

**Practising Non-Evidence-Based Medicine:  
Ethical Issues in the Practice of Traditional Chinese Medicine in Canada**

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May 2018

A thesis submitted to the Department of Graduate Studies in partial fulfillment of the requirements for the Master of Arts degree in Public Ethics.

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## Abstract

Traditional Chinese Medicine (TCM) is non-evidence-based medicine. The purpose of this thesis is to identify and address some potential TCM ethical issues that are particularly related to non-evidence-based medicine. In applying Beauchamp and Childress's four principles approach (principlism), I identify three potential ethical issues in the practice of TCM in Canada. The first issue pertains to enabling TCM patients to make the informed decision concerning the use of TCM. The second issue relates to the obligation of TCM practitioners to distinguish shams from effective TCM treatments. The third issue concerns equal access to TCM care in the context of the Canada Health Act. After identifying each issue, I put forward suggestions to address it.

## Disclosure

The author is a self-employed Registered TCM Practitioner (R.Ac., R.TCMP) in Ontario. The opinions expressed in this thesis are those of the author and do not necessarily reflect the position of other individuals, organizations or the TCM profession.

## Preface

I enter this research as a TCM practitioner. Thanks to the work of other scholars and practitioners, it is established that TCM is recognized as a healthcare profession in Canada. I need not debate the value of TCM or its rightful place in healthcare in this thesis.

In *Building on Values: The Future of Health Care in Canada*, Roy Romanow states that “Canadians view medicare as a moral enterprise, not a business venture.”<sup>1</sup> Being recognized as a healthcare professional in Canada is a privilege and with it comes the responsibility to exercise moral reasoning in our practice. My thesis intends to address some potential ethical issues in the context of practicing TCM in Canada. In *The Methods of Ethics*, Henry Sidgwick explains that:

...the history of Moral Philosophy...would be a history of attempts to enunciate, in full breadth and clearness, those primary intuitions of Reason, by the scientific application of which the common moral thought of mankind may be at once systematised and corrected.<sup>2</sup>

Sidgwick summarizes the most profound lesson that I have learned from studying public ethics. In writing this thesis, I strove to practice the above approach in formulating my

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<sup>1</sup> Roy J. Romanow, *Building on Values the Future of Health Care in Canada: Final Report* (Saskatoon, Sask.: Commission on the Future of Health Care in Canada, 2002), xx, [https://login.proxy.bib.uottawa.ca/login?url=http://books.scholarsportal.info/viewdoc.html?id=/ebooks/ebooks0/gibson\\_cppc/2009-12-01/6/207365](https://login.proxy.bib.uottawa.ca/login?url=http://books.scholarsportal.info/viewdoc.html?id=/ebooks/ebooks0/gibson_cppc/2009-12-01/6/207365).

<sup>2</sup> Henry Sidgwick, *The Methods of Ethics*, 6th ed. (London; New York: MacMillan and Co. Limited; The Macmillan Company, 1901), 413–14, <http://tinyurl.galegroup.com/tinyurl/4YWos4>.

thoughts. My use of empirical data and personal experience is for the purpose of reasoning. There is no intention to divulge any privileged information.

## Acknowledgements

In 2015, I equipped myself with inadequate credentials to apply for the Master of Arts in Public Ethics Program. My gratitude to Amy and Paul for their support in the process. I am grateful for the conditional admission at Saint Paul University. I shall put what I learn here to good use for society.

I am indebted to my supervisor, Dr. Monique Lanoix for her support in writing this thesis. She is generous in sharing her ideas and keeps me focused on worthy research. Without her guidance, I would not have organized or expressed my thoughts properly.

My thanks to Dr. Rajesh Shukla, Dr. Richard Feist and Dr. Matthew McLennan for their interesting courses in moral theories and applied ethics. I was inspired to write a research thesis because of their wisdom and encouragement.

To the participants in the empirical study of this thesis, thank you for the input. The thesis would mean very little without your interest in TCM.

