

## ABSTRACT

Title of Thesis: The Integration of Western Biomedicine and Traditional Chinese Medicine:  
A Comparative Analysis of Perceptions in Beijing and Chicago

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Thesis directed by: Dr. Barbara Anderson

Western biomedicine is often criticized for its lack of compassion, band-aid approach to medical problems, and lack of cultural competency in medicine. Traditional Chinese Medicine (TCM) has the potential to address some of these drawbacks. It utilizes a holistic approach to health, emphasizes prevention in addition to treatment, and is rooted in cultural traditions. This research study seeks to investigate perceptions of the integration of Traditional Chinese Medicine (TCM) and Western biomedicine as a synergistic healing system and to identify barriers to integrative medicine. I interviewed patients, physicians, and others on their perceptions of integrative medicine in Beijing and Chicago. Many participants believed in the synergistic potential of integrative medicine to achieve better health outcomes than either medicine alone. However, there were some concerns about access to integrative medicine and contention of cultural values in seeking integrative medicine in Chicago. The biggest barrier to integrative medicine, cited by patients and physicians alike in Beijing and Chicago, was the lack of understanding of integrative medicine amongst Western physicians. Although integrative medicine shows great promise in providing cost-effective and quality health care, it must overcome significant barriers before it can be successfully implemented in the U.S. health care system.

The Integration of Western Biomedicine and Traditional Chinese Medicine:  
A Comparative Analysis of Perceptions in Beijing and Chicago

By

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## CHAPTER 1

### I. Introduction

The Alma-Ata International Conference on Primary Health Care in 1978 marked the beginning of the primary health care movement, in which thousands of delegates from around the world rallied behind the idea of universal primary health care. At the time, there were mixed results as to the success of “vertical” (disease-specific) eradication programs. Although the World Health Organization’s (WHO’s) campaign to eradicate smallpox was successful in 1967-1979, its goal of eradicating malaria failed to materialize in 1967-1979. These interventions revealed that there was no quick fix, “magic-bullet” intervention to address diseases, especially in areas that lacked robust health systems. Instead, global health problems required a comprehensive, “horizontal” approach or primary health care that utilized community-based medicine.<sup>1</sup>

One of the most successful models of primary health care delivery in the developing world was the Cooperative Medical System or “barefoot doctor” movement in the People’s Republic of China. The barefoot doctor movement built networks of health workers who implemented public health interventions and attended to basic needs in almost 90% of Chinese villages. The barefoot doctors combined Western medicine and Traditional Chinese Medicine (TCM) to control parasitic diseases and achieved tremendous results. The success of the barefoot doctor movement significantly contributed to the rise in average life expectancy, from 35 to 68 years between 1952 and 1982.<sup>2</sup> The primary health care model thus demonstrated that promoting community participation and integrating Western and local medical practices were effective in

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<sup>1</sup> Paul Farmer, Arthur Kleinman, Jim Kim, and Matthew Basilio, eds. *Reimagining Global Health: An Introduction*. California Series in Public Anthropology, v. 26. Berkeley: University of California Press, 2013.

<sup>2</sup> Ibid.

delivering basic care services on a wide scale at a low cost. As such, the barefoot doctor movement served as a model for the international community to utilize an integration of Western medicine and local medical practices to strengthen rural primary health care systems. It was the beginning of integrative medicine.

According to the WHO, health is “a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.”<sup>3</sup> This definition emphasizes a holistic approach to health: being disease-free is only one of many aspects of what it means to be in good health. Integrative medicine encompasses several of these components in its aim to restore and maintain health and wellness through an understanding of the patient’s circumstances and addressing the full range of physical, emotional, mental, social, spiritual, and environmental influences that affect health.<sup>4</sup>

There has been interest in the potential of integrative medicine to address some of the drawbacks of conventional medicine. Western biomedicine has been criticized for its band-aid approach to medical problems, lack of compassion towards patients, and oversight of the importance of cultural competency in medicine. The physician-patient interaction has become increasingly shorter and less personal with advances in medical technology.<sup>5</sup> U.S. health care spending has skyrocketed in recent years due to overprescription of drugs and an excess of screening tests with little to no improvement in health outcomes.<sup>6</sup> Furthermore, traditional medicine remains an integral part of the health care system for many developing countries and

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<sup>3</sup> "WHO Definition of Health," World Health Organization, 2003, accessed January 20, 2016, <http://www.who.int/about/definition/en/print.html>.

<sup>4</sup> "What Is Integrative Medicine?" The Bravewell Collaborative, 2011, accessed January 20, 2016, [http://www.bravewell.org/content/Downloads/What\\_Is\\_IM\\_2011.pdf](http://www.bravewell.org/content/Downloads/What_Is_IM_2011.pdf).

<sup>5</sup> "U.S. Health Care from a Global Perspective." Accessed April 10, 2016. <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>.

<sup>6</sup> David Squires and Chloe Anderson. "U.S. Health Care from a Global Perspective." *The Commonwealth Fund*, October 2015. <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>.



offers a cost-effective approach to providing effective care to populations.<sup>7</sup> Perhaps there is potential for a synergistic integration of Western biomedicine and TCM.

Despite an increased interest in integrative medicine, there have been few studies regarding the perceptions of the integration of TCM and Western biomedicine. In my research project, I interviewed physicians, patients, and others in Beijing and Chicago about their perceptions of the integration of TCM and Western biomedicine. A comparative analysis of these interview responses revealed overarching themes relating to integrative medicine and shed light on cross-cultural differences that shape how people use and perceive integrative medicine. This paper aims to investigate perceptions of the integration of TCM and Western biomedicine as a healing system, evaluate the potential of integrative medicine in providing quality health care, identify barriers (structural, social, economic, etc.) to implementing integrative medicine into the national health care system, and make recommendations towards a full integration.

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<sup>7</sup> Hao Xu and Ke-Ji Chen, "Integrating Traditional Medicine with Biomedicine towards a Patient-centered Healthcare System," *Chinese Journal of Integrative Medicine Chin. J. Integr. Med.* 17, no. 2 (February 2011): 83-84.

## II. Research Question

I am investigating perceptions of the integration of traditional medicine and Western biomedicine as a healing system. Western biomedicine is currently the standard form of health care all around the world. However, physicians and patients have utilized forms of traditional medicine as a complement or alternative to conventional medicine for years. According to the World Health Organization (WHO), traditional medicine is defined as “the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.”<sup>8</sup> Traditional medicine is an integral part of healthcare for many developing countries. Currently, up to 80% of the population in Africa use traditional medicine to meet their healthcare needs. In Asia and Latin America, many populations continue to use traditional medicine due to historical circumstances and cultural beliefs.<sup>9</sup> More than 90% of the urban and rural Chinese populations have used Traditional Chinese Medicine (TCM) in their lifetimes.

A healing system dating back to thousands of years, TCM includes herbal medicine, acupuncture, massage, cupping, moxibustion, food therapy, and qigong exercises. TCM is an institutionalized form of health care in China. In 2006, over 200 million outpatients and some 7 million inpatients utilized TCM to treat their illnesses, which makes up about 10%-20% of health care expenditures in China.<sup>10</sup>

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<sup>8</sup> “WHO Traditional Medicine Strategy 2014-2023,” World Health Organization, accessed January 20, 2016, [http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090_eng.pdf?ua=1).

<sup>9</sup> Hao Xu and Ke-Ji Chen, "Integrating Traditional Medicine with Biomedicine towards a Patient-centered Healthcare System," *Chinese Journal of Integrative Medicine Chin. J. Integr. Med.* 17, no. 2 (February 2011): 83-84.

<sup>10</sup> Jin-Ling Tang, Bao-Yan Liu, and Kan-Wen Ma, "Traditional Chinese Medicine," *The Lancet* 372 (December 6, 2008): 1938-940, accessed January 20, 2015, doi: 10.1016/S0140-6736(08)61354-9.

Physicians and patients may use TCM alone, as a complement, or as an alternative to Western biomedicine. There is a growing number of people using complementary and alternative medicine (CAM). A medicine is considered “complementary” if it is a non-mainstream practice that is used *together with* conventional medicine, and it is considered “alternative” if it is used *in place of* conventional medicine.<sup>11</sup>

Integrative medicine is based off of the WHO’s definition of health. The WHO defines health as “a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.”<sup>12</sup> The goal of integrative medicine is to restore and maintain health and wellness through an understanding of the patient’s circumstances and addressing the full range of physical, emotional, mental, social, spiritual, and environmental influences that affect health.<sup>13</sup> Although patients and practitioners have expressed increasing interest in integrative medicine, few studies have been conducted regarding perceptions of the integration of TCM and Western biomedicine in the health care system and barriers to integrative medicine.

Do people perceive TCM as a primary medicine, alternative medicine, or complementary medicine? Under what circumstances do people choose to use TCM, Western biomedicine, or integrative medicine to treat their illnesses? How do physicians, patients, and others view integrative medicine differently in the U.S. compared to those in China? What do they perceive as the barriers to integration? This paper aims to investigate perceptions of the integration of TCM and Western biomedicine. The information could offer insight into the potential of

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<sup>11</sup> "What Is Complementary, Alternative or Integrative Health?" National Institutes of Health, accessed January 20, 2016, <https://nccih.nih.gov/health/integrative-health>.

<sup>12</sup> "WHO Definition of Health," World Health Organization, 2003, accessed January 20, 2016, <http://www.who.int/about/definition/en/print.html>.

<sup>13</sup> "What Is Integrative Medicine?" The Bravewell Collaborative, 2011, accessed January 20, 2016, [http://www.bravewell.org/content/Downloads/What\\_Is\\_IM\\_2011.pdf](http://www.bravewell.org/content/Downloads/What_Is_IM_2011.pdf).

integrative medicine in providing a synergistic form of health care that could not be achieved by using either form of medicine alone.

An investigation of such questions will lead to the development of new information regarding the merits of integrative medicine. This research will be useful to physicians whose patients may not be responding to conventional medical care and may benefit from integrative medicine. It may also be useful for policymakers, especially in developing countries, who could utilize integrative medicine as a cost-effective means of providing health care for their populations. Based on this research, I will also suggest certain steps that could be taken to move towards a full integration of TCM and Western biomedicine as an effective healing system.

### III. “So What?”- Significance of Study

This research study seeks to challenge Western biomedicine as the standard form of healthcare and explore ways in which an integration of Traditional Chinese Medicine (TCM) and Western biomedicine could provide synergistic care. Western biomedicine is often criticized for its lack of compassion, its tendency to make patients fatigued, its band-aid approach to medical problems, and its lack of cultural competency in medicine. With the advancement of medical technologies in the recent decades, the physician-patient interaction has become increasingly shorter and less personal. Many physicians today actually spend more time entering patient information into a computer database than interacting with their patients. Furthermore, physicians have ordered more MRI scans and prescribed more medications over the years, as scans have become more accurate and medical drugs have become safer to use.<sup>14</sup> However, these changes have led many to conclude that physicians lack compassion and may be doing more harm than good by overprescribing drugs. Imaging tests like MRI scans also tend to make patients lightheaded and nauseated.<sup>15</sup> Western biomedicine is known for its “band-aid” approach to medical problems because of its emphasis on prescription drugs and over-the-counter medications to relieve symptoms instead of investing more on disease prevention. Patients have criticized Western biomedicine for its lack of cultural competency as well, since few physicians are knowledgeable in the social determinants of health like poverty and structural violence that contribute to healthcare disparities affecting minority populations. Some organizations that deliver medical care abroad make the mistake of assuming that Western biomedicine is transferable to other countries and scalable to fit the region’s needs. However, that is rarely the

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<sup>14</sup> “U.S. Health Care from a Global Perspective.” Accessed April 10, 2016.  
<http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>.

<sup>15</sup> Marie Cheour. “Side Effects of MRI With Contrast.” *LIVESTRONG.COM*. Accessed April 10, 2016.  
<http://www.livestrong.com/article/178926-side-effects-of-mri-with-contrast/>.

case, especially in rural areas where the locals are skeptical of Western biomedicine or lack the skills or personnel to handle Western medical equipment.<sup>16</sup>

Even though Western biomedicine is the dominant form of medicine in most of the world, traditional medicine remains an integral part of the health care system for many developing countries. Traditional medicine is more cost-effective than Western biomedicine because it requires minimal equipment and technology, minimal skills in administering treatments, and utilizes easily accessible, natural ingredients such as plants and herbs for medications instead of prescription drugs. Traditional medicine is also rooted in local cultures and thus, has gained the trust of indigenous populations in providing culturally appropriate health care. In these ways, traditional medicine is able to address some of the drawbacks of Western biomedicine.

The significance of this research study lies in its effort to explore the potential of integrative medicine, specifically the integration of Western biomedicine and TCM, in providing synergistic care that cannot be achieved with either medicine alone. Integrative medicine can utilize the strengths of each type of medicine in such a way that minimizes the disadvantages of either type of medicine and maximizes the therapeutic effects. Integrative medicine is also an effort at equalizing access to health care by offering a more cost-effective approach that is affordable to disadvantaged populations, while maintaining a high standard of medical care.

One of the underlying implications of Western biomedicine's dominance in the medical sphere is that biomedicine is inherently "Westernized." For example, much of the world relies on English medical terminology to describe symptoms and diagnose diseases. Most countries use medical technologies and prescription drugs manufactured in the U.S. In a way, the

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<sup>16</sup> Paul Farmer, Arthur Kleinman, Jim Kim, and Matthew Basilio, eds. *Reimagining Global Health: An Introduction*. California Series in Public Anthropology, v. 26. Berkeley: University of California Press, 2013.

Westernization of biomedicine has served to disseminate Western ideals and cultural values to the rest of the world. This research study is significant in that it analyzes the extent of which biomedicine is Westernized and explores the possibility of integrating Western biomedicine with traditional medicine to produce better health outcomes. I examine the potential of integrative medicine as a form of health care in Beijing and in Chicago to investigate the perceptions of integrative medicine and barriers to integration in the two cultures. This information offers insight into the role that integrative medicine currently plays in health care, as well as its potential to address the drawbacks of medicine, and speculate if and how integrative medicine could be expanded to other parts of the world. Doing so may be one of the best ways to equalize access to health care, provide culturally competent and holistic care, while increasing the quality of health care to all.

