the public and the private sectors. In China and India, many qualified traditional practitioners work in hospitals of either secondary or tertiary levels, unlike in Malaysia. In Malaysia, integrated TM is introduced into mainstream healthcare, directly into secondary and tertiary level, without attempting to incorporate it into primary healthcare. As some respondents have argued, it is being implemented prematurely. TM is not integrated at the primary healthcare level. In comparison, TM has been integrated into the primary healthcare level in China and India. At the primary level, TM addresses the nation's wellness concerns (disease prevention and dietary education) as well as its medical needs. Moreover, integration between different levels of healthcare in Malaysia has yet to be established. It needs many years to reach this stage since neither China nor India has succeeded in building the networking amongst all the levels of healthcare.

In the public hospitals, only limited TM modalities are available, for example, acupuncture and herbal treatment for cancer cases. Moreover, patients have to be screened by allopathic doctors prior to meeting with appointed TM practitioners. In other words, traditional practitioners are not allowed to offer direct consultation to patients. Besides, all traditional practitioners are not allowed to utilise the facilities of advanced diagnostic technologies, and interpret laboratory reports in Malaysia. This is based on the good reason that Malaysian traditional practitioners do not have basic modern medicine training, which is different from TM practice in China and India. Moreover, the Medical Act 1971 does not allow TM practitioners to have access to modern medicine technologies. However, traditional practitioners can share all the facilities with their counterparts and colleagues under the same roof in China. In India, practitioners of ISM also practise modern medicine. Integrated medicine is believed to increase the accuracy of disease diagnosis and efficacy of disease treatment. However, there is the risk of losing the curative origin of TM.

The scheme on medical care payment for TM has yet to be finalised in Malaysia. It will not be as complicated as in China. Presently, users receive free consultation in

the public hospitals under the pilot projects for integrated medicine. However, if traditional practitioners in the private sectors are consulted, patients need to pay out of their own pockets.

Generally, quality control of professional medical practice has always received due attention from the government. Incentives have been offered to maintain good quality of care in TM. Particularly, traditional practitioners are encouraged to upgrade themselves and register so that their names can be placed in a centralised data bank and hosted at a website. Unfortunately, proper clinical practice guidelines for TM are not yet available in Malaysia. An evaluating system to verify the qualifications of foreign traditional practitioners has also yet to be established. For the purpose of ensuring patients' safety, only elements of scientifically proven TM practices are allowed to be integrated into the Malaysian mainstream healthcare system. TM research in Malaysia is currently only in its early stages especially since there are no TM research experts in Malaysia. The infrastructure for TM research in China and India is well established. Over many years, the research teams in both China and India have worked on polyherbal formulations of multitarget therapeutic effects through clinical epidemiology and pharmaco-epidemiology respectively - for example, the osteoarthritis herbal drug development project under the New Millennium Indian Technology Leadership Initiative (NMITLI) Scheme in India.⁴⁴⁴ In China, many research studies show that TCM had anti-cancer effects on cancer cachexia, such as 'Kanglaite Injection' (康莱特注射液).⁴⁴⁵ Once there is provision of integrated healthcare services, a comprehensive network on healthcare service provision has to be established. Networking among all the hospitals and healthcare centres of all systems of medicine enables doctors to manage patients, and enables patients to choose their preferred treatment centres or doctors.

⁴⁴⁴ Patwardhan, B., & R. A. Mashelkar, "Traditional Medicine-inspired Approach to Drug Discovery: Can Ayurveda Show the Way Forward?" *Drug Discovery Today* 14(15-16) (2009): 804-811, 807.

⁴⁴⁵ Zhang, S., H.M. Lin, & P.K. Wei, "Current Status of Traditional Chinese Medicine Therapy in Treating Tumour Cachexia," *Journal of Chinese Integrative Medicine* 7(9) (2009): 873-877, 874.

7.4.3 Cognition and Support

This subsection examines the political will in Malaysia in comparison with China and India. Equity, degree of cohesion amongst traditional practitioners, as well as traditional and modern professional groups, and health promotion activities are addressed in the context of governmental, traditional and allopathic professionals, and public support, respectively.

7.4.3.1 Governmental Support

Under Dato' Chua Jui Meng, the then Health Minister of Malaysia, the value of TM was formally proclaimed in 1996. His support for Traditional Chinese Medicine obtained TCM's close support for him to help stabilise and formalise T&CM's position in Malaysia. The TCM organisations constitute a significant political lobby in Malaysia. Subsequently, there was the establishment of the T&CM Unit, the T&CM Umbrella Bodies, the HMRC, and finally the T&CM Division in 2004. Funds were allocated to set up the infrastructure of T&CM in the public sector, including T&CM clinics in three appointed public hospitals under the 9th Malaysia Plan. However, funds are not allocated to upgrade the existing TM institutes and to develop human capital. Under certain circumstances, allopathic fraternity groups from the public sector will be funded to go for short courses at recognised universities such as BUCM in China. In comparison, grants are unavailable for graduates in TM to pursue their studies and to professionalise their profession. In comparison, China and India have offered funding to upgrade the infrastructure of traditional medical institutes and support students through several schemes. The Chinese Government even fully supports the globalisation of TCM. For example, the Consortium for Globalisation of Chinese Medicine (CGCM) aims to develop TCM and integrated medicine, facilitate collaboration, promote research, and assist industry through joint efforts of the academic institutions, industries, and regulatory agencies around the world.⁴⁴⁶

⁴⁴⁶ The CGCM, see <http://www.tcmedicine.org/en/default.asp> (accessed October 21, 2009).

In spite of promoting integrated medicine, the existing medical laws and regulations in Malaysia limit and even prohibit users' access to a proper traditional healthcare service. As in China and India, Malaysia also faces challenges in geographical inaccessibility. The majority of traditional practitioners serving in village communities do not have institutional qualifications.

7.4.3.2 Traditional Support

In contrast to China and India, Malaysia has a limited number of institutionally qualified traditional practitioners. Traditional practitioners have yet to be professionalised and to achieve formal national recognition. Professionalisation of TM in Malaysia will only take place when traditional practitioners upgrade themselves and register with the respective practitioner bodies. The senior officer from HMRC pointed out that only with professional status can TM be accepted officially (M-M8).