## Introduction

TCM is not recognized as evidence-based medicine and hence, it is considered as non-evidence-based medicine for the purpose of this thesis. Non-evidence-based medicine is not the equivalent of medicine with no evidence<sup>3</sup> as there are different levels of evidence<sup>4</sup>. Nevertheless, being non-evidence-based medicine implies certain clinical realities and constraints. There are potential ethical issues for practitioners as well as patients. The purpose of this thesis is to identify and address some of the potential ethical issues that are facing TCM practitioners. I apply Beauchamp and Childress's four principles approach (principlism) as the initial ethical framework to identify three issues. The first issue pertains to enabling TCM patients to make an informed decision regarding the use of TCM. The second issue relates to the difficulty and obligation of TCM practitioners to distinguish shams from effective TCM treatments. The third issue concerns equal access to TCM care in the context of the Canada Health Act. After identifying each issue, I put forward suggestions to address it.

Principlism is a common ethical framework in Western biomedicine. It is grounded in what Beauchamp and Childress call "common morality theory" and uses four principles: respect

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<sup>3</sup> Izet Masic, Milan Miokovic, and Belma Muhamedagic, 'Evidence Based Medicine – New Approaches and Challenges', *Acta Informatica Medica* 16, no. 4 (2008): 219–25, <https://doi.org/10.5455/aim.2008.16.219-225>.

<sup>4</sup> 'Oxford Centre for Evidence-Based Medicine - Levels of Evidence (March 2009)', CEBM, 11 June 2009, <https://www.cebm.net/2009/06/oxford-centre-evidence-based-medicine-levels-evidence-march-2009/>.

for autonomy, beneficence, nonmaleficence and justice as the starting point for biomedical ethics.<sup>5</sup> I accept Beauchamp's claim that it is a theory and practical method for clinicians to yield practical judgements in bioethics<sup>6</sup>. Therefore, principlism is the ethical framework to identify ethical issues in this thesis.

The main content of this thesis is organized into four sections. Section I is an overview of TCM practice in Canada. Section II, "Respect for Autonomy," section III, "Beneficence and Nonmaleficence," and section IV, "Justice," are named after the ethical principles that identify the issues. In addition to my TCM training, I reviewed a variety of books and journal articles related to Chinese medicine, bioethics, evidence-based medicine, qualitative research, ethics education, cost-benefit analysis and medicare. The literature was accessed mainly through the University of Ottawa library. I also referred to several online courses on edx.org to further my understanding of randomized clinical trials and Chinese philosophy. The information related to TCM regulations or Canada Health Act is based on the public websites of TCM associations, TCM regulators and Health Canada.

Section I describes how TCM is regulated in Canada, introduces some TCM characteristics, highlights the main ethical frameworks for TCM practitioners and explains why TCM is not recognized as evidence-based medicine. It follows that some potential ethical issues deserve our attention.

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<sup>5</sup> Tom L. Beauchamp, *Principles of Biomedical Ethics*, 7th ed.. (New York: Oxford University Press, 2013), Ch.1.

<sup>6</sup> Tom L. Beauchamp, 'The Theory, Method, and Practice of Principlism', 16 July 2015, 1, <https://doi.org/10.1093/oxfordhb/9780198732365.013.31>.

Section II pertains to enabling TCM patients to make an informed decision to use TCM. This section focuses on an empirical study in the form of a questionnaire survey. The purpose of the survey is to gauge the awareness of TCM being non-evidence-based medicine among the participants and its impact on their decisions to use TCM. The findings also suggest some TCM patient characteristics among the participants. The results are qualitative with no statistical power to make generalization. The empirical study was approved by the Saint Paul University Research Ethics Board (REB File Number: 1360.6/17) before data collection. Section II discusses the methodology, ethics review, results and interpretation of the study in details. Appendix A includes a copy of the Research Ethics Board approval certificate and the full package of the survey invitation.

Section III relates to the difficulty and obligation of TCM practitioners to distinguish shams from effective TCM therapies. The safety and efficacy of TCM in Canada rely on the ethical standards and competency of TCM practitioners. Emphasis on moral cultivation and the ideal model of practitioner-patient relationship<sup>7</sup> in TCM training can effectively promote high TCM standards of practice for the long term. I suggest exploring the teacher-apprentice learning model in TCM training in order to facilitate such an endeavour.