#### **IV. Answer to Research Question**

The purpose of my research study was to investigate perceptions of the integration of Traditional Chinese Medicine (TCM) and Western biomedicine as a healing system and to identify any barriers to integration. In doing so, I challenged Western biomedicine's dominance as the conventional medicine and the standard form of health care by exploring ways in which traditional medicine could be combined or integrated with Western biomedicine to provide better care. Traditional medicine has long been, and continues to be, the primary form of health care for many developing countries and in many rural areas. It is valued for its ability to provide cost-effective and culturally appropriate health care, as well as its emphasis on health maintenance as opposed to strictly treatment. Therefore, the integration of TCM and Western biomedicine could ideally provide holistic and effective health care to a broader population.

Over the course of eight months, I interviewed patients, physicians, and others in Beijing and Chicago to record their perceptions of integrative medicine and thoughts on potential barriers to the integration of TCM and Western biomedicine. After a thorough analysis of their responses, I found that people generally had optimistic views of integrative medicine. Many participants believed in the synergistic potential of integrative medicine to combine the benefits of Western biomedicine and TCM, while minimizing the drawbacks of either medicine. They believed that integrative medicine could achieve better health outcomes than either medicine alone.

Despite the general optimism in integrative medicine, there were some concerns about the integration of TCM and Western biomedicine. There were fewer concerns from participants about integrative medicine in Beijing than Chicago due to a stronger cultural emphasis on TCM, increasing government promotion of integrative medicine, and the affordability and easy access



to integrative medicine. However, this was not the case in Chicago. Participants generally did not utilize TCM or integrative medicine, unless Western biomedicine failed to produce better health outcomes for them. Western biomedicine was much more accessible and convenient to them because it was the standard form of health care in the U.S. This pattern even applied to first-generation immigrant families in Chicago. Furthermore, integrative medicine and TCM were generally not covered by health insurance companies, which further incentivized them to utilize Western biomedicine instead.

An analysis of the participants' interview responses in Chicago also revealed that a contention of cultural values played a role in participants' likelihood in seeking Western biomedicine, as opposed to TCM or integrative medicine. Many participants shared that TCM was a lifestyle choice and a cultural value that was passed down from generation to generation in their families, not a conscious decision on their part. For this reason, many of the participants who grew up in the U.S. seemed ashamed of their TCM use or lacked confidence in their rationale for using TCM. They shared that they felt strong pressure to conform to the status quo, to use strictly Western biomedicine and abandon the tradition of using TCM. This evidence has led me to conclude that the clash of cultural values poses a key barrier to integrative medicine, which will only grow stronger as immigrant families continue to live and thrive in the U.S.

Perhaps the biggest barrier to the integration of TCM and Western biomedicine, as cited by patients and physicians alike, is the lack of understanding of integrative medicine amongst Western physicians. Participants disclosed that there is a group of Western physicians who consider TCM as a foreign, unsophisticated, and ineffective form of medicine. Therefore, these physicians would discourage their patients from using TCM or integrative medicine. Negative attitudes towards unconventional forms of medicine foster prejudice against the use of TCM and

integrative medicine. Nevertheless, a handful of medical centers have started to offer integrative medicine as part of their health services. Certain medical schools have also implemented integrative medicine as part of their curriculum, so that future physicians can develop an understanding and appreciation of unconventional forms of healthcare that will almost inevitably be used by some of their patients. Consequently, integrative medicine shows great promise in providing quality health care to populations in China and in the U.S., but it must overcome significant barriers before it can be successfully implemented in the U.S. health care system.

## CHAPTER 2:

### I. Literature Review

Over the last decade, medical practitioners and policymakers have increasingly shown greater interest in integrative medicine. The World Health Organization (WHO) estimated that approximately 80% of the global population relies on traditional herbal medicines as part of standard healthcare. In 2002, more than one-third of U.S. citizens had used complementary and alternative medicines (CAM) within the previous 12 months, and more than one-half of patients 18 years of age or older used CAM treatments concurrently with conventional treatments with the belief that CAM treatments increased the effectiveness of conventional drugs. Medical institutions have also created integrative medicine programs, including the University of California, San Francisco (UCSF) Osher Center for Integrative Medicine and the University of California, Los Angeles (UCLA) Collaborative Centers for Integrative Medicine. Both centers aim to optimize patient care by promoting an increased understanding of cross-cultural and interdisciplinary healthcare.<sup>17</sup>

One form of integrative medicine is the combined use of Traditional Chinese Medicine (TCM) and Western biomedicine. TCM is one of the oldest healing systems in the world with over 2000 years of history. The theory of TCM follows from the Taoist and Confucian belief that all natural phenomena have Yin and Yang components, which are two opposite, complementary, interdependent, and exchangeable aspects of nature. According to TCM, Yin represents the material aspects of the organism, and Yang refers to the organism's functions. There is Qi (energy) circulating within the body. Organs regulate and preserve Qi through meridian channels in the body. A disease results when there is an imbalance or disharmony in Yin-Yang or in the

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<sup>17</sup> Chan, Tan, Xin, and Sudarsanam, "Interactions between Traditional Chinese Medicines and Western Therapeutics," 50-65.

flow of Qi. Therefore, the goal of TCM treatment is to expel the disturbance and restore balance in the body to maintain good health. Moreover, everything in the universe is made up of five basic elements (wood, fire, earth, metal, and water), and the universe is constantly moving towards balance and harmony. The Yin/Yang balance in combination with the five elements theory formed the basis of understanding, preventing, and curing disease in ancient China.

A TCM physician examines the pulse, face, tongue, urine, and stool to make a diagnosis. He or she also utilizes eight diagnostic principles to categorize the disease as Yin-Yang, exterior-interior, deficiency-excess, and cold-heat. The physician uses Zheng, a temporary state, to guide diagnosis. The same disease in Western biomedicine can be represented as different Zhengs in TCM; consequently, the same disease can be treated in multiple ways. For example, a physician may diagnose a single illness (as determined by Western biomedicine) as kidney Yin deficiency, flaring up of heart fire, or spleen-stomach dampness-heat, and each of these diagnoses would require a different treatment.<sup>18</sup>

There are a variety of TCM treatments including acupuncture, massage (tuina), cupping, moxibustion, food therapy, herbal medicine, and qigong. Acupuncture involves inserting thin, solid metal needles into 1 of the 361 acupuncture points along the meridian channels throughout the body to regulate and promote the proper flow of Qi. Massage or tuina uses pulling, kneading, pushing, and grasping to stimulate acupuncture points and recreate balance within the body. Cupping treatment involves using fire to heat up a glass circular cup and then pressing the heated cup onto the body to suck up bad energy. Moxibustion is the process of burning moxa on or near

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<sup>18</sup> Jin-Ling Tang, Bao-Yan Liu, and Kan-Wen Ma, "Traditional Chinese Medicine," *The Lancet* 372 (December 6, 2008): 1938-940.

a person's skin. Qigong is a form of mediation that emphasizes breathing exercises combined with body movements to regulate, harness, and enhance Qi.<sup>19</sup>

TCM is an institutionalized part of the health care system in China. In 2006, the TCM sector provided health care to over 200 million outpatients and 7 million inpatients, which made up 10%-20% of health care expenditures in the country. However, this was not always the case in China. At the beginning of the 20<sup>th</sup> century, the Chinese government considered TCM as an outdated and unsophisticated practice compared to Western medicine, which prompted the government to ban TCM. In 1929, the government attempted to abolish TCM altogether, but that failed when traditionally trained physicians united in protest. In 1934-1935, when Mao Zedong led his armies on the "Long March," he and his armies of people were forced to depend on TCM physicians in the rural areas for medical care. After seeing the effectiveness of TCM in treating his armies' ailments, Mao officially promoted the "cooperation" of Western and Chinese medicine in 1944, which was essentially the beginning of integrative medicine. Before that point, the government had pushed to "improve the scientific foundation of TCM," seeking to make TCM more like Western medicine. Mao's new stance on TCM was the near opposite: "Henceforth the most important thing is to ask practitioners of Western medicine to study Chinese medicine and not for practitioners of Chinese medicine to study Western medicine." From that point on, the government advocated for the integration of TCM with Western biomedicine and continues to support it to this day.<sup>20</sup>

Homeopathic medicine was quite popular in the U.S. in the 19<sup>th</sup> century. The American Institute of Homeopathy was founded in 1844, and it was the first American national medical

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<sup>19</sup> Maggie B. Covington, "Traditional Chinese Medicine in the Treatment of Diabetes," *Diabetes Spectrum* 14, no. 3 (2001): 154-59.

<sup>20</sup> Gustav Dobos and Iven Tao, "The Model of Western Integrative Medicine: The Role of Chinese Medicine," *Chinese Journal of Integrative Medicine Chin. J. Integr. Med.*, 17, no. 1 (2011): 11-20.

society. Homeopathic medicine questioned allopathic medicine's philosophical basis, clinical methodology, and pharmacology. It was critical of allopathy's approach to medicine, which was based on the idea of suppressing patients' symptoms. Homeopathic medicine saw this approach as harmful, toxic, and counterproductive to health. The American Medical Association (AMA) was founded in 1846 as a counter to homeopathic medicine. Homeopaths were not allowed membership into the AMA, and AMA members could not even consult a homeopath or risk being expelled from the association.<sup>21</sup>

It was not until the publication of the Flexner Report in 1910 that allopathic medicine asserted its dominance in medicine. The Flexner Report written by Abraham Flexner was an investigative study on the condition of medical school education in the U.S. and Canada. The results of the study led to the creation of a single model of medical education and were credited for the development of the present-day philosophy of medical school education. In the study, Flexner rated medical schools highly if they emphasized the physiochemical and pathological approach to the human body and poorly for homeopathic colleges for he doubted the scientific validity of their practice. As a result, many homeopathic colleges closed down. In 1900, there were 22 homeopathic colleges, but by 1950, there was not a single homeopathic college that remained in the U.S.<sup>22</sup> Other factors at the time likely contributed to the fall of homeopathic colleges as well. For example, the development of antiseptics, antibiotics, and anti-inflammatory drugs and increasing precision and reliability of procedures had demonstrated the practical significance of allopathic medicine.

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<sup>21</sup> Paolo Bellavite, Anita Conforti, Valeria Piasere, and Riccardo Ortolani. "Immunology and Homeopathy. 1. Historical Background." *Evidence-Based Complementary and Alternative Medicine* 2, no. 4 (2005): 441–52.

<sup>22</sup> Ibid.

The 1990's saw a revival of homeopathic medicine all over the world. In the U.S., homeopathic medicine sales grew at an annual rate of 20-25% during the 1990s.<sup>23</sup> There were several reasons for the revival of homeopathic medicine. Firstly, homeopathic medicine offered something that conventional medicine could not provide: individualized treatments. Secondly, technological advances in medicine had minimalized and dehumanized the physician-patient interaction in such a way that patients felt neglected and sought the increased attention that was offered by homeopathic medicine. Third, the awareness of new challenges in current health problems led to greater interest in homeopathic medicine. For instance, researchers have found that there were new diseases that were induced by the increasingly potent drugs themselves. Degenerative diseases due to poor diet and an inactive lifestyle, allergies, autoimmunity and immune deficiency, neurological and psychiatric diseases, and cancers are all diseases that patients have sought alternative care for.<sup>24</sup>

Much of the support for integrative medicine stems from the belief that Western biomedicine is limited in its treatment. In other words, there are some diseases that are currently untreatable by Western biomedicine or could be treated with fewer side effects. According to Hao and Chen, Western biomedicine is limited in its treatment of degenerative diseases, stress-related diseases, and chronic diseases. It is believed to focus on parts rather than the whole, treatment rather than prevention, and treats the suffering *disease* rather than the diseased *person*.<sup>25</sup> In these areas, TCM has the potential to fill in some gaps.

For example, researchers have used TCM in conjunction with Western biomedicine in clinical trials for cancer and diabetes research. Some herbal drugs used in TCM with anti-cancer

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<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Hao and Chen, "Integrating Traditional Medicine with Biomedicine towards a Patient-centered Healthcare System," 83-84.

activity include camptothecin, homoharringtonine, and arsenic trioxide. These TCM drugs amongst others, when used alongside standard chemotherapy, have resulted in improved tumor response, improved survival rate, and reduced therapy-related toxicity. Additionally, acupuncture and massage therapy relieved pain and reduced nausea and vomiting in cancer patients.<sup>26</sup> In another study, interviews with patients and physicians concerning TCM treatments for cancer in China revealed that there was a strong cultural grounding in using TCM as a process of self-help. Patients liked using TCM to complement their standard cancer treatment for fear that the chemotherapy treatment would damage the ‘vital essence.’ Furthermore, they highly valued the idea of having personalized prescriptions, a distinguishing feature of TCM.<sup>27</sup> TCM has also been used in combination with Western biomedicine in treating diabetes. Acupuncture and moxibustion have been shown to reduce blood glucose levels and normalize endocrine function in diabetic patients. Herbal medicine, diet therapy, qigong, and tuina are other forms of TCM that have yielded beneficial effects.<sup>28</sup>

There is a possibility of unknown adverse effects in integrative medicine due to herb-drug interactions. Certain herbs found in TCM practice are not to be used in combination with certain Western biomedical drugs. In an effort to increase access to information on the potential efficacy and safety of phytochemical constituents in herbs, a growing number of databases are available to the public with information about potential herb-drug interactions. Nevertheless, there is a need for an increased understanding of the benefits and risks involved with concurrent use of TCM and conventional therapies. Although many patients receive more than one type of

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<sup>26</sup> V. Badireenath Konkimalla and Thomas Efferth, "Evidence-based Chinese Medicine for Cancer Therapy," *Journal of Ethnopharmacology* 116, no. 2 (December 23, 2007): 207-10.

<sup>27</sup> W. Xu, A.d. Towers, P. Li, and J.-P. Collet, "Traditional Chinese Medicine in Cancer Care: Perspectives and Experiences of Patients and Professionals in China," *Eur J Cancer Care European Journal of Cancer Care* 15, no. 4 (February 22, 2006): 397-403.