More than 50% of traditional practitioners, mainly apprentices, have yet to come forward and register themselves with the respective practitioner bodies. The main reason for their failure to do so is their lack of paper qualifications. To overcome the fear that they may be prosecuted by the authorities concerned, one option they have is to consider attending short term reorientation courses to upgrade themselves. To attend such courses, they need to sacrifice some hours of their practice, discard their feelings of inferiority, and attempt to learn more about different aspects of TM, and not hold on to their ancestral concepts only. Although these apprentices have innate intelligence and special clinical skills obtained from their masters or ancestors, an acquisition of fundamental theoretical knowledge is mandatory under the Malaysian T&CM regulatory framework.

In China, CME is a compulsory programme for each and every practitioner. As in India, traditional practitioners in Malaysia do not pay attention to the importance of continued professional education. They attend courses, seminars, and

conferences at random rather than engaging in a systematic approach to update their knowledge and upgrade their qualifications. Moreover, not many traditional practitioners are enthusiastic about organising and conducting CME programmes to help professionalise their profession.

7.4.3.3 Allopathic Support

In China, TCM and allopathic fraternity groups share their knowledge and work as a team in patient management and research to some extent, even though modern medicine still plays a dominant role. Even in India, ISM and allopathic professional groups have begun to collaborate with each other in certain areas after nearly forty years of disagreement and argument - which still continue. By contrast, a majority of Malaysian allopathic doctors and paramedical teams are still unable to accept TM. They have turned down the idea of the incorporation of TM into the mainstream healthcare system, even after the implementation of pilot projects for integrated medicine. They claim that TM is not scientifically proven.

According to two-thirds of the respondents from the policy-makers focus group, the success of integrated medicine in Malaysia is bound to be determined by the cooperation between the two medical professional groups. Team work helps to professionalise TM. Hence, allopathic doctors are encouraged to acquire knowledge of TM and vice-versa. As a senior officer from MOH stated "... Allopathic doctors should enhance their knowledge of T&CM and become familiar with it. ...For any ailment, the best approach in management should be decided and agreed upon by both allopathic doctors and T&CM practitioners" (M-M7). Meanwhile, traditional fraternity groups are looking forward to working with their allopathic colleagues. They have even learned TCM terminologies in English to facilitate communicating with their counterparts and colleagues in the near future. With some fundamental knowledge in TM, allopathic fraternity groups can help their traditional counterparts and colleagues to conduct research in TM. They will be able to understand that scientific hierarchical methodology is not applicable in

TM and alternatives have to be sought. Research in TM is poorly developed in Malaysia at this point in time. Allopathic professional groups can help to teach modern medicine subjects in TM institutes if this is preferred.

7.4.3.4 Public Support

In Malaysia, the public believe that TM can maintain health and prevent infectious diseases. Hence, periodic consumption of herbal remedies is practised by some families in both urban and rural areas. As mentioned in the introductory chapter, a nation-wide community survey in 2004 reported that 69.4% of the Malaysian population have used TM in their life-time. They do not have much knowledge of herbal medicine; they just follow the advice of the traditional practitioner whom they have consulted. Unfortunately, qualified traditional practitioners are limited in Malaysia. This results in an influx of foreign traditional practitioners who claim to be qualified.

In comparison to China and India, public education programmes on basic knowledge of herbal remedies - components and usage – are not organised and conducted in Malaysia. Information on the availability of policy on TM, and the existence of appointed practitioner bodies and the T&CM Division is not conveyed to the public. Hence, the public remains uninformed as to whom to approach and what they should do in order to differentiate between genuine and bogus practitioners, or even to lodge complaints. Through public education, the public will be discouraged from consulting unregistered traditional practitioners, including visiting foreign practitioners since there will be an absence of continuity in care.

Cognitive institutionalisation of T&CM profession frames the government beliefs about the value of professionalisation of T&CM in Malaysia. The sign of cognitive institutionalisation processes at work occurs when more and more T&CM practitioners take it for granted that upgrading themselves and registration is not necessary. This belief is supported by the thinking that traditional medicine is

recognised by the public and culturally supported. Allopathic professions are encouraged to look into the worth for learning traditional medicine and helping its progress.

7.5 Discussion

A question that arises throughout this thesis is whether it is possible to cultivate a comprehensive healthcare policy and regulation across the TM systems so as to oversee traditional practices and enable their incorporation into the mainstream healthcare practice in Malaysia. It is clear that the incorporation of TM into the mainstream healthcare system is on track, but policy and regulation do not guarantee equality, as the experiences of China and India demonstrate.

Understandably, statutory self-regulation is the ultimate form of regulation for all medical professional groups, despite the fact that it may not be a goal for all individual practitioners. Overall, the traditional practitioner groups accept the introduction of law and regulation, with the understanding that their rights and public interests are to be protected. However, Malaysia has taken more than five years to draft the Bill. The awaited Act focusses on registration and licensing of traditional practitioners. What is the main reason behind the delay? Scott's institutionalisation framework in analysing the experiences in China and India, leads to the conclusion that Malaysia may be considering a statutory regulatory framework at a premature stage without first putting in place the necessary foundations to produce the required human capital in the TM system.

In China and India, it took nearly 40-50 years to establish professionalisation in TM. In China, institutional education began in 1955 and apprentice traditional practitioners were banned in 1962 (immediately following the availability of institutional TCM practitioners). Subsequently, the Law was adopted in 1998. Similarly, India started its institutional education for ISM in the late 19th century, promulgated the IMCC Act and stopped RMP registration in 1970. It is clear that

both China and India have set up structural education and developed human capital of a professional standing prior to implementation of the law and regulations. As the senior Ayurvedic practitioner from FRLHT remarked, statute laws should be drafted to govern the professional traditional medical groups and not folk healers (I-P23).⁴⁴⁷

Applying Scott's framework to analyse China's and India's experience, it would seem proper for Malaysia to establish a regulatory body composed of experts from various areas especially those from TM. Currently, the T&CM Division is composed of only allopathic fraternity groups. The lack of concrete knowledge of TM and its practices can lead to premature implementation of various policies, rules and regulations. Moreover, the officers are sent abroad for only short term courses or attachments with relevant regulatory bodies or universities by the Malaysian Government. This might prove insufficient for them to understand the complete working system of TM and to support the development of TM in Malaysia upon their return. The authorities concerned should consider engaging an international expert or experts on TM to guide Malaysian TM and to upgrade it to a professional platform. Meanwhile, traditional practitioner groups wonder if they can maintain their distinct philosophies of care and unique practices within the anticipated regulatory framework.