Section IV concerns the issue of equal access to TCM care in the context of the Canada Health Act. After providing an overview of Canada's public healthcare system (medicare) and the insured health service, I ask if TCM should be included in the coverage? Cost,

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<sup>7</sup> Ezekiel J. Emanuel and Linda L. Emanuel, 'Four Models of the Physician-Patient Relationship', *JAMA* 267, no. 16 (22 April 1992): 2221–26, <https://doi.org/10.1001/jama.1992.03480160079038>.

benefit and the founding values of medicare (equity, fairness and solidarity) are prominent factors in Canada's medicare policy. I explore whether utilitarianism and the values can shed light on the question of TCM coverage in medicare.

To conclude my thesis, I summarize all the research findings and suggestions from sections II, III and IV in the final chapter. The conclusion also includes a list of research areas that are worthy of further investigation in Canada.

## I. Overview of TCM Practice

The following information about TCM is relevant to the subsequent discussions in my thesis. It is organized under the headings of regulation, characteristics, ethical framework and non-evidence-based medicine.

### TCM Regulation in Canada

In Canada, there are five provinces that regulate TCM under the provincial legislation. These provinces are British Columbia, Alberta, Ontario, Quebec and Newfoundland and Labrador. To practice TCM legally in these provinces, one must register with the regulator of the province of their practice. The table below lists the regulators for each province:

British Columbia	College of Traditional Chinese Medicine Practitioners and Acupuncturists of British Columbia (CTCMA)	<a href="https://ctcma.bc.ca">https://ctcma.bc.ca</a>
Alberta	College and Association of Acupuncturists of Alberta (CAAA)	<a href="http://acupuncturealberta.ca">http://acupuncturealberta.ca</a>
Ontario	College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario (CTCMPAO)	<a href="http://www.ctcmpao.on.ca">http://www.ctcmpao.on.ca</a>
Quebec	Order of Acupuncturists Quebec (OAQ)	<a href="http://www.o-a-q.org">http://www.o-a-q.org</a>
Newfoundland and Labrador	College of Traditional Chinese Medicine Practitioners and Acupuncturists of Newfoundland and Labrador (CTCMPANL)	<a href="http://ctcmpanl.ca">http://ctcmpanl.ca</a>

Source: <http://www.cmaac.ca/public/tcm-regulation-in-canada><sup>8</sup>

<sup>8</sup> 'TCM Regulation in Canada | C.M.A.A.C. – Promotion TCM and Acupuncture', accessed 28 September 2017, <http://www.cmaac.ca/public/tcm-regulation-in-canada>.

Together, these five regulators form The Canadian Alliance of Regulatory Bodies – Traditional Chinese Medicine Practitioners and Acupuncturists. The alliance is responsible for ensuring the competency requirements for the practice of TCM in Canada. The alliance also designs the national Pan-Canadian Examination and Clinical Case-Study Examinations for all TCM student graduates. In order to be eligible for the examinations, an applicant must meet the minimal TCM training requirement. The prerequisites for being qualified to write the Pan-Canadian Examinations vary from province to province. In general, applicants for the registration of Acupuncturist are required to have a minimum of 1900 hours of TCM education including between 450 and 600 hours of practical clinical training in three academic years; and the applicants for the registration of TCM Practitioner are required to have completed a minimum of 2600 hours of traditional Chinese medicine program with at least 650 hours of practical clinical training in four academic years.<sup>9, 10</sup> All TCM registration applicants are required to pass their relevant Pan-Canadian Examinations before being eligible to register with the provincial regulator for the protected titles, such as Registered Acupuncturists (R.Ac.) or Registered TCM Practitioner (R. TCMP), within their province of practice.