<sup>28</sup> Covington, "Traditional Chinese Medicine in the Treatment of Diabetes," 154-59.



treatment (conventional Western medicine and another form of medicine), less than 40% of patients share their complementary or alternative therapy information with their physicians. Thus, it is difficult to predict the side effects and outcomes of the integration of these forms of medicine.<sup>29</sup>

A study conducted on immigrant cancer patients in New York City revealed that about half of them concurrently use TCM (herbal medicine) and conventional cancer therapy, but more than half of those TCM users did not share that information with their Western biomedical physicians. This lack of transparency with their Western physicians exposes patients to a high risk for herb-drug interactions with adverse, potentially dangerous consequences. Thus, it is also essential for Western physicians to be aware and knowledgeable about these risks and to ask their patients whether they are concurrently using TCM with conventional cancer treatment in order to provide effective, culturally appropriate care.<sup>30</sup>

Despite an increased interest in integrative medicine, there are still barriers to a fully integrated system of TCM and Western biomedicine. Two qualitative studies were conducted in Madison, Wisconsin, to analyze the perceptions of the barriers to integration, which revealed a series of conceptual, philosophical, and attitudinal issues. In general, the interviewees thought that conventional medicine had much prejudice and arrogance in the prestige associated with medicine, as well as an ignorance of CAM's theory and practice. Many of the participants viewed physicians as being knowledgeable and influential in their fields, but often lacked the ability to connect with patients on a human level. They also lacked an understanding of or did not acknowledge forms of CAM. Though most CAM practitioners viewed biomedicine with

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<sup>29</sup> Elena Chan, Marisela Tan, Gianni Xin, and Sucha Sudarsanam, "Interactions between Traditional Chinese Medicines and Western Therapeutics," *Current Opinion in Drug Discovery and Development* 13, no. 1 (January 2010): 50-65.

<sup>30</sup> Jennifer C. F. Leng and Francesca Gany, "Traditional Chinese Medicine Use among Chinese Immigrant Cancer Patients," *Journal of Cancer Education J Canc Educ* 29, no. 1 (September 27, 2013): 56-61.

respect and advocated for some form of integration, some also expressed levels of distrust and skepticism towards Western biomedicine. They believed that Western biomedicine can have a debilitating effect on the body in the long term and may not be the best way to maintain good health. Hence, there must be an increased level of communication and mutual understanding between practitioners of CAM and conventional medicine to move towards a truly integrated healing system.<sup>31</sup>

Another barrier to integration involves the safety and efficacy of TCM. Currently, the gold standard for evidence-based medicine in health care is the use of randomized clinical trials with double-blinding and a placebo.<sup>32</sup> However, double-blinding is nearly impossible for some forms of TCM like acupuncture. It is also difficult to standardize the compounds and techniques used in TCM. Genetic and environmental conditions such as diversity within a plant species, pharmacological activity within combinations of herbs, and seasonal and regional differences in herb growth all contribute to the variations and quality of the herbal medicines.<sup>33</sup> The lack of international quality standards for TCM products has been a source of criticism.<sup>34</sup>

As mentioned previously, some studies have addressed the perception of the barriers to the integration of CAM and conventional medicine. However, there have been few studies about the perceptions of the integration of TCM and Western biomedicine specifically. My research study serves to fill this gap, while adopting a cross-cultural comparative lens to analyze the extent of the integration in China compared to the extent of the integration in the U.S. By doing

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<sup>31</sup> Bruce Barrett, Lucille Marchand, Jo Scheder, Mary Beth Plane, Rob Maberry, Diane Appelbaum, David Rakel, and David Rabago, "Themes of Holism, Empowerment, Access, and Legitimacy Define Complementary, Alternative, and Integrative Medicine in Relation to Conventional Biomedicine," *The Journal of Alternative and Complementary Medicine* 9, no. 6 (2003): 937-47.

<sup>32</sup> Shea, Jeanne L, "Applying Evidence-Based Medicine to Traditional Chinese Medicine: Debate and Strategy," *The Journal of Alternative and Complementary Medicine* 12, no. 3 (2006): 255-63.

<sup>33</sup> Chan, Tan, Xin, and Sudarsanam, "Interactions between Traditional Chinese Medicines and Western Therapeutics," 50-65.

<sup>34</sup> Konkimalla and Efferth, "Evidence-based Chinese Medicine for Cancer Therapy," 207-10.

so, I examine the reasons behind why certain groups of people may be more receptive to integrative medicine than others. Based on these observations, I speculate on the role that integrative medicine can play in providing synergistic, cost-effective health care and the steps that must be taken to allow for a fully integrated healthcare system in the world.

## II. Methodology & Design

### *Design, settings, and participants*

I conducted two qualitative studies to investigate perceptions of the integration of TCM and Western biomedicine. The first set of interviews took place in Beijing. I interned at Guang'anmen TCM Hospital (广安门中医院)<sup>35</sup> over the summer through a study abroad program offered at the University of Michigan. Guang'anmen TCM Hospital is a public hospital affiliated with the China Academy of Traditional Chinese Medicine and emphasizes clinical practice, scientific research, and teaching. At Guang'anmen TCM Hospital, I interviewed physicians who practiced TCM and/or integrative medicine in a variety of departments, as well as patients who utilized TCM and/or integrative medicine to treat their ailments. I interviewed other people outside of the hospital setting, in a different area of Beijing. I will designate this third group of participants as "others," who are not physicians and not patients. In total, I interviewed nine physicians, ten patients, and seven others.

The second set of interviews took place in Chicago. Most of these interviews were conducted in-person, but there was one interview conducted through e-mail correspondence and one phone interview. I interviewed two physicians who practiced TCM and/or integrative medicine and one physician who practiced Western biomedicine in the Chinatown community. I also interviewed some patients who have recently used or are currently using TCM and/or integrative medicine to treat their illnesses, as well as others in the area. I interviewed three physicians, three patients, and three others.

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<sup>35</sup> This is the name of the hospital where I interned over the summer. The direct translation of the hospital's name into English is Guang'anmen TCM Hospital. See Appendix C for more information.

### *Recruitment, interview procedure, and data collection*

The study protocol was approved by the University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board (IRB-HSBS)<sup>36</sup>. Each participant signed an Informed Consent form detailing the purpose of this study, potential benefits, and request for voluntary consent. At the beginning of each interview, I explained the objective of the study, the kinds of questions that would be asked, and that all answers would be anonymous. Participants could skip a question or discontinue the interview for any reason. All data from the interviews were stored securely and anonymously, so that the data were only available to me.

The same set of open-ended questions was used to interview physicians, patients, and others in each study (see Appendix A). Physicians and patients were asked a few additional questions specifically pertaining to their role as a physician or patient. The interviews were semi-structured<sup>37</sup>, meaning that the discussion was not limited to the prepared interview questions. Participants were asked to elaborate on their answers in detail through follow-up questions. Notes were taken down by hand instead of electronically to make participants feel more comfortable during the interview.

For the first set of interviews at Guang'anmen TCM Hospital in Beijing, a bilingual nurse Nancy served as a translator and a guide. Nancy made arrangements for me to meet with physicians and interview them for the study. She used purposeful sampling,<sup>38</sup> meaning that she identified knowledgeable physicians whom she thought might provide me with valuable insights, while making sure to recruit physicians from a variety of specialties for my research study. Nancy also helped me to recruit patients in the lobby, waiting rooms, and at the pharmacy. I

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<sup>36</sup> Study eResearch ID: HUM00101442

<sup>37</sup> Xu, Towers, Li, and Collet, "Traditional Chinese Medicine in Cancer Care: Perspectives and Experiences of Patients and Professionals in China," 397-403.

<sup>38</sup> Ibid.

asked my interview questions in Mandarin Chinese (limited working proficiency), and Nancy clarified my questions whenever the participant expressed confusion or misunderstood the question. Almost every participant answered in Chinese, and I took notes on what I understood from their responses. Nancy also translated each participant's response after they finished answering, at which point I then added further thoughts to my notes. I recruited others to participate in my research from a random sample of people at the Capital Normal University campus, where I was taking classes, and the surrounding area. Some of them were Chinese language teachers, others were local university students, and one was a professor of TCM and a retired TCM physician.

For the second set of interviews in Chicago, I recruited practitioners of TCM and/or integrative medicine by searching them on Google and then directly contacting them through e-mail or through a contact form on their website. In the e-mail, I described the objective of my study and included a few sample interview questions. I also gave them the option of having an in-person interview, phone interview, or an e-mail interview to better accommodate their schedule. Two physicians replied back to me with an interest in participating in my research study. I interviewed one of them over the phone and the other through e-mail correspondence. In addition, I recruited a physician who practiced Western biomedicine in Chinatown to participate in my study with the help of family connections. The patients in the study were those who either received TCM treatment in the past six months or who were currently using TCM to treat their illnesses. I recruited these patients by personally reaching out to distant associations whom I had reason to believe may have used or may currently use TCM and/or integrative medicine. Lastly, I recruited others in Chicago including Chinese immigrants, second generation, and third generation Asian Americans through family connections and distant associations. Each of them

had some level of exposure to TCM, either from personal experience or through influences from their family members. The interviews were either conducted in English or Cantonese Chinese (native proficiency). No translator was necessary.

### *Data analysis*

Each of the interview responses underwent inductive thematic analysis<sup>39</sup>. This method allows new categories to emerge from the data instead of imposing predetermined categories on the data. This entailed going through the responses and noting key words or concepts, while resisting further interpretation. I went through the responses a second time to categorize the key words and concepts into broader themes. I also noted the few responses that did not fit into overarching themes, but nevertheless brought up interesting points of discussion worth further exploration. Then, I checked to make sure that each of the themes that were created was mutually exclusive. That way, the key words and concepts fit neatly in each specific theme.

After that, I went through the interview responses a third time to note the frequency of which a certain key word or phrase was used to describe or explain an aspect of TCM, Western biomedicine, or integrative medicine. This task helped me to track the frequency of which the word or phrase was used across physicians, patients, and others, which may be an indication of how prevalent that idea was within that society. I created bar graphs, charts, and schematic representations to display the data. I analyzed all of the data collected, even though three patients and three locals were unable to complete the full interview. Regardless of how far they progressed in the interview, I used all of the responses that I collected from them to make the most out of the data. The interview responses in Beijing were analyzed separately from the interview responses in Chicago to allow for an independent analysis of each set of data.

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<sup>39</sup> Ibid.

## CHAPTER 3

### I. Discussion of Findings

#### *Analysis of Interviews from Beijing*

When the participants were asked to describe the circumstances in which they would use Western biomedicine and the circumstances in which they would use TCM to treat their illnesses, there was a general consensus among physicians, patients, and others as to when to use each medicine. As shown in Table 3.1, the participants agreed that they would use Western biomedicine for emergencies, illnesses requiring surgery, complications, quick relief for a fever or cold, or to reset a major imbalance in the body (trauma or cancerous tumor). However, they would use TCM to treat chronic conditions (cough, insomnia, aches, etc.), to prevent the onset of new diseases or ailments, to regulate the body for retaining good health, or to reset a minor imbalance in the body (indigestion).

**TABLE 3.1: Views of when to use Western biomedicine and when to use Traditional Chinese Medicine according to physicians, patients, and others in Beijing**

Western biomedicine	Traditional Chinese Medicine
<ul style="list-style-type: none"><li>• Emergencies</li><li>• Illnesses requiring surgery</li><li>• Complications</li><li>• Quick relief (fever, cold)</li><li>• To reset a <i>major</i> imbalance in the body</li></ul>	<ul style="list-style-type: none"><li>• Chronic conditions (cough, insomnia, aches)</li><li>• Prevention</li><li>• To regulate the body for good health</li><li>• To reset a <i>minor</i> imbalance in the body</li></ul>

The consistency of responses across the physicians, patients, and others populations indicate that perhaps there is a norm that guides them in their decision to use Western biomedicine or TCM. One of the physicians that I interviewed at Guang'anmen TCM Hospital implied that Chinese cultural values naturally lend themselves to TCM. He said, "Chinese people



don't like risk-taking and so, it follows that we also don't like to undergo surgery. Instead, we prefer safety and simplicity, both of which are found in TCM." This negative connotation associated with the term "surgery" may also explain why participants specified that they would use Western biomedicine only if their illnesses "required" surgery.

In addition to a cultural norm, Table 3.1 reveals that the philosophical differences between TCM and Western biomedicine guide participants in deciding which medicine to use. One of TCM's core values is the belief in a long-term healing process. Consequently, many participants responded that they would use TCM for chronic conditions and for prevention (keeping the body healthy in the long-term). In contrast, Western biomedicine emphasizes the value of a quick remedy, one that is effective and efficient. Therefore, depending on the type of medical condition or the patient's preference in recovery (quick relief or long-term healing), the participants would choose his or her medicine accordingly. Also, TCM views illness as the result of an imbalance in the body. A few participants explained that they would use TCM to reset a *minor* imbalance in the body and would use Western biomedicine to reset a *major* imbalance. This indicates that these participants took a TCM approach in viewing illness as an imbalance in the body. However, they also understood that TCM is limited in the types of imbalances that it is able to treat. For example, they may complement Western chemotherapy treatment with TCM to ease the side effects of the treatment, but they would not replace chemotherapy with a TCM treatment because cancer is considered a *major* imbalance in the body.