In responding to the development of TM, the experience of China suggest that collaboration between the government and TM professional associations is essential to establish institutes and standard curricula so as to professionalise TM. Particularly, Article 7 of the Law has encouraged practitioners to organise or join professional associations.⁴⁴⁸ Similarly, Malaysian national policy on T&CM has encouraged the establishment of professional associations and registration of practitioners. Unfortunately, many traditional practitioners decline to register in

⁴⁴⁷ 'Folk Healers' are midwives, bone-setters, supernatural curers who diagnose and treat illnesses through secret verbal charm and ritual. They are supported entirely by village communities.

⁴⁴⁸ See "Law on Licensed Doctors of the People's Republic of China" in *Collections of Laws, Regulations and Documents on Traditional Chinese Medicine*, ed. Daning Li et al. (Department of International Cooperation SATCM, 2005), 105-113, 105.

Malaysia. Moreover, TM practitioner bodies fail to speak with one voice, or at least with different voices complementing each other. If the practitioner bodies can unite and have a considerable degree of cohesion, they can represent the TM profession in dealings with the government and further develop their profession. Lack of internal cohesion appears to be one of the biggest obstacles for the traditional practitioners to move towards professionalisation. The other key obstacle is what the traditional practitioners and academics have pointed out as the 'lack of financial support from the government'. Experience in China and India proves that there is a demand for government involvement in the professionalisation of TM. Without it there will be no standard curriculum, no well equipped institutes, and a lack of clinical guidelines and quality evaluation.

In setting up a standard curriculum for TCM and ISM in Malaysia, the TCM groups encounter difficulties due to fragmentation in the three Chinese practitioner bodies. In comparison, MATIM has collaborated with the government and taken a proactive approach after understanding the issues related to ISM in India. As such, the Ayurveda curriculum has been drawn up and approval obtained, prior to looking into the Unani and Siddha systems of medicine. Even though ISM is composed of Ayurveda, Siddha, and Unani, MATIM has decided to focus on Ayurveda to begin with because it is in great demand compared to the other streams of ISM in Malaysia. The other streams can be developed in the near future as demand increases. It is very difficult to focus on developing all three streams at the same time. Moreover, in the contemporary context, ISM practitioners in Malaysia mainly comprise Ayurvedic practitioners. Even if there are self-described Unani or Siddha practitioners, they practise Ayurveda as well. In fact, after analysing the experience in China and India, the appropriate option appears to be that of starting TM education, either in ISM or TCM, on a small scale according to the national policy and then extending it further based on feedback from the public.

Malaysia has implemented pilot projects for integrated medicine directly in three public hospitals without conducting a feasibility study in the primary healthcare centre. Looking back at the success of integrated medicine in China, TCM was introduced into public health first. Even India has focussed on the rural healthcare, whereby ISM is integrated into the primary healthcare level prior to tertiary level. The Malaysian authorities concerned may consider introducing TM into the primary healthcare system first instead of directly into hospitals. Besides, the study area can be restricted to one state in the trial period. In this way it will minimise any contradictions with the mainstream system.

Referring to the historical background of Malaysia which consists of a melting pot of various medical systems, the authorities concerned could even consider allowing the various systems of TM to become integrated amongst themselves prior to integration into modern medicine. What about integrating ISM - Ayurveda, Siddha, and Unani - prior to leaping into modern medicine? There are areas where each of the streams has overwhelming evidence of better cures, for example, Ayurveda has better cures for piles, fistula, jaundice and arthritis, and Unani for menstrual disorders and psoriasis.

Even though the platform for research on TM has become very active, in the meantime Malaysia could subscribe to the concrete database of Chinese, Indian and global research on TM and draw on this for reference through the GLOBinMED (<http://www.globinmed.com/IMRContent/default.aspx>). Based on some advice from experts in China, Malaysia should focus on clinical training in TM. Recording patients' data into the electronic database to facilitate research in the near future is suggested. Moreover, research cannot be carried out without strong human capital and sufficient funds. Human capital includes traditional practitioners, scientists, and allopathic doctors.

Undoubtedly, China is very actively promoting knowledge of its traditions, formulations, and practices. However, there is still a discrepancy in developing

TCM and modern medicine in spite of its national policy and constitution. The discrepancy in the development of ISM and modern medicine has also been illustrated in the process of analysing the findings in India. In spite of the implementation of the National Policy on T&CM, development of TM in Malaysia is still slow and a long way behind modern medicine since it is not considered a component of the mainstream healthcare system. Patients cannot gain access to TM services in all the public health centres and hospitals. The Malaysian authorities concerned might consider formulating a comprehensive national policy on healthcare to equalise developing both TM and modern medicine based on the Chinese and Indian experience. Quality control in the provision of TM service needs to be addressed. Moreover, China has close international collaborations such as with WHO, in developing TCM. Similarly, India has taken the initiative in collaborating with other countries to develop ISM. Hence, Malaysia will only be following precedent if it is to engage in international collaboration to help professionalise TM and integrate it into mainstream medicine successfully.



Traditional and Complementary Medicine Division, Malaysia was established in 2004. (Photo courtesy of Traditional and Complementary Medicine Division, Ministry of Health)

Chapter 8

CONCLUSION

The purpose of professional regulation is to establish a countrywide, professionally set, independent standard of training, conduct and competence for each profession for the protection of the public and the guidance of employers. This is underpinned by personal accountability of practitioners for maintaining safe and effective practice, wherever they are employed and to include effective measures to deal with individuals whose continuing practice represents an unacceptable risk to the public or otherwise renders them unfit to be a registered member of the profession.

Health Bill, House of Commons, London, UK⁴⁴⁹

8.1 Introduction

In this Chapter, the research questions are restated and the conclusions based on findings in each chapter are summarised. Next, contributions of this research to the field of TM are drawn. Finally, limitations of the policy and research findings will be outlined.

Following the Declaration of Alma-Ata on Primary Healthcare and formulation of the WHO Traditional Medicine Strategy 2002-2005, many countries began to develop TM policy and legislation and to attempt the incorporation of TM into mainstream healthcare system. Recently, WHO predicted that the global herbal market would be worth USD five trillion by 2050.⁴⁵⁰ In responding to the high demand for TM, Malaysia, as a developing country is also beginning to look into policy and legislation on TM. The main reason behind this is to ensure a high standard of TM practice and patients' safety. To this end, experiences of regional neighbour countries such as China and India, both of which have built up strong policies, legislation and regulation for TM, have served as points of reference in this study. Their experience has been analysed and comparisons have been drawn out. Finally, the conclusions derived from the comparative study could serve

⁴⁴⁹ *Health Bill*, Explanatory Notes, HL Bill 15 - EN (The Stationery Office, 28 January 1999), 47.