**TABLE 3.2: Perceptions of the differences between the concepts of Western biomedicine and Traditional Chinese Medicine according to physicians, patients, and others in Beijing**

Western biomedicine	Traditional Chinese Medicine
<ul style="list-style-type: none"> <li>• “Treats symptoms of the disease”</li> <li>• “Uses poison against poison”</li> <li>• Damages the immune system</li> <li>• Complex</li> <li>• Reductionistic</li> </ul>	<ul style="list-style-type: none"> <li>• “Treats root causes of the disease”</li> <li>• “Uses hard to defeat soft”</li> <li>• Restores the immune system</li> <li>• Simple</li> <li>• Holistic</li> <li>• Dynamic, changing</li> <li>• Interconnected</li> <li>• Restores balance and harmony within the body and with the environment</li> <li>• More effective in the long run</li> <li>• Fewer side effects</li> <li>• Can get medication even if not diagnosed as sick</li> </ul>

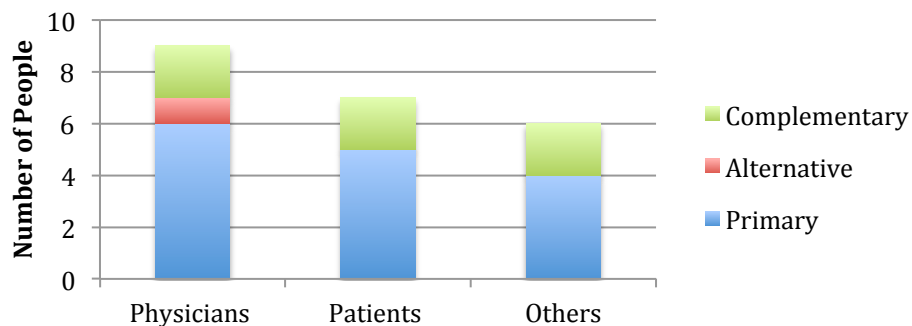
Table 3.2 shows the participants’ perceptions of the different approaches that TCM and Western biomedicine take in regards to healing. As was the case for Table 3.1, the three groups (physicians, patients, and others) shared similar views on what they perceived as the main differences between TCM and Western biomedicine. They described TCM’s approach to healing as one that “treats the *root causes* of the disease,” whereas Western biomedicine “treats the *symptoms* of the disease.” One of the TCM physicians used a tree analogy to explain this: “TCM treats the roots of the tree, and Western biomedicine treats the leaves.” Just as a leaf will grow back on a tree if you snip it off at the bud, it is likely that the disease will recur if one uses Western biomedicine. However, if one uses TCM, the disease is uprooted, thereby getting rid of most if not all of the problem, so the patient will be better off in the long term. Next, this same TCM practitioner used a balloon analogy to explain why Western biomedicine damages the immune system, whereas TCM does not. He said, “Imagine a blown-up balloon. This represents good health. Now, imagine that pressure is applied to one side of the balloon. In order to relieve

that pressure, someone applies pressure on the opposite side of that balloon. This effectively relieves the pressure at the first point, but now, you still have applied pressure, except it is on the opposite side.” The idea behind this balloon analogy is that using Western biomedicine (the first pressure point) to treat an illness creates a host of other health problems in different parts of the body. Some participants cited that Western biomedicine “uses poison against poison” in its use of pharmaceutical drugs to fight disease, which elicits side effects that cause further damage to the immune system because it is forced to fight off infection after infection. In contrast, TCM has fewer side effects and actually restores the immune system because it “uses hard to defeat soft,” implying that it utilizes the concept of opposite forces and equilibrium to cancel out any harmful side effects.

TCM and Western biomedicine were also perceived to be different in that TCM was a simple and holistic view of health, whereas Western biomedicine was viewed as a complex system with a reductionist approach to health. Participants elaborated that TCM is dynamic and constantly changing, but everything within the body and the universe are interconnected. The idea is that TCM restores balance and harmony within the body and with the environment to achieve good health. One distinctive feature of TCM is that one can be prescribed TCM medication or treatment, even if he or she is not diagnosed as being sick. This is because TCM serves not only to treat current illnesses, but also to maintain the body in good health to prevent future, more serious illnesses. However, this does not apply to Western biomedicine, where one must be diagnosed with a certain condition in order to receive the appropriate medication. This suggests that participants characterized the institutionalization of Western medicine with a “band-aid” approach, where medicine is used to fix what is broken, but TCM is viewed as more of a lifestyle choice that requires constant maintenance to achieve good health.

Figure 3.1 shows a graphical representation of the responses from physicians, patients, and others when they were asked whether he or she believed TCM to be a primary medicine, alternative medicine, or complementary medicine. Most of the TCM physicians predictably said that they considered TCM to be the primary medicine, and it makes sense that they feel strongly for TCM because TCM is their profession. However, 3 out of the 9 TCM physicians believed otherwise. 2 physicians considered TCM to be a complementary form of medicine that works best when it is paired with Western medicine because they “cooperate” with each other in their workings and because TCM can only be used to treat or cure a small number of diseases. 1 physician considered TCM as an alternative medicine because she believes that people should use TCM if there is “nothing else” that Western medicine can do for them. 2 out of 7 patients and 2 out of 6 people in the others category considered TCM as a complementary medicine. The rest of the participants in the respective categories considered TCM as a primary medicine. Although there were 3 missing responses from the “patients” category and 1 missing response from the “others” category because those people could not stay for the whole interview, my data analysis uses only the responses of those who had answered the question.

### Categorization of TCM as a Type of Medicine in Beijing



**FIGURE 3.1: Categorization of TCM as a Type of Medicine in Beijing<sup>40</sup>**

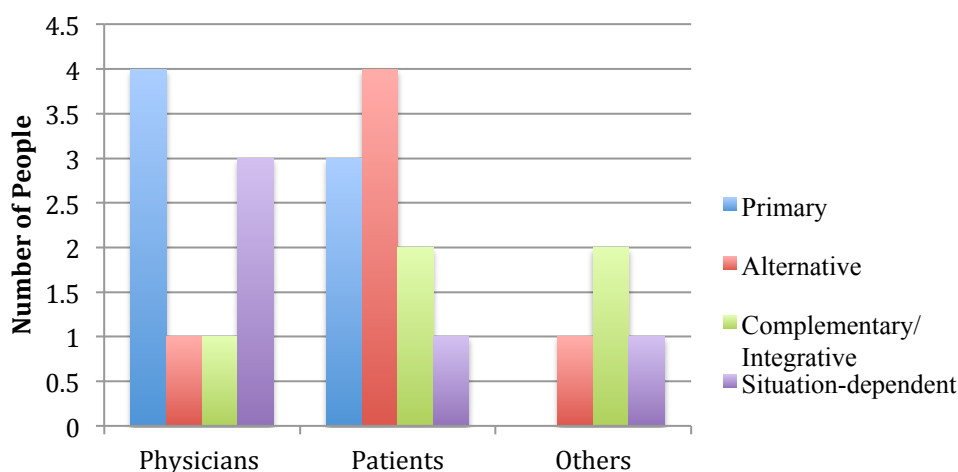
<sup>40</sup> When participants were asked whether he or she believes TCM to be a primary medicine, alternative medicine, or complementary medicine, this is how they responded. Note: there are 3 missing responses from the “patients”

Figure 3.2 shows the participants' responses when they were asked to describe their personal use of TCM in relation to Western biomedicine. Based on their descriptions of how they used TCM, I categorized their responses into whether they used it as their primary medicine (would first use TCM if they fell ill), alternative medicine (would only use TCM if Western biomedicine was ineffective at treating their illness), complementary/integrative medicine (would use each medicine to treat a certain aspect of their illness or use a combination of the two), or situation-dependent (would choose which medicine to use and how to use it depending on the medical condition). Less than half of the TCM physicians would use primarily TCM to treat their illnesses, and one-third of the physicians indicated that their use of TCM would depend on the medical condition. These results are different from the results shown in Figure 1, where nearly two-thirds of the physicians claimed that they considered TCM as the primary medicine. 4 out of 10 patients described using TCM as an alternative medicine, 2 out of 10 patients as a complementary or integrative medicine, 3 out of 10 patients as a primary medicine, and 1 patient as a situation-dependent medicine. This indicates that although many patients used primarily TCM, approximately double that number of patients incorporated some level of Western biomedicine in their treatments, which highlights the important role that Western biomedicine plays in their lives. Amongst others that I interviewed in Beijing, half of them described using TCM as a complementary or integrative medicine, one-fourth described it as an alternative medicine, and one-fourth described it as situation-dependent. There were 3 missing responses from the "others" category because those individuals could not stay for the whole interview. Of those who responded, it is worth noting that none of them described their use of TCM as their primary source of medicine.

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category and 1 missing response from the "others" category because those people could not stay for the whole interview.

### Personal Use of TCM as indicator of the Type of Medicine in Beijing



**FIGURE 3.2: Personal Use of TCM as Indicator of the Type of Medicine in Beijing<sup>41</sup>**

Perhaps the physician and patient responses were biased towards the use of TCM as their primary form of medicine because I was conducting the interviews at the Guang’anmen TCM Hospital, whereas others whom I interviewed outside of the hospital setting responded otherwise. Furthermore, it is also interesting that there is a discrepancy between participants’ thoughts on TCM as a primary medicine and their personal use of TCM. Although many participants claimed that TCM was their primary medicine, when asked to describe their use of TCM, they actually use TCM in a complementary or alternative manner. I also found this discrepancy in the others group that was not interviewed at Guang’anmen TCM Hospital, which indicates that the discrepancy is not attributed to the interview location.

I analyzed possible justifications for the discrepancy in the responses of how participants classified TCM as a form of medicine versus how they actually used TCM as a form of

<sup>41</sup> When participants were asked to describe how they personally use TCM in relation to Western biomedicine, I categorized their responses based on their descriptions. Note: situation-dependent means that how or when they choose to use TCM depends on the type of illness or symptoms that they have. Also, note that there are 3 missing responses from the “others” category because these people could not stay for the whole interview.

medicine. It is possible that participants did not have a clear understanding of the differences between primary medicine, alternative medicine, and complementary or integrative medicine, even though I defined these terms during the interview. Or, perhaps there was another factor that prompted the participants to answer that they considered TCM to be a primary medicine, when in fact, their use of TCM indicated otherwise. Throughout the interviews in Beijing, I noticed that the participants referred to three key concepts when they spoke about their views on TCM effectiveness: family influences, cultural values, and historical significance.

**TABLE 3.3: Schematic representation of social influences on views of TCM<sup>42</sup>**

	Beijing	Chicago
Physicians	FFFFF C HH	F C H
Patients	FFFF CC HHH	F C
Others	FFF CCC HHH	FF C HH

**F:** Familial influences, parental emphasis of TCM theory/knowledge at a young age, passing down TCM theory and practice from generation to generation

**C:** Cultural values, tradition, Chinese cultural values of safety, simplicity, and no risk-taking lend into TCM

**H:** Historical significance, TCM with over 2000 years of history, its existence today speaks to its effectiveness

Table 3.3 shows the frequency of which the three groups of participants referred to these three concepts to explain their views on TCM effectiveness. These references were not prompted by any specific interview question, but rather, the participants themselves brought up these factors. The three concepts are not mutually exclusive because there were some participants who mentioned one or more of these factors, while others mentioned none of them at all. It is

<sup>42</sup> The repetition of the letter indicates the frequency at which that factor was cited in influencing a participant's view of TCM and/or the effectiveness of TCM. Note: these factors reported here were not in response to any particular interview question, but were mentioned by the participants themselves. Some participants mentioned one or more of these factors, while others mentioned none of these factors at all. Thus, these categories are not mutually exclusive. For example, a physician could have referenced both family influences and historical significance as to why he believes TCM is an effective form of health care.

interesting that family influence plays a much greater role in the physicians' view on TCM than it does for patients and others. Many of the physicians spoke about how they were influenced by TCM starting at a young age because their parents instilled TCM theory and knowledge in their everyday lives. For example, one physician mentioned that her parents would tell her as a kid not to eat cold foods, such as wintermelon and green beans, during the hottest time of the year to eliminate dampness. Other participants explained that TCM theory and practice were passed down in their family from generation to generation, which makes them more accustomed to and have greater trust in TCM.

Patients, like physicians, also most frequently cited familial influences when speaking about TCM. However, others who were not patients or physicians at Guang'anmen TCM Hospital were just as likely to speak about familial influences as they were to talk about cultural values or historical significance. This suggests that perhaps familial influences played a greater role in motivating people to practice or use TCM, however, in general, Chinese cultural values and the historical significance of TCM also greatly shaped the way people in Beijing viewed TCM.

When participants spoke about cultural values in relation to TCM, they said that TCM is an important part of their culture, "inseparable from Chinese culture," therefore, they expect that TCM will continue to be relevant to the Chinese people for many, many years. Other participants referred to TCM's historical significance: TCM has a history of over 2000 years, and the fact that it is still widely practiced today means that it must be effective. Consequently, these three factors (familial values, cultural values, and historical significance) may have skewed participants to answer that TCM is their primary medicine because they feel so strongly about



TCM under these types of social influences when in fact, they actually use TCM quite differently.

Tables 3.4a, 3.4b, and 3.4c summarize the participants' speculations about what the future of TCM might look like. There was a wide variety of responses ranging from those who were highly confident in the future of TCM to those believed that the theory would disappear completely. For the most part though, there was more optimism than pessimism regarding the future of TCM (see Table 3.4a). Of the participants who believed that TCM would improve in the future, TCM physicians stated that there will be more people who believe in TCM, especially as Chinese culture and TCM theory becomes more widely known. Other physicians believed that scientific advances in TCM will improve its techniques and effectiveness and to treat new diseases as it continues to develop with increased government backing. One practitioner believed that TCM will fill in the gaps in Western biomedicine, implying that there will be an increased interest in complementary or integrative medicine in the future. Others shared the physicians' thoughts including the idea that "TCM and Western biomedicine will make up for each others' shortcomings." Some also believed that there will be increased TCM research.

**TABLE 3.4a: Views on the future of Traditional Chinese Medicine (improvement)**

	Beijing	Chicago
Physicians	More people will believe in TCM More scientific advances in TCM Used to treat new diseases Fill in Western biomedicine’s gaps Continue to develop with increasing government backing Grow more popular as Chinese culture and TCM theory become more widespread Promising future Confident in its future	TCM will grow if combined with Western biomedicine (integrative) Bright future More acceptance More acupuncture practices Continue to grow Become part of mainstream medicine More integrated
Patients	Will get better and better Optimistic about its future	
Others	Continue to believe in TCM More integrated with Western biomedicine TCM and Western biomedicine make up for each other’s shortcomings Increased research into TCM More patients Continue to develop	Integrative medicine has great potential

There were a small handful of people across the three participant groups who did not think that TCM would change much in the future and some participants who believed that TCM was on a decline (see Table 3.4b and Table 3.4c respectively).

**TABLE 3.4b: Views on the future of Traditional Chinese Medicine (no change)**

	Beijing	Chicago
Physicians	Not much change in TCM	TCM will not grow with increasing scientific development
Patients	It’s hard to say...	Will continue to be passed down from generation to generation Will not disappear
Others	Will not disappear	Will fade away if it does not keep up with technology Will remain but will not develop Nothing more than alternative medicine

A few physicians believed that TCM would become more limited in disease treatment and perhaps become more of a preventative medicine. Others predicted that TCM will become merely a complementary or alternative medicine in China over time (assuming that it is the primary medicine in China at present) and have a much smaller market and demand for its products and services. Perhaps the most revolutionary speculation for the demise of TCM came from a professor of TCM categorized as one of the “others” in my research study. He believed that that even though TCM practice may still be common in the future, its theory and philosophy will be lost in the sands of time. He claimed, “Currently, TCM physicians only use TCM jargon to satisfy the patients. I don’t think that they truly understand the theory themselves.”

**TABLE 3.4c: Views on the future of Traditional Chinese Medicine (decline)**

	Beijing	Chicago
Physicians	More limited in disease treatment More preventative in nature than as a treatment option	Needs more research Will lose the philosophical underpinnings
Patients		Will have less demand (mostly Chinese or Chinese diaspora) Less recognized
Others	TCM theory or philosophy will disappear even though its practice may still be around Become a complementary or alternative medicine in China, instead of a primary medicine Smaller market and demand Achievements in a small, narrow area	

*Other results from Beijing interviews*

A closer look at some of the interview responses reveals that perhaps the TCM professor had good reason to believe that knowledge of TCM theory may be diminishing. Some of the younger people (in their late teens to twenties) who were interviewed for this study admitted that

one of the reasons they use TCM is because they believe it is “神奇.”<sup>43</sup> They did not understand how TCM works exactly, but they use it because it works for them. One middle-aged patient also said that she does not know much about TCM theory: all that she knows come from health promotion television programs. Another participant in the study who was not a physician or patient said that she merely uses TCM not necessarily because she believes in it, but she uses it because of habit.

Another topic of discussion that arose during the interviews was whether TCM was scientific. A nephrologist at Guang’anmen TCM hospital believed that TCM was scientific. He explained, “TCM is *experiential* science, whereas Western biomedicine is *experimental* science. They are different, but BOTH are sciences.” TCM is an experiential science because it has shown to be effective from past experiences, despite the fact that there has been few clinical studies on TCM. Western biomedicine is a science that has been confirmed through experiments and the use of the scientific method. However, the TCM professor (also a retired TCM physician who practiced integrative medicine) argued otherwise, “TCM isn’t scientific, which is why it cannot be tested in randomized double blind studies.” For the professor, insofar as TCM cannot be tested in an experiment, it is not scientific. Although both were trained in TCM, each had a vastly different view on the practice. Perhaps their different educational backgrounds influenced their thoughts on TCM. While the nephrologist studied and practiced TCM in Beijing, the retired TCM physician received his education in Beijing and in the U.S., where he had studied health policy for some time.

In addition, there were mixed responses on the effectiveness of TCM and whether it merely constitutes a placebo effect. On this respect, it was surprising to learn that a dermatologist

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<sup>43</sup> This Chinese term means “magical.” See Appendix C for more information.

at Guang'anmen TCM Hospital and the aforementioned professor of TCM both believed that the placebo effect plays a role in the effectiveness of TCM. The dermatologist explains, "TCM is 70% psychological and 30% herbal medicine." According to the dermatologist, the placebo effect is relevant, and it plays an even greater role than the medicine itself. The TCM professor agrees that TCM's effectiveness is "a combination of herb-active chemical components and the placebo effect." However, a diabetic patient from Guang'anmen TCM Hospital had a different view on this topic. He strongly believed that TCM is not a placebo effect, but that it is the nature of the TCM treatment in requiring patience and adherence to a long-term treatment plan that makes it necessary for one to be persistent with TCM to see results. That is, if one believes that TCM is effective, they will be more likely to adhere to the TCM treatment plan, which is key to the success of the treatment.

#### *Thoughts on Integrative Medicine- Beijing*

Out of the three participant groups (physicians, patients, and others), the physicians most strongly advocated for the use of integrative medicine. One oncologist at the TCM hospital said that TCM and Western biomedicine see the patient from "different perspectives" and that it is good that we have both because it allows for more treatment options. While many people view TCM and Western biomedicine as almost complete opposites (Eastern vs. Western medicine and traditional vs. modern), the oncologist viewed the two as merely "different." He went on to say that he believed that there is no "higher or lower medicine," that there is no such thing as one medicine being "better" than another. Perhaps the oncologist's response was influenced by the way in which integrative medicine is used in oncology. Currently, cancer patients who suffer from fatigue and nausea from chemotherapy treatments use herbal medicine and/or acupuncture

to relieve some of the side effects. These methods add variety to the treatment options available to patients, and many patients consider both the herbal medicine or acupuncture component to be just as important as the chemotherapy because it helps relieve some of the side effects as they prepare themselves for the next round of chemotherapy. Another physician, an infectious disease specialist, believed that Western biomedicine cannot replace TCM and that one should “use both for a better health outcome.” Most of the physicians that I interviewed at Guang’anmen TCM Hospital use integrative medicine in their daily work, so that likely contributed to their positive views on integrative medicine.

Many of the patients agreed that Western biomedicine cannot replace TCM because each type of medicine has its own benefits (the term “各有所成”<sup>44</sup> was used by multiple patients to explain this). Therefore, many patients thought that TCM had a unique role in healthcare. One male patient in his middle years believed that Chinese people are fortunate to have integrative medicine. He said, “Each [medicine] has its own benefits, but Chinese people are able to get optimal health care by having access to both forms of medicine. No one medicine is perfect.” For this patient, optimal care means utilizing both forms of medicine and getting the best of both worlds. These patients most likely answered optimistically about integrative medicine because they have recently used integrative medicine. Many of them were either currently using integrative medicine or have used them complementarily.

Others that I interviewed outside of Guang’anmen TCM Hospital were receptive to the idea of integrative medicine, but they did not have particularly strong views on it. They seemed to place more emphasis on the importance of Western biomedicine than TCM in integrative medicine. For example, one participant mentioned that in some cases, only using TCM can make

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<sup>44</sup> This Chinese idiom means “each has its benefits.” See Appendix C for more information.

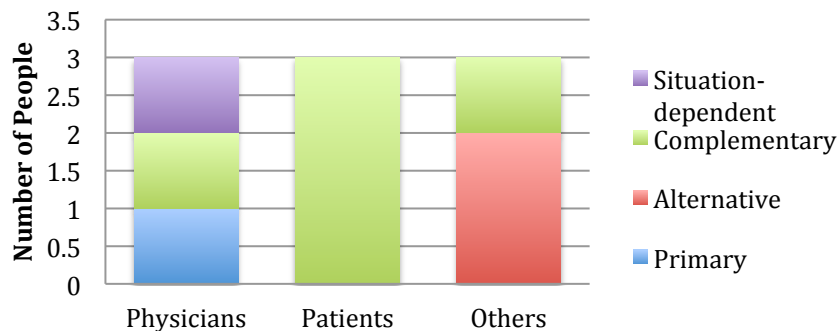
the condition even worse by delaying appropriate treatment. The sense of distrust from her response implies that perhaps she is skeptical about combining TCM with Western biomedicine. Another participant said that TCM may have “something to add” to the treatment, but he was not particularly enthusiastic about the concept of integrative medicine. Perhaps the lack of strong opinions on integrative medicine may be due to the fact that some of the participants in the “others” category have not used integrative medicine before or rarely used it. Many of them mentioned that they pick and choose whether to use Western biomedicine or TCM based on their conditions and based on whatever works for them. Or, it could be that participants at Guang’anmen TCM Hospital felt the need to speak more strongly about integrative medicine because they were at a facility that practices integrative medicine, which may have been a source of potential bias in their responses.

#### *Analysis of Interviews from Chicago*

Figure 3.3 shows a graphical representation of the responses from physicians, patients, and others in Chicago when they were asked whether he or she believed TCM to be a primary medicine, alternative medicine, or complementary medicine. One of the physicians whom I interviewed who practices strictly Western biomedicine in the Chinatown community viewed TCM as a complementary medicine. However, she said that she does not use TCM to treat disease, instead, she uses TCM theory as a guiding principle to choose food supplements for nutritional value. Her response reflects a scientific, Western-oriented perspective in the sense that she did not see TCM as a form of “medicine” *per se*, but she did recognize that there was some value to the way TCM views certain types of food as healthy or non-healthy. Another physician who strictly practices TCM viewed it as a situation-dependent medicine. In other

words, he thought that TCM was used as an alternative medicine, complementary medicine, or primary medicine with no strong belief in it being in any one particular category. The third physician whom I interviewed practices integrative medicine. He utilizes both a TCM and Western biomedical approach to examine the patient and finishes with a diagnosis from each healing system to prescribe an integrative treatment. He viewed TCM as a primary medicine because he personally would start with the most natural approach (for example, using herbal medicine, acupuncture, etc.) and then move to pharmaceutical drugs if necessary, with the intention of minimizing the use of pharmaceutical drugs as much as possible. All three of the patients whom I interviewed considered TCM as a complementary medicine. 2 out of 3 others viewed TCM as an alternative medicine, and 1 out of 3 others viewed TCM as a complementary medicine.

### Categorization of TCM as a Type of Medicine in Chicago



**FIGURE 3.3: Categorization of TCM as a Type of Medicine in Chicago<sup>45</sup>**

Figure 3.4 shows the participants' responses when they were asked to describe their personal use of TCM in relation to Western biomedicine. As with the interviews in Beijing, based on their descriptions of how they used TCM, I categorized their responses into whether

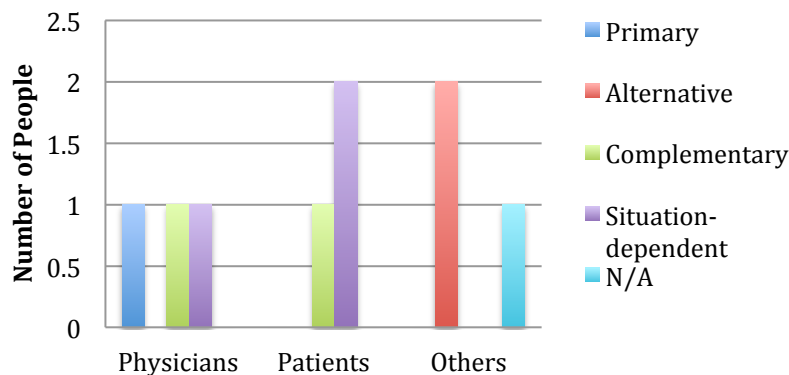
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<sup>45</sup> When participants were asked whether he or she believes TCM to be a primary medicine, alternative medicine, or complementary medicine, this is how they responded. Note: situation-dependent means that how or when they choose to use TCM depends on the type of illness or symptoms that they have.



they used it as their primary medicine (would first use TCM if they fell ill), alternative medicine (would only use TCM if Western biomedicine was ineffective at treating their illness), complementary/integrative medicine (would use each medicine to treat a certain aspect of their illness or use a combination of the two), or situation-dependent (would choose which medicine to use and how to use it depending on the medical condition). The physicians' personal use of TCM matched their categorizations of TCM as a type of medicine. However, the patients and others' personal use of TCM differed slightly from their categorizations. For instance, two of three patients would choose to use TCM based on their medical conditions, even though they considered TCM as a complementary medicine. Sometimes, they may use it as an alternative or primary medicine. As one patient said, "I personally don't have much of a preference. If I'm sick, I will just use whatever works." In the others category, one of the participants admitted that he personally would not use TCM as a form of medicine "under any circumstances" because he does not believe that TCM works, even though he considers TCM as a complementary medicine based on how it is used within the general population.

### Personal Use of TCM as indicator of the Type of Medicine in Chicago



**FIGURE 3.4: Personal Use of TCM as indicator of the Type of Medicine in Chicago**<sup>46</sup>

<sup>46</sup> When participants were asked to describe how they personally use TCM in relation to Western biomedicine, I categorized their responses based on their descriptions. Note: situation-dependent means that how or when they

Table 3.3 shows a schematic representation of certain social influences that may have played a role in how the participants viewed TCM. Given that the sample size was smaller for the interviews conducted in Chicago, there are predictably fewer references to familial influences, cultural values, and historical significance during the interviews. However, I analyzed this data by comparing the participants' responses with each other, paying careful attention to the way in which they described the influence and who was more likely to refer to those factors. Many of those participants who mentioned familial influences in their responses described how their parents had "forced" them to take TCM as a child. One participant stated that he "went along with it," even though he did not believe that it would be effective in treating his illness. This indicates that the participant was somewhat opposed to taking this medicine, although it is difficult to determine the reason for the opposition. It could be the case that the participant understandably resisted taking medication as a child or that TCM seemed strange to him in comparison to mainstream Western biomedicine. I suspect that the latter had a bigger effect, since many of those participants decided to stop taking TCM once they were able to exercise personal autonomy as a grown-up.

Certainly, the participants' families had exposed the participants to TCM, a Chinese tradition that has been passed down from generation to generation. However, the extent to which they successfully passed down TCM theory and practice to their children is questionable. Some of the participants expressed confusion as to whether a certain medication they took as a child was TCM or Western biomedicine. They knew the name of the herbal ointment, but they were not familiar with the ingredients used to produce the medicine or with the philosophical reasoning as to why the medicine was appropriate for this use. Since the practice of TCM relies

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choose to use TCM depends on the type of illness or symptoms that they have. N/A means that the individual does not use TCM as a medicine.

so much on theory (hot/cold, yin/yang, etc.) that is easier to understand for laymen compared to Western biomedicine, it is odd that the participants did not know the TCM theory underlying the effectiveness of the medicine. One of the patients acknowledged, “TCM doesn’t make any sense at all, but it works.” Furthermore, the patients used a few TCM terms to describe why they decided to use it to treat their current ailments. They spoke about 热气<sup>47</sup> and 火气<sup>48</sup> to describe a condition in which one has too much heat in their bodies, thereby creating an imbalance that leads to their ailments. Their use of TCM terminology indicates that these terms were passed down to them from their parents, but their reluctance to elaborate on TCM theory indicates that perhaps they lack a solid understanding of it.