⁴⁵⁰ Chaudhary, A., and N. Singh, "Contribution of World Health Organization in the Global Acceptance of Ayurveda," *Journal of Ayurveda and Integrative Medicine* 2(4) (2011): 179-186.

as useful knowledge in assisting the development of a legislative and policy framework for TM based on the specific needs of Malaysia.

8.2 Chapter Summary and Discussion

The research questions framing this study are:

- How do India and China regulate traditional medicine practices?
- What can Malaysia learn from the Indian and Chinese regulatory systems?
- How can the intention to regulate be justified?
- What would be the best way to achieve and oversee this regulatory system?

Clearly, a key question in this study is how China and India regulate TM practices. Both these countries have attempted to regulate TM practices through professionalisation of TM with respect to training and ethical practice. The theoretical framework for this study has been defined and explained in first three chapters. With reference to the literature review, Last's professionalisation framework emphasises "autonomy, monopoly, ideology of service, and body of esoteric knowledge" as defining features of professionalisation. Vollmer and Mills characterise professionalisation as the action of making an occupation professional by a group of people with specialised knowledge and skills which leads to upgrading the status of the particular profession. According to this perspective, developing countries like China and India have taken professionalisation of TM into account. In China and India, the influence of political decisions is the key determination factor in professional legitimacy. Professionalisation of TM in the above two nations is predicated on allopathic hegemony and cannot be considered to have ever been a profession in Last's sense.

Malaysia's context has focussed on TM professionalisation as a prerequisite for attesting to the qualifications of practitioners and ensuring public safety. Following professionalisation, incorporation of TM into the mainstream healthcare system is

encouraged. A large section of the data is gathered mainly through in-depth interviews

In keeping with Scott's notions of institutions, this study has analysed the national healthcare policy and related regulations on TM in China, India, and Malaysia. Following a comparative study of the TM healthcare policy and regulations in China and India, some conclusions have been obtained for a comparative focus on Malaysia. The comparative findings which emerged in this regard are summarised in the ensuing paragraphs and subsequently serve as a point of reference for Malaysia as tabulated in table 8.1.

China and India each have well-established traditions of, and policies on, TM. Both have their respective regulations, funding, education system, and health provisions concerning TM. Both these countries have served as case studies in this study because they are developing countries with an established historical background of traditional practice, and with well-formulated policy and legislation. The main objective of China and India is to develop TM.

It has taken several decades for TM practitioners in China and India to gain recognition as a professional group and put legislation in place. Following the enactment of the Law in China and the Indian Medicine Central Council Act in India, the TM Council acquired the power to impose a fine or working restrictions, and suspend or expel a traditional practitioner. This is consistent with Scott's analytic argument that TM practitioners who come under the regulative rules would be subjected to sanction if they commit an offence. Refusing to believe that the rules were fair and appropriate, a majority of the traditional practitioners felt dissatisfied with the rigidity of the policy and regulations in China; while in India there was a notion of uncertainty and considerable lack of uniformity in enforcement.

China and India, with well-defined educational structures and developed infrastructures to develop human capital, still have many challenges in their TM education such as insufficient clinical training. Chinese health policy has outlined the objectives of integrated TCM education, namely, to nurture excellent TCM practitioners from TCM universities and allopathic doctors from modern medicine universities. However, outcomes do not reflect a significant success. Similarly, weaknesses in enforcement in India have allowed authorised officers to misuse power, with ISM graduates practising modern medicine instead of developing ISM. A section of TM practitioners fail to comply with rules that are legally and ethically binding. In the contemporary context, China has considered specifying, checking, and maintaining the quality of integrated education by programmes that include peer reviews of teaching by senior colleagues or external agents, one-on-one teaching, audits/evaluations, continuing professional education and other related activities.

Comprehensive healthcare policy and regulation has the potential to integrate TM into the mainstream healthcare system with plurality in medical service provision. All medical systems have their own strengths and deficiencies. Hence, knowledge-sharing complements limitations of each and produces improved outcomes. For example, TM has an important role in disease prevention. China, being a country with an integrated healthcare system, has yet to achieve integration at the theoretical level. TCM is not completely integrated into modern medicine. It is limited to the clinical level only. In India, ISM is parallel to modern medicine. ISM has recently been incorporated into public healthcare, although not in a comprehensive manner. There is a fear of dominance of modern medicine, legal and ethical issues with cross referrals, and risk of health service commercialisation. Moreover, there is uncertainty about the efficacy and harmful effects of each medical system. Therefore, policy alone has not necessarily ensured quality of clinical practice.

Nevertheless, GCP guidelines have been formulated to standardise traditional medical practices. Quality assurance development has been put in place to ensure the establishment of a complete healthcare network, and the improvement of practice of TCM and integrated medicine in China and its globalisation. India has yet to develop programmes to evaluate the quality of education and healthcare service provision.

In spite of the established historical development of TM in China and India, the healthcare policy output and performance are considered unsatisfactory by TM practitioners. Policy and regulation rationalise the delivery of medical services in order to control costs and minimise the waste of resources. Unfortunately, the expenditure on TM healthcare services has not been proportionate to that for modern medicine, especially in the rural areas. TM healthcare services are culturally supported by the communities. Moreover, the budget allocated for educating and training TM personnel was seen by respondents as being inadequate. The existence of a dichotomy between modern medicine and TM renders inequities in the development of both medical systems. Equity in allocating funding for service delivery and for ensuring service availability remains the challenge of healthcare policy. A core challenge for policy makers and providers is decide how to rationalise and distribute resources.