Furthermore, Tables 5a, 5b, and 5c show the participants’ responses when they were asked about their views and speculations about the future of TCM. There were mixed reviews regarding the future of TCM across patients, physicians, and others. Some physicians believed that TCM will continue to grow as it becomes more integrated with Western biomedicine. Another physician believed that TCM, especially acupuncture, will become more accepted in its own right, regardless of whether it is integrated with Western biomedicine. A third physician proposed a bolder vision that the integration of TCM and Western biomedicine will become part of mainstream medicine in the future. In other words, integrative medicine will not even have a separate category of its own, as it does now, but rather it will be so widely accepted and practiced that it will be encompassed in mainstream medicine. Others in the study also believed that integrative medicine has great potential. Some participants did not think that TCM will grow in the near future. One physician said that TCM is limited in its growth as there is increasing scientific development. Others seemed to agree with this notion that TCM may fade away if it

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<sup>47</sup> This Chinese term directly translates to “hot air.” See Appendix C for more information.

<sup>48</sup> This Chinese term directly translates to “fire air.” See Appendix C for more information.

fails to keep up with technology. They said that TCM may still be around, but will not change much in the future. Patients believed that TCM will continue to be passed down from generation to generation in Chinese families. Another participant who did not believe that TCM was an effective form of medicine argued that TCM will be nothing more than alternative medicine in society. Those participants who believed that TCM use would decline in the future cited the need for more scientific research to support the practice. Other participants believed that TCM will have less demand in the future—mostly limited to the Chinese and Chinese diaspora population. One of the physicians who practicing integrative medicine worries that TCM may lose its “depths” in the future. He elaborates, “TCM is about working with people and their life experience (lifestyle, beliefs, etc.) as a comprehensive system of wellness. If we Westernize it, we lose the language, and lose the depths of TCM.”

Like the interviews conducted in Beijing, the topic of whether TCM was scientific also came up during the interviews in Chicago. The physician who practiced strictly Western biomedicine believed that TCM was not scientific. Another participant in the “others” group agreed that TCM was not scientific and described it as “weird and foreign” and “just a hoax.” However, the patients whom I interviewed and some others thought that TCM was scientific for a variety of reasons. One of the participants explained, “TCM is its own kind of science and has its own logic and reasoning. It is not random, not a blind search for a cure.” This indicates that perhaps TCM should be viewed with a different lens. Rather than examining TCM with a preconceived definition of what science is and trying to fit TCM into that definition, maybe one should judge whether TCM is scientific without comparing it to modern science. Another participant said, “TCM is scientific in the sense that it is a culmination of ‘trial and error’ attempts throughout ancient history, just as science is also based off of ‘trial and error.’” One of

the patients justifies why he believes that TCM is scientific by comparing it to the ‘flat Earth’ theory that was once thought to be true. He explains, “TCM is scientific. It’s just that our current level of knowledge cannot explain why certain things in TCM works the way they do. It’s just like when we thought that the world was flat.” Just as back then, we did not have the scientific tools and knowledge to show that the world was actually spherical, this patient argues that for that same reason, we cannot say that TCM is not scientific. He further elaborates that it would be “cocky” to think otherwise, presumably because it would be the equivalent of imposing a Western view of science onto traditional medicine from another culture and making a judgment about its effectiveness based off of a preconceived notion of what is correct and true according to Western values.

Furthermore, there were mixed views as to whether TCM’s effectiveness is due to a placebo effect across the three groups. One participant said that TCM is a medicine that has healing power regardless of whether one believes in its effectiveness. A TCM practitioner added that TCM takes “time, patience, and faith,” so that people must believe to get results. In other words, he argues that TCM’s effectiveness is not necessarily a placebo effect. Two participants believed that this was true: the nature of any TCM treatment necessarily requires a long-term commitment, and so if people believe in its effectiveness, they are more likely to adhere to the treatment plan and get results. In contrast, the integrative medicine physician and one of the patients believed that TCM is indeed a placebo effect. According to the integrative medicine physician, “For every medicine, the belief in that medicine plays into its efficacy. Everything works better if you believe in it.” The patient echoed a similar sentiment. He said, “TCM relies on the placebo effect to a certain extent, but then again, all medicine relies on the placebo

effect.” These responses show that there is no general consensus as to whether the placebo effect plays a role in the effectiveness of TCM.

In general, the participants expressed interest and optimism in integrative medicine. One participant believed that integrative medicine has great potential because “using each to its benefits is better than using each one alone.” A patient agreed with this idea in that TCM “can fill in the gaps” of Western biomedicine. However, there were also barriers to integrative medicine that were brought up during the interviews. The physicians elaborated on the idea of how certain health insurance plans may not cover the costs of integrative medicine treatments. For example, BlueCross BlueShield covers acupuncture, but may not cover other aspects of TCM or integrative medicine. Health insurance coverage thus limits the number of people who are able to access integrative medicine as one of their options for treatment and limits the influence of integrative medicine in healthcare. Another barrier to the full integration of TCM and Western biomedicine in the U.S. is the lack of understanding of integrative medicine and traditional medicine by Western biomedical practitioners. According to an integrative medicine practitioner, TCM still sounds like “crazy talk” to many Western biomedical physicians. There is a prejudice from certain Western practitioners who “discount something as unreal if it is outside of their paradigm.” Thus, in order for integrative medicine to make headway in the U.S., there must be something in place to bridge the gap of understanding for Western biomedical physicians.

Other barriers to integration involve limited research efforts in integrative medicine. Limited funding is available because integrative medicine is a relatively new area of study. An ongoing debate as to whether double-blind randomized placebo trials, the gold standard for research studies in mainstream medicine, are appropriate for TCM has contributed to the lack of

funding. An integrative medicine physician believed that double-blind randomized placebo trials are “flawed to some degree” for it because TCM introduces variables that are difficult to measure. There is also literature that mentions that TCM’s holistic nature makes it hard to replicate in studies. For instance, herbal medicine depends on the quality of the herbs, which differs depending on geographical region, weather conditions, etc.<sup>49</sup> In this way, herbal medicine is not standardized, and it is difficult to evaluate its effectiveness.

*Analyzing why participants answered the way they did*

In an effort to understand the participants’ reasoning for the way they view TCM, Western biomedicine, and integrative medicine, I decided to ask the participants about their family immigration history for the interviews conducted in Chicago. Table 3.5 summarizes their family immigration histories. The participants in my study had a wide range of family backgrounds. Most participants had family roots in mainland China, but some had roots in Hong Kong or Taiwan and varied with respect to how long their family has been living in the U.S, ranging from first generation to third generation Asian-Americans. Some participants were born in the U.S. and raised abroad for a period of time, some were immigrants, while others had lived in the U.S. their entire lives.

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<sup>49</sup> Tang, Jin-Ling, Bao-Yan Liu, and Kan-Wen Ma. "Traditional Chinese Medicine." *The Lancet* 372 (December 6, 2008): 1938-940. Accessed January 20, 2015. doi: 10.1016/S0140-6736(08)61354-9.

**TABLE 3.5: Participant Characteristics in Chicago: Family Immigration History**

Physicians	Patients	Others
<ul style="list-style-type: none"> <li>• Born and raised in China, immigrated 20-30 years ago</li> <li>• Not of Chinese descent</li> <li>• Born and raised in China, immigrated to the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• Born and raised in China, immigrated 20 years ago</li> <li>• Born in Chicago, raised in China for 4 years as a toddler, then moved back to the U.S.</li> <li>• Born in Chicago, raised in Taiwan for 8 years (from 4-12 years old), then moved back to the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• Born in China, raised in Hong Kong, immigrated 17 years ago</li> <li>• Born in Hong Kong, raised in Chicago, immigrated 17 years ago</li> <li>• Born and raised in the U.S., 3<sup>rd</sup> generation family</li> </ul>

I speculated that participants who had lived in the U.S. for a longer time or had a longer family history in the U.S. would have more biased views towards Western biomedicine and would be more skeptical of TCM and/or integrative medicine, since Western biomedicine is the dominant form of medical care in the U.S. As expected, the participants who had most recently lived in China or in surrounding parts of China had a more positive view of TCM and were more optimistic about integrative medicine. There were two patients in my study who were born in Chicago, but grew up in China and Taiwan respectively for a number of years before moving back to the U.S. Even though they had lived in China and Taiwan for a shorter period of time compared to those who were born and raised in China or Hong Kong and had immigrated to the U.S. 17-20 years ago, they were more likely to use TCM and/or integrative medicine to treat their ailments. One participant who was a 3<sup>rd</sup> generation Asian American and was born and raised in the U.S. did not believe in TCM's effectiveness and was strongly against the idea of integrative medicine. I believe that the fact that he had never lived in China or in the surrounding areas for an extended period of time contributed to the lack of TCM influence in his life and his strong opinion against TCM.



In addition, a scientific background grounded in Western biomedicine may have also influenced participants' views of TCM and Western biomedicine. The participant previously mentioned is a pre-medical student majoring in Biomolecular Science, so his educational background in the sciences may have swayed his views. The Western biomedical physician whom I interviewed did not believe that TCM was an effective form of health care at all, even though she was born and raised in China and had immigrated to the U.S. 20-30 years ago. However, this pattern does not hold true for all of my participants. The integrative medicine physician whom I interviewed was trained in Western biomedicine and TCM, and despite his rigorous physician training in Western medicine, he was still optimistic about TCM and integrative medicine.

Another trend that I noticed in my interviews was that the younger participants tended to place more emphasis on efficiency of the treatment. Approximately eight individuals in their early- to mid- twenties explained that they favored Western biomedicine because it was a quick, easy, and efficient way to relieve their symptoms. One of the participants said, "If it's effective, why would I go out of my way to use TCM?" This implies that the younger generation prioritizes an outcome-based approach to medicine. That is, their criteria in choosing a medicine is simply that (1) the medication works, (2) it works quickly, and (3) it is relatively easy to access the medication.<sup>50</sup> In contrast, the older participants use a process-based approach to medicine, in which they recognize the value of long-term healing in TCM and believe that this slower process is better for the body. Nevertheless, ease of access is a major deciding factor as to

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<sup>50</sup> Over the years, it has become faster and easier for people to take TCM. During my shadowing experience at Guang'anmen TCM Hospital in Beijing, I learned that instead of having to boil a package of selected herbs for several hours at home, many herbal medications at the hospital are pre-boiled and prepared in containers or bags for patients to take home. Other herbal medications are compressed into a single pill, much like Western medicine, for patients to take on-the-go. These changes likely reflect the modernization of TCM due to technological advances, rather than an attempt to appeal to the younger patients. Many participants in Beijing said that there was not a significant difference between younger and older patients who sought TCM services.

whether participants would seek TCM and/or integrative medicine for treatment. Even though the older participants may have a greater appreciation for TCM, sometimes, due to the high costs associated with seeking TCM care that is not covered by health insurance or having to drive out of the city to a TCM clinic in the suburbs of Chicago, the participants may decide to stick to Western biomedicine instead.

### *Comparison of Beijing and Chicago interviews*

In Beijing, the participants were specific as to when they would choose to use Western biomedicine and when they would use TCM to treat their ailments (see Table 3.1). There was a general consensus among physicians, patients, and others that they would use Western biomedicine for emergencies and for quick relief of their symptoms and use TCM for chronic conditions and to regulate the body for good health. However, in Chicago, the participants generally did not have clear-cut criteria for deciding when to use Western biomedicine and when to use TCM. Although some participants did mention that it is good to use TCM for chronic conditions, most of them admitted that they would use whatever was most convenient or most effective for their medical condition, which was usually Western biomedicine. Given that the participants in Beijing and Chicago still shared similar perceptions of the philosophical differences between Western biomedicine and TCM (see Table 3.2), this indicates that although their uses of the medicines differed, both groups of people had a common understanding of the differences between Western biomedicine and TCM.

My results also suggest that the family tradition of passing down TCM theory and practice from generation to generation was more effective for families in Beijing than in Chicago. Figures 3.1-3.4 show that there is a greater proportion of participants who consider TCM as a

primary medicine or who use TCM as a primary medicine compared to participants in Chicago. Furthermore, the older participants in Chicago valued the long-term healing process in TCM unlike the younger participants, but there was no such distinction amongst the participants in Beijing. Both the young and old used TCM to treat their ailments. The younger participants in Beijing also never spoke of any resentment against their parents for “forcing” them to take TCM, which was quite different than the younger participants in Chicago. Societal differences in the value of Western biomedicine and TCM in each city likely played a huge role in shaping participants’ perceptions to each type of medicine.

The interviews in Beijing and Chicago revealed a set of overarching themes in participants’ perceptions of the integration of TCM and Western biomedicine. Table 3.6 organizes these themes into the following categories: economic, political, access, social/societal, holistic, understanding, and medical. These themes revealed the potential of integrative medicine as a form of health care, as well as some of the barriers to integration. For example, limited access to TCM treatment and/or integrative medicine was a big concern in the U.S. Integrative medicine is not widely available in the U.S., and even in areas where it is available, it is often inconvenient to seek integrative treatment. Although Western biomedical physicians in Beijing were more likely to refer patients to seek TCM treatment, patients in both regions noted that the biggest factor that pushed them to seek TCM or integrative medicine was referrals from friends. Therefore, the growing use of integrative medicine primarily relies on individuals within a social network.

Furthermore, there was a general consensus among patients in Chicago that restrictions in their health insurance coverage have prevented them from accessing integrative treatment. Many participants in Beijing shared that the Chinese government has played a huge role in

promoting integrative medicine. In order to successfully implement integrative medicine as a viable option for treatment in the healthcare system, the U.S. government must offer integrative medicine as an option in medical centers and actively promote it by incentivizing insurance companies to expand their coverage to include integrative medicine.