Malaysia, a developing country that wishes to move towards integrated medicine, has yet to professionalise and develop a legislative framework for TM. While waiting for the promulgation of the Traditional and Complementary Medicine Act, one option for Malaysia is to formulate a comprehensive healthcare policy on TM through learning from the experiences of China and India. Regarding the current situation of TM in Malaysia, its practice is constrained by the existence of the mainstream healthcare and regulatory system. Although it is timely for TM to be professionalised, unfortunately the traditional practitioner groups experience internal fragmentation. An internal cohesion amongst all the traditional professional groups in the country and close collaboration with authorities

concerned would be of foundational advantage in the Malaysian context, after analysing China's experience of the existence of a good bilateral cooperation between SATCM and professional bodies to professionalise TCM. Disunity and lack of teamwork are identified as major obstacles to the success of professionalisation and healthcare policy implementation. As highlighted by Xu coming together under an umbrella medical organisation saved CM from being abolished in 1929 and protected China's culture and economy.⁴⁵¹

Another important challenge faced by the traditional practitioner group during the process of professionalisation is to maintain the original value of their respective TM systems. There is a high possibility of losing the original value and thereby limiting the therapeutic practices in the process of looking for a hierarchy of evidence. The process of standardisation of TM through evidence-based medicine presents to practitioners as contradictory to the notion of clinical freedom of traditional practitioners. It also narrows the scope of TM practices.

It also seems appropriate for the authorities concerned in Malaysia to engage international advisors on TM to guide Malaysian TM to move forward to a professional status and to be incorporated into the mainstream healthcare system. They can employ a group of experts in various aspects of TM to advise on and oversee progress in the formalisation of TM. Human capital development in the TM system can be initiated through a small-scale institution and extended to a larger scale once positive feedback is obtained from the public. Subsequently, integration of medical systems could be implemented gradually, starting with the primary healthcare level. Malaysia has also created an international traditional and complementary database, GLOBin MED (www.globinmed.com), which provides international data that can serve as source material for enabling the Malaysian Government to focus on clinical training and to develop research on TM at a subsequent stage.

⁴⁵¹ Xu, X.Q., *Chinese Professionals and the Republican State: The Rise of Professional Associations in Shanghai 1912-1937* (CUP, 2001), 197.

In addition, continued professional development and maintenance of quality high education is of central relevance to the Malaysian situation at this point of time. Quality control of TM service provision, such as evaluating professional practices is mandatory according to the respondents in this study. From the Indian experience, religious interest groups should refrain from making TM a politico-religious agenda.

In short, integration of TM into the mainstream healthcare system is influenced by political decisions and opinions of other stakeholders. The full support of the stakeholders could change and shape the healthcare policy into a more comprehensive one. Without their support, the quality of TM healthcare service provision would be poor and keeping pace with modernisation would be impossible on account of lack of expenditure on TM healthcare, limited access to medical technology, insufficiency of human resources, public lack of information, and failure to collaborate.

Table 8.1: A summary of the status evolution of traditional medicine policy in China, India, and Malaysia

	China	India	Malaysia
<i>Political power and legal system</i>			
Supreme legislative body	National People's Congress	Parliament	Parliament
Legislation	The Law 1998 for both TCM and allopathic professions	IMCC 1970 for ISM professions only	Nil (T&CM Bill has been drafted)
Country's governmental structure	The State Council is following People's Congress, so it has higher political status of influence. There is devolution of authority to the branches of SATCM in different provinces.	The CCIM is under Health Ministry, so it has lower political status of influence. There is devolution of authority to the Department of AYUSH in different states.	Nil
Administrative department	SATCM - comprises TCM and allopathic practitioners.	Department of AYUSH – comprises ISM practitioners only.	T&CM Division – allopathic professions.
Registration of traditional medicine apprentices / healers	Stopped registration of apprentices in 1962. China is more determined to professionalise TCM.	Stopped registration of RMP in 1970. However, in 1984, the Government in Tamil Nadu State (no CCIM) allowed one time registration for traditional healers.	Have to register with the respective professional associations and health ministry.
Illegal practices	Persists	Persists	Present
Rules and regulations	Rigid and unjustified	Are not uniform and have lots of uncertainties.	Weak policy

	China	India	Malaysia
<i>Professional Bodies</i>			
Organisation	NGOs, under supervision of the government.	NGOs	NGOs
Registration	Compulsory	Optional	Encouraged
Collaboration with government	Work closely with SATCM	Poor collaboration with AYUSH department	Some collaboration with T&CM Division.
<i>Universities</i>			
Organisational structure	Under supervision of respective local government.	Department of AYUSH	NGOs - INTI College University
System of education	Integrated medicine education	Pure ISM with basic biological science (1986)	Pure TCM with modern medicine subjects
Medium of instruction	The original language of the texts – Chinese.	Optional	English
Practising license	Following two national examinations. It is more bureaucratic & requires more pieces of paper.	Following examination board.	Following examination board.
Challenges	Fail to understand the holistic approach of TCM, undefined teaching methodology on biomedical subjects, inappropriateness of the ratio of credit	ISM education is overwhelmed by modern medicine, lack of clinical training, weakness of regulation, and discrimination in the development of the	Difficulty to get the message across to students, shortage of trained lecturers and

	China	India	Malaysia
Quality control	hours, and lack of clinical training. Has developed standardisation and quality control of TCM education.	elements of ISM, Has yet to develop.	Clinical training. Has yet to develop.
<i>Integrated Hospital</i>			
Number	2,688 TCM hospitals & 236 integrated hospitals.	1,291 ISM hospitals. Co-locate ISM facilities with allopathic hospitals.	3 public hospitals (pilot projects).
Service provision	Both out-patient and in-patient services.	Certain district hospitals provide in-patient service as well.	Out-patient service only
Primary Healthcare	Private sector in the provision of primary medical care.	Private sector	Private sector
Complete integration	Nil, only clinical integration	Nil, only practise in parallel manner	Nil
Healthcare funding	Urban healthcare insurance and cooperative medical scheme.	Out-of-pocket payment in receiving healthcare service from private sectors.	Out-of-pocket payment in receiving healthcare service from private sectors
Quality of care	-Practitioners with good professional practices are honoured as 'Distinguished doctors'. -Ensure patients' safety through research.	- Practitioners with good professional practices are listed as 'E-porter practitioners'. - Ensure patients' safety through drug research.	Nil Nil

	China	India	Malaysia
	-Has yet to establish a complete healthcare network in service organisation.	-Has yet to develop networking.	Nil
<i>Governmental support</i>	Inequities in the development of both medical systems (TCM and modern medicine) - both funding and geographical inaccessibility.	- do -	- do -
<i>Traditional support</i>	Integrated TCM practitioners are in higher demand. CME is required for maintaining professionalisation.	Allopathic doctors are in higher demand as compared to ISM practitioners. In order to maintain professionalisation of ISM, CME is encouraged.	Allopathic doctors are in higher demand. Traditional practitioners should upgrade themselves.
<i>Allopathic support</i>	Team work and mutual understandings	- Same -	- Same -
<i>Public support</i>	Apprentices are very much supported by their communities.	Apprentices are supported by the rural communities	Apprentices are supported by the communities