**TABLE 3.6: Big themes regarding the integration of TCM and Western biomedicine in both sets of interviews**

ECONOMIC	POLITICAL	ACCESS	SOCIAL/SOCIETAL
-Cost-effectiveness -Development -Affordability -Has potential	-Government promotion -Health insurance coverage -Research funding	-Availability -Convenience -Referral	-Cross-cultural -Familial influences -Tradition -Generations

HOLISTIC	UNDERSTANDING	MEDICAL
-Natural -Balance -Restoration -Toxicity -Interconnected -Harmony -Synergy -Long-term -Simple -Energy -Patience	-Evidence-based -Placebo effect -Awareness -Attitudes -Philosophy -Theory -Knowledge -Prejudice -Different perspectives -Education -Trust -Science -Exposure -Acceptance	-Side-effects -Safety -Efficacy -Treatment -Prevention -Chronic -Personalized -Taste of medication -Quick relief

Lastly, the greatest barrier to integration cited by physicians, patients, and others alike was the gap of understanding between Western biomedical physicians and TCM practitioners. In order to practice integrative medicine, physicians must be trained in both Western biomedicine and TCM. However, a lack of awareness and acceptance of TCM in the U.S. biomedical community has cultivated certain attitudes and prejudice against the practice of integrative medicine. Many Western physicians have expressed concern about the lack of evidence-based

research in TCM. Although there are a handful of medical centers in the U.S. who offer integrative medicine, there must be a paradigm shift in the way physicians think about traditional medicine and complementary/alternative medicine in providing an effective means of care before integrative medicine can be fully implemented into the health care system.

Table 3.7 and Table 3.8 lists the characteristics of individuals from Beijing and Chicago who participated in the research study.

**TABLE 3.7: Participant Characteristics in Beijing**

Physicians: specialty	Patients: health conditions for treatment at Guang'anmen TCM Hospital	Others: personal use of TCM
<ul style="list-style-type: none"> <li>• Nephrologist</li> <li>• Emergency Medical Technician</li> <li>• Pediatrician</li> <li>• Dermatologist (2)</li> <li>• Oncologist</li> <li>• Infectious Diseases Specialist</li> <li>• Immuno-rheumatologist</li> <li>• Orthopedic Surgeon</li> </ul>	<ul style="list-style-type: none"> <li>• Shingles</li> <li>• Heart problems</li> <li>• Hyperthyroidism</li> <li>• Diabetes</li> <li>• Hair loss</li> <li>• Skin problems</li> <li>• Fever</li> </ul>	<ul style="list-style-type: none"> <li>• Massage</li> <li>• Herbal medicine</li> <li>• Tai qi</li> <li>• Acupuncture</li> <li>• Cupping</li> </ul>

**TABLE 3.8: Participant Characteristics in Chicago**

Physicians: specialty	Patients: health conditions for treatment	Others: personal use of TCM
<ul style="list-style-type: none"> <li>• Internal Medicine and Dermatology</li> <li>• TCM practitioner</li> <li>• Integrative medicine, Pediatrics, and Family Practice</li> </ul>	<ul style="list-style-type: none"> <li>• Chronic back pain</li> <li>• Stomachache</li> <li>• Flu</li> </ul>	<ul style="list-style-type: none"> <li>• Acupuncture</li> <li>• Cupping</li> <li>• Herbal medicine (oral)</li> <li>• Herbal ointments</li> <li>• Massage</li> <li>• Gua Sha</li> </ul>

## CHAPTER 4

### I. Implications of Findings

My findings have led me to draw a slightly different conclusion than those drawn by other authors who have written about integrative medicine. In my literature review, I described three studies that had a similar research question and/or experimental design. The Barrett study<sup>51</sup> explored how people perceived complementary medicine and alternative medicine (CAM) and conventional medicine, and it explored the possibilities of integrative medicine. This study was conducted through interviews with patients and physicians in Madison, WI from 1999-2001.

Like my study, the Barrett study concluded that many of its patients found CAM to be more holistic and conventional medicine to be more impersonal, but efficient and evidence-based. The physicians were split as to whether CAM was scientific or legitimate. Many agreed that conventional medicine was limited in dealing with chronic disease and were prejudiced and uninformed of CAM's theory or practice. However, the Barrett study concluded that patients perceived conventional medicine as more paternalistic, which is something that I did not encounter in my interviews in Beijing or Chicago. Perhaps this is because the field of medicine has shifted dramatically in the past 15 years from being paternalistic to placing greater emphasis on patient autonomy. The Barrett study also concluded that physicians felt that CAM was more individualized and empowering compared to Western biomedicine. In my study, the topic of personalized medicine rarely came up during the interviews, and no participant mentioned that they felt that TCM or integrative medicine empowered them. Nevertheless, the Barrett study recommended that there must be increased communication between CAM and conventional

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<sup>51</sup> Bruce Barrett, Lucille Marchand, Jo Scheder, Mary Beth Plane, Rob Maberry, Diane Appelbaum, David Rakel, and David Rabago, "Themes of Holism, Empowerment, Access, and Legitimacy Define Complementary, Alternative, and Integrative Medicine in Relation to Conventional Biomedicine," *The Journal of Alternative and Complementary Medicine* 9, no. 6 (2003): 937-47.

medicine before there can be a fully integrated system. My study also suggests a need to bridge the gap of understanding between Western biomedical practitioners and TCM practitioners, so that both can learn from each other's disciplines in order to develop and sustain integrative medicine. The fact that my study has led me to make the same recommendation as the Barrett study suggests that there has been little progress made in the development of integrative medicine since 2001.

The Xu study<sup>52</sup> analyzed patients' and professionals' perspectives and experiences in using TCM in cancer care in China. The study found that patients and physicians considered TCM as a process of self-help and emphasized the importance of individualized prescriptions. Although issues of access did come up in my interviews, none of my participants discussed TCM as a process of self-help. Rather, many of my participants referenced cultural factors, familial factors, or historical significance as contributing factors of why they would choose to use TCM as part of their treatment. Perhaps this result indicates that there has been an increased interest amongst patients in seeking TCM practitioners for diagnosis and treatment, rather than self-prescribing an herbal treatment that has been passed down in the family.

Lastly, the Leng study<sup>53</sup> investigated TCM use among Chinese immigrant cancer patients in New York City. Specifically, the study was interested in the concurrent use of TCM with conventional cancer treatment and analyzing herb-drug interactions. The Leng study had found that there was a high risk of dangerous herb-drug interactions for patients using both treatments concurrently, especially for cancer patients whose physicians do not ask about TCM use. Some patients chose not to tell their Western physicians about their concurrent TCM use because they

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<sup>52</sup> Xu, Towers, Li, and Collet, "Traditional Chinese Medicine in Cancer Care: Perspectives and Experiences of Patients and Professionals in China," 397-403.

<sup>53</sup> Jennifer C. F. Leng and Francesca Gany, "Traditional Chinese Medicine Use among Chinese Immigrant Cancer Patients," *Journal of Cancer Education J Canc Educ* 29, no. 1 (September 27, 2013): 56-61.

thought that Western physicians would advise them not to use TCM. I did not encounter this problem in my research study. Many of the patients whom I interviewed in Beijing or in Chicago had said that they usually turn to TCM when Western medicine failed to improve their medical conditions. Or, if they were using both medicines concurrently, it would not be for a major disease like cancer, but rather for smaller ailments like a stomachache or back pain.

I believe that my findings shed new insight into the perceptions of the integration of TCM and Western biomedicine, especially because there have been very few studies on this area of research. Although my research study reached a different conclusion than similar studies, it is more of a reflection of the changes in medicine over the years and different priorities of interest than a major shift in integrative medicine. As integrative medicine continues to develop in the future, my research study will serve as a means of increasing understanding between Western biomedicine and TCM, reducing barriers to integration, and helping to build a system of cost-effective and cross-cultural care.



## II. Summary of Findings

The goal of my research study was to investigate perceptions of the integration of TCM and Western biomedicine and to identify barriers to integrative medicine. I was interested in challenging Western biomedicine's dominance as the standard form of health care by exploring TCM as a complement or an alternative to conventional medicine. Traditional medicine plays a key role in the health care system for many developing countries and certain urban areas. In addition to being a culturally appropriate form of care, traditional medicine is also cost-effective and emphasizes the maintenance of health as opposed to strictly treatment. Integrative medicine arose from an understanding that health is shaped by a combination of "physical, emotional, mental, social, spiritual, and environmental influences"<sup>54</sup> and that restoring and maintaining health means addressing physiological causes of disease, as well as taking a holistic approach to well-being. The integration of TCM and Western biomedicine aims to use each medicine to its own benefits and provide effective, balanced care.

Over the course of eight months, I conducted interviews with physicians, patients, and others in Beijing and Chicago. I spoke with TCM practitioners, Western biomedical physicians, integrative medicine physicians, and a variety of people who have used or have been influenced by TCM and/or integrative medicine. From these conversations, I have concluded that for the most part, there are optimistic views of integrative medicine. Many participants believe that integrative medicine holds great potential for the future because both Western biomedicine and TCM have their limits, and integrative medicine could allow each of them to fill in those gaps. Integrative medicine was widely used in Beijing, partly due to cultural influences, government promotion, and affordability. However, there were barriers to the integration of TCM and

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<sup>54</sup> "What Is Integrative Medicine?" The Bravewell Collaborative, 2011, accessed January 20, 2016, [http://www.bravewell.org/content/Downloads/What\\_Is\\_IM\\_2011.pdf](http://www.bravewell.org/content/Downloads/What_Is_IM_2011.pdf).

Western biomedicine in Chicago. Even amongst first-generation immigrant Chinese families, participants were not compelled to use TCM unless it was the more convenient option or if Western treatments failed to work for them. Although some of them used TCM and Western biomedicine complementarily as an integrative treatment, in general, they did not have a strong inclination to do so because Western biomedicine was easily accessible and was the standard form of health care in the U.S. TCM and integrative medicine, with the exception of certain acupuncture services, are generally not covered by health insurance. These barriers in accessing integrative medicine limited patients' options when they sought holistic or integrative care.

There seems to be a clash in cultural values as participants explained their use of TCM or integrative medicine during the interviews in Chicago. I sensed that some patients were uncomfortable when they explained why they used TCM. Perhaps they felt a sense of shame that they used traditional medicine in a Western society or perhaps they did not feel confident about explaining the value of TCM, since it was merely a cultural value or lifestyle that was passed down to them in their families instead of a conscious individual choice to try TCM. This is perhaps a minor barrier to integration because even though the participants use TCM and/or integrative medicine, they did not feel confident in their decision. It is likely that they may discontinue their use of TCM and/or integrative medicine in the future as they experience greater societal pressure to use strictly Western biomedicine as they continue to live and adjust to America.

The biggest barrier to full integration of Western biomedicine and TCM in the U.S. is the lack of understanding amongst Western physicians of the value of TCM and integrative medicine. Health care in the U.S. involves high-tech machinery, shots, prescription drugs, blood tests, and IVs. For physicians who have only had Western biomedical training and values

evidence-based research, TCM sounds foreign, unsophisticated, and ineffective. A few physicians in Chicago mentioned that the lack of understanding results in prejudice and attitudes that discourage the use of TCM and integrative medicine. Over the past few years, certain medical centers have added integrative medicine to their health care options, which indicates that there are Western institutions that have realized the merits of integrative medicine. However, there is still a long way to go in terms of bridging the level of understanding of integrative medicine and fully implementing integrative medicine as an option in the U.S. healthcare system.

Lastly, it is important to note that there is a possibility of bias in the interview responses that could have led to errors in my research. For example, I interviewed physicians and patients at the Guang'anmen TCM Hospital in Beijing, where participants may have felt compelled to speak more positively about TCM and integrative medicine in that environment. Also, the bilingual nurse, Nancy, selected certain physicians for me to interview, which may have also been another source of bias. Nonetheless, I believe that the potential for bias was balanced by the variation found in the perceptions of physicians and patients. I found each interview conversation to be distinctive and insightful.

The recruitment of participants for my study in Chicago represents another potential source of bias. Due to time constraints, I was unable to recruit a large sample of participants. I reached out to distant connections within my social network to serve as participants. I had reason to believe that they either currently use TCM or have been influenced by TCM in some way and as such, would have developed a perspective on integrative medicine. Even so, I believe that these were minor drawbacks to my study. Given that I had a small sample, I refrained from making overarching generalizations about the population and instead, focused on observations and insights that I could make about the individuals in my study. Moreover, the fact that I had

reached out to distant connections within my social network likely led to more honest interview responses because they felt more comfortable speaking to me than to a random interviewer.

## CHAPTER 5

### I. Future Points of Interest

#### *Future Research*

Further research into the integration of Western biomedicine and Traditional Chinese Medicine (TCM) could evaluate structural, economic, and political barriers to integration on a deeper level. One political barrier that I identified in this research paper was access to integrative health care. In Beijing, integrative medicine was widely available and accessible because the Chinese government promoted the medicine. As such, it was also quite affordable to the general population. However, the opposite was true in Chicago. There was limited access to integrative health care because most health insurance plans do not cover complementary or alternative medicine. It would be interesting to analyze and compare health insurance policies in regards to integrative medicine in China and the U.S. One could explore the reasons behind why these health insurance policies were put in place and propose a solution to reduce integrative healthcare costs in the U.S. As declared in the Alma-Ata International Conference on Primary Health Care in 1978, health is a human right.<sup>55</sup> Knowing that and given that health is a “state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity,”<sup>56</sup> everyone should have access to integrative medicine to achieve a holistic state of health.

Another topic of interest may be to explore economic barriers to integrative medicine in the U.S. by evaluating the cost-effectiveness of integrative, complementary, and/or alternative medicine. In 2013, the U.S. spent more on healthcare than any other country, by far. Higher

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<sup>55</sup> Paul Farmer, Arthur Kleinman, Jim Kim, and Matthew Basilio, eds. *Reimagining Global Health: An Introduction*. California Series in Public Anthropology, v. 26. Berkeley: University of California Press, 2013.