8.3 Overall Contribution

Based on the above findings, the following conclusions may be drawn:

Firstly, it may be concluded that there are substantive differences in the political system of healthcare in China and India, which influence, in turn, policy on and development of TM. In China, registration of practitioners with professional bodies is compulsory, whereas it is optional in India. Integrated medicine has been

practised officially and widely in China for years, but this is not so in India. China has strong central political influence on the development of TCM, unlike the development of ISM in India, which has been largely marginalised within the health system until very recently and is subject to a multitude of influences, such as state policies, central policies, national councils of traditional medicine etc. China has a ministry with a hierarchical type of administration of their affairs. India has a multi-party system and hence the administration of implementation may meet with changes and amendments at many points in the policy process. As both the Indian and Chinese systems are a reflection of their respective political systems, it is not simple to precisely compare the policy structure of these two countries. Different theoretical formulas have to be considered for each context.

In relation to this point, Malaysia, with its democratic political system, can learn from both China and India to formulate certain policies. At the same time, it has to recast the models of China and India according to Malaysia's political culture and ethnic groupings and their priorities. The challenge for Malaysia is to decide whether to have a more centrally controlled system like China, or to follow India's more self-regulatory approach.

The main difference between China, India and Malaysia is that both TCM and ISM are formal medical systems in China and India respectively. The mainstream healthcare system in Malaysia is modern medicine alone. In terms of development of TM, unlike in China and India, Malaysia has three systems of TM from three different ethnic categories or sectors, none of which is yet fully part of the formal system: Malay, Chinese and Indian. Regarding support for TM, there seems to be a political reluctance to place one sector above the other. This means that the three systems of TM will have to develop at the same pace. Nevertheless, there are doubts as to whether the public response and political support would be balanced and uniform on the issue of development. Otherwise, it would amount to a political verification where one system (e.g. Malay TM) would be categorised as more important than another (e.g. Chinese or Ayurvedic medicine). Unavoidably in

a multicultural society, there are overtones of ethnicity, involving national and ethnic political agendas.

Croizier documents the impact of the Chinese political system on Chinese medicine 50 years ago. He argues that the political system has damaged classical TCM. It has led to decreased acupuncture points, and the abandoning of quite a number of practices considered 'superstitious' by the Communist authorities. Croizier has argued that Chinese medicine in China is, therefore, not a complete system of Chinese medicine in its original form. Others have argued the same, including Scheid, Sivin and Taylor. Particularly, the element of governmental control is subsequent to the element of tradition. This is the issue that Malaysia has to consider when formulating policy in response to political polarisation (politics of different ethnic, professional and party political agendas). Accordingly, Malaysia is exercising caution in developing TM. To further develop the traditional system of medicine in Malaysia, it is important to ensure that no one single system based on the majority-led group in the country becomes dominant. To set too many conditions on the content of development of already well-established systems of TM may well retard their development and progress. As shown in the Chinese experience, too much political control can result in the loss of traditional knowledge. In a culturally heterogeneous society, this may constitute interference in another culture, restricting a full representation of that culture. This, in turn, would attract political attention and conflict. Therefore, Malaysia has a need to be more cautious than China has been in preserving cultural principles.

Malaysia could be more appropriately engaged with a jurisdiction like India. The system in India is basically dualistic – it involves both modern medicine and ISM. However, such a dual system may result in a marginalisation of the weaker of the two systems. Moreover, India has, over time, taken in the views of multiple political organisations to secure the Ayurvedic system of medicine in national healthcare.

The next conclusion derived is that the integration of TM into the mainstream healthcare system is anticipated to be a time-consuming and challenging task. Professionalisation of TM is a preliminary step. From the historical viewpoint, in China and India, more attention was paid to the development of modern medicine. Similarly, in Malaysia, there is already evidence that modern medicine affects, and potentially restrains, the development of TM. In China, the integration of TCM with modern medicine has existed over a long period, and the relationship between modern medicine and TCM continues. During the financial crisis (1980), in the first ten years of the market oriented economic reform, hospitals struggled for survival.⁴⁵² For example, hospitals prepared and packed the herbs into TCM formulas or decoctions, and encouraged doctors to prescribe and sell them at prices many times higher than the market value. Generally, revenue from TCM can exceed that from modern medicine, as herbs can be processed on site in a hospital or clinic setting and marked up many times beyond their raw market value.

On the other hand, in India, it is not a business model like in China and exists rather due to the political process. The Ayurvedic professional bodies, such as the All Indian Ayurvedic Congress, include members who are also politicians and members of parliament. Hence, the professionalisation of ISM in India is through a political process, unlike the dominance of Chinese medicine in China through a combination of Central Government authority and a market development model.

In Malaysia, the mode of professionalisation for TM is uncertain since modern medicine has been dominant for the five decades since Independence from British rule. In Malaysia, one of the biggest challenges is to face the impact of control by modern medicine and acknowledge that TM development has been slow.

⁴⁵² There are two eras in the history of development in the PRC: Socialist planned economy (1949-1979) and socialist market economy (from 1980 onwards). During the period of reform of the economy, there was a shortage of funds in the healthcare system. In order to overcome this crisis, policy makers suggested reduced budgets and increased competition, such as wholesale drug prices being allowed to mark up their prices by 15-25%. See Liu, X.Z., & Y. Yi, *the Health Sector in China Policy and Institutional Review*, <http://siteresources.worldbank.org/INTEAPREGTOPHEANUT/Resources/502734-1129734318233/policyandinstitutionalreview-final.pdf> (accessed March 11, 2010).

The disbandment of the Umbrella Bodies on July 9, 2004 by the former health minister Datuk Dr. Chua Soi Lek, could be seen as the removal of the consolidated strength of the professional bodies. Moreover, the absence of activity for four years following the disbandment of the Umbrella Bodies reversed the growth of all T&CM modalities in the country. The lack of focus in developing a formalised curriculum greatly reduced the prospects of producing human capital in all the three systems. Eventually, a new working group in T&CM modalities was formed but in the framework of a set of individual associations. The new line up of these associations has to work individually as separate entities – clearly, in a weakened political bargaining position.

It is obvious that the T&CM Division, Health Ministry of Malaysia has developed a specific model of T&CM administration. This, however, is one in which staffing is by officers who are mainly trained pharmacists and allopathic doctors. Due to the fact that these officers are not well versed in the subject areas of TM, a significant barrier is created with the T&CM groups with regard to the implementations of various policies. Instead of collaborating and working towards a common goal as how best to develop the sector, constant barriers are created.

Drawing on India and China's experience, the Malaysian T&CM Division needs to revamp its ideology on how to effectively address the promotion of T&CM in the country without prejudice towards the subject and its practitioners. Unfortunately, allopathic professionals do not understand content and expressions of TM as majority of them have a closed minded position towards all these subjects, which inevitably leads to misunderstandings and conflicts. Monitoring future growth and preserving the principle of professional self regulation approach of extra-ordinary control needs to be considered.

In accordance with the Chinese and Indian experiences, after obtaining official recognition, TM extends beyond a tertiary clinical context and is introduced into the primary healthcare level. Further extension of the integration of TM into

secondary or tertiary level depends on the feedback from the public and other stakeholders. In other words, political will is required to support and ensure the quality of TM practices in order to integrate them into the mainstream healthcare system. Premature integration may result in TM being over-shadowed by modern medicine and this could lead to the constriction or loss of the original therapeutic value of TM.

Based on Scott's analytic arguments, with a proper organisational structure, professionalisation of TM will occur within it. However, it is not suitable for a country with more than one system of TM. For example, in India, with an official organisational structure, there is discrepancy in the development of the three streams of ISM. Moreover, it may not be possible to signify the true changes throughout the process of professionalisation since there are changes in rules, values, norms, beliefs, and behaviours. Therefore, Scott's framework may not be the strongest analytic framework in demonstrating how best to cultivate a standard policy across the traditional systems of medicine.

8.4 *Policy Limitations*

A national policy is meant to improve the role of TM in national healthcare delivery by ensuring the formulation of legislation for effective and good clinical TM practices, and stimulating research and educational efforts. However, policy does not guarantee equality, as India's and China's experience demonstrates. There is no universally applicable definition of an ideal healthcare policy that could ensure high quality healthcare system. Undoubtedly, policy decisions will affect the future of TM.

Furthermore, poor communication and failure to obtain general consensus regarding the contents of the policy have contributed to a second limitation of policy. The lack of understanding of the objectives of policy by traditional practitioners will pose a barrier between the government and the practitioners.

This may prevent collaboration between the authorities concerned and the practitioners. Moreover, difficulty in implementing the policy will be encountered.

The formulation of policy requires the assistance of a group of experts in various aspects of TM. Limiting its formulation to only policy-makers who do not possess any knowledge of TM will clearly not fulfil the purpose of developing TM; instead it may even impede its progress. Undoubtedly, the full support of the stakeholders could change and shape the healthcare policy into a more comprehensive and a friendlier policy. With the existence of a group of experts in TM, the feasibility and practicability of the policy may be further enhanced.

Formulation of policy ought to be based on social, cultural, and demographic factors of a country, since healthcare policy output and performance are under the influence of these factors. The most important part is to depend on the ultimate objectives of the respective nations. Direct trans-national transfer of policy models may not be suitable as policy works in accordance with the specifics of individual countries.

8.5 Suggestions for Future Research

This study is a starting point on healthcare policy for regulating TM practices in China, India, and Malaysia, and inevitably must leave several questions unanswered. There is a need for more research into health policy in other South East Asian and Western Pacific regions on issues of TM, particularly around the topic of models of professionalisation and integration. One of the issues that is not clear is the status of medical insurance for TM treatment or how this could be dealt with by the authorities concerned. This study provides a potentially useful baseline for future research on such issues.

This study also highlights other key areas for further research. It is important to note that the collected data come from a small sample of participants whose

opinions are not necessarily representative of each and every stakeholder in China, India, and Malaysia.

The objective of this qualitative study is to explore the range of life experiences of policy makers, academics, and traditional practitioners in the three case-study countries regarding the implementation of national policy on TM and related rules and regulations. It also allows the study of the responses of the three focus groups in Malaysia at different stages of the professionalisation process. While the findings are not conclusive, they do provide concepts for sensitising future research on generating theory. Future research could be done to see whether TM could maintain its originality in the process of professionalisation. Future studies with larger samples and involving all the states or provinces of respective countries can increase the scope for transferability and applicability of the findings. And important stakeholder research, especially on views and aspirations of traditional practitioners, can serve to guide culturally-grounded policy development.

Last but not least, the limited information on intellectual property rights (IPR) and TM does not allow it to stand as an independent section in this thesis. However, the literature review and work done on IPR could act as a stepping-stone for future research on framing suitable policy and legislation and enforcement for the protection of traditional IPR.

8.6 Conclusion

In light of the worldwide changing healthcare environment, there is a necessity to have a comprehensive policy on traditional system of medicine, and the sharing of information and experiences among nations pertaining to professional development. The opinion of Bodeker and his colleagues in their sustained interest and study of Asian TM especially regarding policy, regulation, education and training, and research development, may be especially appropriate in summing up this study:

A broad-based strategy is required if complementary and traditional medicine is to shift from the marginal status it holds in most countries, to having a significant role in national healthcare. Political will as well as scientific will and data are needed to support such an agenda. Ultimately, nothing would be considered complementary or alternative, orthodox or conventional.⁴⁵³

⁴⁵³ Bodeker, G. et al., "Policy and Public Health Perspectives on Traditional, Complementary and Alternative Medicine: An Overview" in *Traditional, Complementary and Alternative Medicine: Policy and Public Health Perspectives*, ed. G. Bodeker, and G. Burford (Imperial College Press, 2007), 8-38, 31-32.