<sup>56</sup> "WHO Definition of Health," World Health Organization, 2003, accessed January 20, 2016, <http://www.who.int/about/definition/en/print.html>.

healthcare spending was attributed to increased use of biomedical technology and higher health care prices, as opposed to more frequent doctor visits or hospital stays.<sup>57</sup> Despite spending more on healthcare, the U.S. had poorer health outcomes than countries who spent less on health care, including shorter life expectancy and a greater prevalence of chronic conditions. The discrepancy between healthcare spending and health outcomes in the U.S. shows that there may be potential for integrative medicine to help lower health care costs while also improving health outcomes, especially in regards to chronic conditions. The excessive money spent in biomedical technology could be invested in integrative health services to offer culturally competent care to a diverse population, increase long-term effectiveness, and increase patient satisfaction. An investigation of the cost-effectiveness of integrative medicine with respect to these indicators would help to inform policies of integrative healthcare.

Prejudice and biased attitudes against integrative medicine pose a great barrier to integration. Future studies could explore the roots of this prejudice by evaluating the American Medical Association's position on integrative medicine and Western physicians' perspectives on integrative medicine. In this study, I interviewed a small sample of Western physicians in Chicago, however, that may not be indicative of the overall perception of Western physicians in the U.S. It would be interesting to interview Western physicians in other regions in the U.S. to understand the reasoning behind the prejudice and identify ways in which the prejudice could be reduced to allow for a full integration of TCM and Western biomedicine in the U.S. health care system.

One of the main reasons for the prejudice against integrative medicine cited by Western physicians interviewed in this study was the lack of evidence-based studies supporting the use of

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<sup>57</sup> David Squires and Chloe Anderson. "U.S. Health Care from a Global Perspective." *The Commonwealth Fund*, October 2015. <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>.

TCM or integrative medicine. The current gold standard in research is to use double-blind randomized controlled trials to evaluate the effectiveness of treatments. However, there has been criticism against using double-blind randomized controlled trials to evaluate TCM or integrative medicine because it is difficult to standardize TCM treatments (quality of herbs differs depending on region), and it is almost impossible to set a placebo for acupuncture. Perhaps double-blind randomized controlled trails are not suitable for evaluating the effectiveness of TCM or integrative medicine. Future studies could propose a new research method to evaluate the safety and efficacy of TCM and integrative medicine. The research method could potentially yield evidence to address the biomedical community's doubts and prejudice against integrative medicine.

Another avenue for future research could be to investigate whether integrative medicine could lead patients to make healthier choices. One component of TCM is herbal medicine, and patients have acknowledged that they self-prescribe herbal medicine sometimes (based off of recipes passed down in the family). They either self-assemble various herbs or buy pre-packaged herbs at the grocery store to boil at home. By letting patients prepare their own medications, TCM and integrative medicine lend more responsibility to the patient to care for his or her own health. Patients know exactly what goes into the herbal drink because they are preparing the ingredients, and almost all of the ingredients are natural, so there are no chemical nomenclature to decipher. Perhaps future research could investigate whether this system empowers patients to be more aware of their health and to make healthier decisions.

There has also been increased interest in personalized medicine. Personalized medicine is centered on the idea that an individual's health is shaped by genetic, genomic, clinical, and environmental factors that determine one's susceptibility of developing disease, the course of

disease, and response to treatment.<sup>58</sup> It promotes individualized treatments for diseases. TCM diagnosis is inherently individualized because two people with the same “disease” as characterized in Western biomedicine could potentially receive two different TCM diagnoses with different treatment plans. Every individual receives a personalized diagnosis and treatment. Therefore, there is a possibility that integrative medicine could offer a means to providing patients with individualized treatment plans that best suit the needs of the patients.

### *Policy Recommendations*

#### **Increase communication between conventional and traditional medicine providers**

I would encourage partnerships between Western biomedicine and traditional medicine practitioners to strengthen relations and to reduce prejudice associated with each field. These partnerships would include an exchange of ideas and best practices, so that Western physicians and TCM practitioners could develop a better understanding of their respective fields and consider how to incorporate aspects of each medicine into their practice in a safe and appropriate manner. Enhanced communication and cooperation between Western biomedicine and TCM are essential to an integrated model of health care.<sup>59</sup> Collaborations between Western physicians and TCM practitioners would create optimal healing environments that respect the diversity of health care traditions.<sup>60</sup>

For example, one way to increase communication between conventional and traditional medicine providers is to encourage an international collaboration and dialogue on integrative

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<sup>58</sup> U.S. News & World Report- Health. “Personalized Medicine - US News.” *U.S. News & World Report*, January 20, 2011. <http://health.usnews.com/health-conditions/cancer/personalized-medicine/overview>.

<sup>59</sup> WHO Congress on Traditional Medicine. “WHO | ‘Beijing Declaration,’” November 8, 2008. Accessed March 30, 2016. [http://www.who.int/medicines/areas/traditional/congress/beijing\\_declaration/en/](http://www.who.int/medicines/areas/traditional/congress/beijing_declaration/en/).

<sup>60</sup> White House Commission on Complementary and Alternative Medicine Policy. “White House Commission on Complementary and Alternative Medicine Policy- Final Report,” 2002. Accessed March 30, 2016. [http://www.whccamp.hhs.gov/pdfs/fr2002\\_document.pdf](http://www.whccamp.hhs.gov/pdfs/fr2002_document.pdf).



medicine. This international forum would showcase best practices in integrative medicine to help countries improve their existing integrated models of health and assist other interested countries in developing their own integrated health care system. Countries can identify and discuss how certain clinics and hospitals in their regions successfully implemented integrative medicine into their healthcare system. They can share some of the barriers that they have had to overcome in the process and how they have resolved those issues.<sup>61</sup>

### **Train health professionals and medical students in traditional, complementary, and/or integrative medicine and train TCM practitioners in conventional medicine**

In order to have a fully integrated system of care, both Western physicians and TCM practitioners must be knowledgeable in each standard of care. The curriculum for health professionals and medical students should be expanded to cover traditional, complementary, and/or integrative medicine.<sup>62</sup> Physicians who are trained in these nonconventional forms of medicine will be able to better understand the health conditions of their patients and how to mitigate potentially harmful side effects of a combination of both types of medicine. Some of the prejudice against integrative medicine stems from cases of irresponsible practice of traditional medicine. By training health professionals and future physicians in the appropriate use of traditional medicine, these scenarios can be avoided.

In turn, TCM practitioners should update their knowledge and skills based on national requirements and learn relevant components of conventional medicine. This exchange of knowledge and skills between Western biomedicine and TCM can serve as a basis for developing a common language and level of understanding between these fields. For example,

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<sup>61</sup> White House Commission on Complementary and Alternative Medicine Policy. "White House Commission on Complementary and Alternative Medicine Policy- Final Report," 2002. Accessed March 30, 2016. [http://www.whccamp.hhs.gov/pdfs/fr2002\\_document.pdf](http://www.whccamp.hhs.gov/pdfs/fr2002_document.pdf).

<sup>62</sup> Ibid.

conventional doctors would be able to recognize opportunities for patients to use TCM, while traditional medicine practitioners would be more knowledgeable of potential harmful side effects of a combined use of TCM and Western medicine. Essentially, this step would also make it easier and more efficient for practitioners of both disciplines to make referrals as necessary to improve a patient's health.<sup>63</sup>

### **Advance research in integrative medicine**

There has been much concern about the lack of evidence supporting the use of TCM. Some advocates of TCM have argued that double-blind randomized controlled trials are not appropriate for evaluating the effectiveness of TCM. Therefore, researchers and scholars should develop new methodological approaches to study TCM and integrative medicine, while maintaining the high standards of rigorous science that are applied to biomedical research. The development of evidence-based research should evaluate the safety, efficacy, and cost-effectiveness of integrative medicine.

In addition to pushing for new research in integrative medicine, researchers must also disseminate the evidence-based information widely and make it easily accessible to the general public. One way they can do this is to make informational brochures about the latest research on integrative medicine and make them available to patients in health clinics and community centers. Patients can learn about the benefits and limitations of integrative medicine and make informed decisions about their own health. Health care providers can also stay informed with the most updated information about the appropriate use of integrative medicine.<sup>64</sup>

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<sup>63</sup> WHO Congress on Traditional Medicine. "WHO | 'Beijing Declaration,'" November 8, 2008. Accessed March 30, 2016. [http://www.who.int/medicines/areas/traditional/congress/beijing\\_declaration/en/](http://www.who.int/medicines/areas/traditional/congress/beijing_declaration/en/).

<sup>64</sup> Ibid.

## **Develop a national policy that clearly outlines the government’s commitment to include integrative medicine as part of the national health care system<sup>65</sup>**

Governmental promotion of integrative medicine helped China to successfully implement integrative medicine into its national health care system. Other countries interested in adding integrative medicine should consider doing the same. As the W.H.O. stated in *The Regional Strategy for Traditional Medicine in the Western Pacific Region (2011-2020)* publication, “Traditional medicine, as a component of health care, has to be recognized and function effectively alongside other demands on the national health system, if it is to fulfill its potential in health care.”<sup>66</sup> The national policy should clearly state the government’s role in promoting integrative medicine, which may include increasing access to integrative medicine by making it more affordable and ensuring appropriate regulatory provisions are in place to maintain quality, safety, and efficacy of TCM practice and products.<sup>67</sup>

## **Increase coverage, reimbursement, and access to integrative medicine**

Access to integrative medicine is limited for rural, uninsured, or underinsured populations. Therefore, the government should conduct a research study to examine how the public uses integrative medicine in order to determine how best to increase access to these services. Researchers can utilize community health centers as an area to recruit people for health interventions by providing integrative services to diverse, medically underserved populations who might otherwise not have access to integrative medicine.<sup>68</sup> Currently, many health insurance plans cover chiropractic, but not necessarily acupuncture, massage therapy, or other forms of

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<sup>65</sup> WHO Congress on Traditional Medicine. “WHO | ‘Beijing Declaration,’” November 8, 2008. Accessed March 30, 2016. [http://www.who.int/medicines/areas/traditional/congress/beijing\\_declaration/en/](http://www.who.int/medicines/areas/traditional/congress/beijing_declaration/en/).

<sup>66</sup> WHO Regional Office for the Western Pacific. “WPRO | The Regional Strategy for Traditional Medicine in the Western Pacific Region (2011-2020),” 2012. Accessed March 30, 2016. [http://www.wpro.who.int/publications/2012/regionalstrategyfortraditionalmedicine\\_2012.pdf?ua=1](http://www.wpro.who.int/publications/2012/regionalstrategyfortraditionalmedicine_2012.pdf?ua=1).

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

integrative medicine. Some health insurance plans also limit the number of doctor visits and evaluate the practitioner's qualifications in deciding how much the patient has to pay.<sup>69</sup> The government can increase access to integrative medicine by offering incentives for insurance companies to cover all kinds of integrative medicine.

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<sup>69</sup> White House Commission on Complementary and Alternative Medicine Policy. "White House Commission on Complementary and Alternative Medicine Policy- Final Report," 2002. Accessed March 30, 2016. [http://www.whccamp.hhs.gov/pdfs/fr2002\\_document.pdf](http://www.whccamp.hhs.gov/pdfs/fr2002_document.pdf).

## **APPENDIX A: Semi-Structured Interview Questions (English)**

### *For All Participants:*

1. Under what circumstances do you use Western biomedicine? Traditional Chinese Medicine (TCM)?
2. To what extent have you used TCM? (Acupuncture, cupping, massage, moxibustion, etc.)?
3. Do you see TCM as a primary medicine, an alternative medicine, or a complementary medicine (to Western biomedicine)?
4. What are some advantages and disadvantages to using TCM?
5. Are there some illnesses that are untreatable by TCM?
6. Do you think TCM benefits older people more than younger people?
7. What do you think is the future of TCM?

### *For Physicians (in addition to the general questions):*

1. What is your specialty as a physician? How many years have you been practicing? Were you trained in Western biomedicine, TCM, or both?
2. Do you practice TCM, Western biomedicine, or integrative medicine?

### *For Patients (in addition to the general questions):*

1. What brings you to Guang'anmen TCM Hospital? (For patients in Beijing)
2. Why did you choose to use TCM to treat your illness and not Western biomedicine? Have you tried using Western biomedicine before coming here? Or, are you using both treatments at the same time (complementary or integrative medicine)?
3. How long have you been using TCM and/or Western biomedicine to treat your conditions?

## APPENDIX B: Semi-Structured Interview Questions (Chinese)

### *For All Participants:*

1. 如果你不舒服，你会首选中医还是西医？为什么？
2. 如果你用中医的话，你用过哪些中医疗法？（比方说，针灸，推拿，拔罐，推拿，艾灸，等等）
3. 你认为中医是个主要治疗方法，替代医疗，还是补充医疗？你觉得中医能替代西医吗？
4. 中医有什么优点和缺点？
5. 有没有疾病是中医治不了的呢？
6. 你觉得是老年人看中医多还是年轻人看中医多？为什么？
7. 你认为中医会发展地怎么样？

### *For Physicians (in addition to the general questions):*

1. 你的专业是什么？你当医生当了多久？你学了西医，中医，还是两个都有学？
2. 你现在用中医，西医，还是中西医结合？

### *For Patients (in addition to the general questions):*

1. 你今天来到广安门中医院是看什么病？
2. 你为什么选择用中医，不用西医？你来之之前有用过西医吗？你现在在用中西医结合吗？
3. 你用中医或者西医来治你的病用了多久？

## APPENDIX C: Translations for Chinese Terminology

Chinese Characters	Pronunciation in Pinyin	Translation
广安门中医院	Guǎng'ānmén zhōng yī yuàn	Guang'anmen (a district in southwest Beijing) Traditional Chinese Medicine Hospital
神奇	Shén qí	Magical
各有所成	Gè yǒu suǒ chéng	Each has its own benefits
热气	Rè qì	Hot air (direct translation) or heat
火气	Huǒ qì	Fire air (direct translation), anger, internal heat

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