The Standing Committee of Traditional and Complementary Medicine Division, Malaysia, of which is chaired by the Deputy Director General of Health (Research and Technical). (*Photo courtesy of Traditional and Complementary Medicine Division, Ministry of Health*)

Questionnaires for China

A) Questionnaire for policy-makers:

1. What is the main objective in regulating traditional practitioners and their practices?
2. What is the structure and main content of the legislation which regulates these traditional practitioners?
3. Which agency is the administrator of the Act?
4. What is China's policy on traditional practitioners who are trained through apprenticeship?
5. What are the new developments in China with regard to the regulation of traditional practitioners and their practices?
6. What are the public documents which describe China's policy and regulation? And how can I get them and any latest variations/developments of these?
7. What is the budget allocation for education in Traditional Chinese Medicine (TCM) in the State and central?
8. What do you anticipate or expect to see in the future of development in TCM in China? (10 years time)
9. What is your advice to Malaysia in moving towards an integrated health care system?
10. With regard to the regulation of traditional practitioners and their practices, what are the lessons Malaysia can learn from China?

B) Questionnaire for Academics:

1. What is your opinion on the development of refresher or reorientation courses in the categories of traditional practitioners such as those who have come from apprenticeship?
2. What are the shortfalls in Traditional Chinese Medicine (TCM) education at the college/university level in China?
3. What is your opinion on how to improve the education of TCM in China?
4. What are the pros and cons of introducing Modern medicine in the undergraduate curriculum of Traditional Chinese medical students and vice-versa?
5. What are the shortcomings in TCM in respect of progress towards evidence based medicine?
6. Do you think that the government has allocated an adequate budget for education in TCM in each state?
7. If you were going to give recommendations to Malaysia regarding the setting up of a TCM university, would you advise on the adoption of the same system of rules found in China or different standards and criteria (professional training) to be developed based on the country's need?

C) Questionnaire for Practitioners:

1. Do you agree with being regulated? Why?
2. Do you think that illegal practices have decreased since the implementation of the Law on Licensed Doctors of the People's of China, 1998?
3. Are you satisfied with the regulatory system on Traditional Chinese Medicine (TCM) at this time? (It is regulated by the allopathic medical fraternity in China) If you are not, why?
4. Do you agree that TCM should be incorporated into the current health care system?
5. Do you agree that traditional medicine needs to be incorporated with scientific technology from diagnosis to therapeutic aspects? Will it alter the origin and nature of traditional medicine?

Questionnaires for India

A) Questionnaire for policy-makers:

1. What is the main objective in regulating traditional practitioners and their practices?
2. What is the structure and main content of the legislation which regulates these traditional practitioners?
3. Which agency is the administrator of the Act?
4. What is India's policy on traditional practitioners who are trained through apprenticeship?
5. What are the new developments in India with regard to the regulation of traditional practitioners and their practices?
6. What are the public documents which describe India's policy and regulation? And how can I get them and any latest variations/developments of these?
7. What is the budget allocation for education in TIM in the State and central?
8. What do you anticipate or expect to see in the future of development in traditional Indian medicine (TIM) in India? (10 years time)
9. What is your advice to Malaysia in moving towards an integrated health care system?
10. With regard to the regulation of traditional practitioners and their practices, what are the lessons Malaysia can learn from India?

B) Questionnaire for Academics:

1. What is your opinion on the development of refresher or reorientation courses in the categories of traditional practitioners such as those who have come from apprenticeship?
2. What are the shortfalls in TIM education at the college/university level in India?
3. What is your opinion on how to improve the education of TIM in India?
4. Do you agree that education in modern medicine should be introduced in the undergraduate curriculum of traditional Indian medical students and vice-versa?
5. What are the shortcomings in TIM in respect of progress towards evidence based medicine?
6. Do you think that the government has allocated an adequate budget for education in TIM in each state?
7. If you were going to give recommendations to Malaysia regarding the setting up of a TIM university, would you advise on the adoption of the same system of rules found in India or different standards and criteria (professional training) to be developed based on the country's need?

C) Questionnaire for Practitioners:

1. Do you agree with being regulated? Why?
2. Do you think that illegal practices have decreased since the implementation of the Indian Medicine Central Council Act, 1970?
3. Are you satisfied with the regulatory system on TIM at this time? (It is regulated by the traditional sector in India) If you are not, why?
4. Do you agree that TIM should be incorporated into the current health care system?
5. Do you agree that traditional medicine needs to be incorporated with scientific technology from diagnosis to therapeutic aspects? Will it alter the origin and nature of traditional medicine?

Questionnaires for Malaysia

A) Questionnaire for policy-makers:

1. What is the main objective in regulating traditional practitioners and their practices?
2. I do understand that the Ministry of Health, Malaysia is in the midst of preparing legislation to regulate the traditional practitioners and their practices. What is the structure and main content of the legislation which regulates these traditional practitioners?
3. Which agency is the administrator of the Act?
4. What is Malaysia's policy on traditional practitioners who are trained through apprenticeship?
5. What are the public documents which describe Malaysia's policy and regulation on traditional medicine? And how can I get them and any latest variations/developments of these?
6. What are the potential obstacles in regulating traditional practitioners in Malaysia?
7. Is there any provision of funds from the Government to support education in traditional medicine?
8. What do you anticipate or expect to see in the future of development in traditional medicine in Malaysia? (10 years time)
9. What is your advice to Malaysia in moving towards an integrated health care system?
10. With regard to the regulation of traditional practitioners and their practices, what are the lessons Malaysia can learn from China and India?

B) Questionnaire for Academics:

1. What is your opinion on the development of refresher or reorientation courses in the categories of traditional practitioners such as those who have come from apprenticeship?
2. What are the strengths and shortfalls in Traditional Medicine education in Malaysia?
3. What is your opinion on how to improve the education of traditional medicine in Malaysia?
4. Do you agree that education in modern medicine should be introduced in the undergraduate curriculum of traditional medical students and vice-versa?
5. What are the shortcomings in traditional medicine in respect of progress towards evidence based medicine?
6. What is your opinion on professional training standards at this moment in Malaysia?
7. If Malaysia will set up a traditional medical college or university, would Malaysia adopt the educational system based China? Or would Malaysia develop its own standards and criteria based on the country's need?

C) Questionnaire for Practitioners:

1. What is the percentage of unregistered practitioners in Malaysia?
8. In order to prevent unhealthy practices, the government intends to introduce an Act to regulate traditional practitioners. Are you aware of this?
9. Do you agree with being regulated? Why?
10. Are you satisfied with the self-regulatory system on traditional medicine at this period of time? If you are not, why?
11. Do you agree that traditional medicine needs to be incorporated with scientific technology from diagnosis to therapeutic aspects? Will it alter the origin and nature of traditional medicine?
12. Do you agree that traditional medicine should be integrated into the current health care system?

Article

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