Similar to other healthcare professions such as dentistry or nursing, the TCM profession is self-regulated. Self-regulation means that the provincial government has made a legislative statute. For example, in Ontario: the statutes are the Regulated Health Professions Act, 1991 and Traditional Chinese Medicine Act, 2006. These statutes give a governing body the duty

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<sup>9</sup> 'TCM Regulation in Canada | C.M.A.A.C. – Promotion TCM and Acupuncture'.

<sup>10</sup> 'Education Program Review | CTCMA - College of Traditional Chinese Medicine Practitioners and Acupuncturists', accessed 23 October 2017, <http://www.ctcma.bc.ca/resources/education-program-review/>.

to regulate the TCM profession. In Ontario, the governing body is the College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario.<sup>11</sup> The Board of Directors of the College establishes the policies of the College and oversees its administration. The mandate of the College is to serve the public interest by ensuring that the TCM profession acts honestly and competently. Unlike the role of a professional association, the College does not serve the self-interest of the profession nor can it lobby the government on behalf of the interests of the profession.<sup>12</sup> Other provinces that regulate the practice of TCM also have their own statutes and governing bodies with similar roles.

According to the Traditional Chinese Medicine Act (2006) in Ontario, “The practice of traditional Chinese medicine is the assessment of body system disorders through traditional Chinese medicine techniques and treatment using traditional Chinese medicine therapies to promote, maintain or restore health.”<sup>13</sup> Registered practitioners are authorized to practice the following:

1. Performing a procedure on tissue below the dermis and below the surface of a mucous membrane for the purpose of performing acupuncture.
2. Communicating a traditional Chinese medicine diagnosis identifying a body system disorder as the cause of a person’s symptoms using traditional Chinese

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<sup>11</sup> ‘Regulations · CTCMPAO Website’, accessed 6 November 2017, <https://www.ctcmpao.on.ca/regulation/>.

<sup>12</sup> ‘Jurisprudence Course · CTCMPAO Website’, handbook p.4-5, accessed 28 October 2017, <https://www.ctcmpao.on.ca/applicant/jurisprudence-course/>.

<sup>13</sup> ‘Standards of Practice · CTCMPAO Website’, accessed 31 January 2018, <https://www.ctcmpao.on.ca/regulation/standards-of-practice/>.

medicine techniques.<sup>14</sup>

There are multiple modalities of therapies or treatment in TCM. The most common TCM treatment modalities in Canada are herbal therapy and acupuncture. In general, a registered acupuncturist (R. Ac) is qualified to practice acupuncture. A registered TCM practitioner (R. TCMP) is qualified to practice a combination of acupuncture and herbal therapies.<sup>15</sup>

### TCM Characteristics

The terms “Traditional Chinese Medicine” and “Chinese medicine” refer to the same system of medicine for the purpose of this thesis. In China, the term “traditional” is often omitted when referring to Chinese medicine. In the West, most scholars and practitioners use the term “Traditional Chinese Medicine” to refer to Chinese medicine.<sup>16</sup> Taylor explains that “the term ‘Traditional Chinese Medicine’ first appeared during the latter half of the year 1955, and it appeared first not in medical documents, but in political ones.”<sup>17</sup>

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<sup>14</sup> ‘Standards of Practice · CTCMPAO Website’, accessed 5 October 2017, <https://www.ctcmpao.on.ca/regulation/standards-of-practice/>.

<sup>15</sup> ‘Public Register Search · CTCMPAO Website’, accessed 4 October 2017, <https://www.ctcmpao.on.ca/publicregistersrc/>.

<sup>16</sup> Volker Scheid, *Chinese Medicine in Contemporary China Plurality and Synthesis*, E-Duke Books Scholarly Collection (Durham, NC: Duke University Press, 2002), 3, <https://login.proxy.bib.uottawa.ca/login?url=http://dx.doi.org/10.1215/9780822383710>.

<sup>17</sup> Kim Taylor, *Chinese Medicine in Early Communist China, 1945-63: A Medicine of Revolution*, Needham Research Institute Studies (London ; New York: RoutledgeCurzon, 2005), 84.

Scheid points out that “the term ‘traditional’ invokes the inappropriate sense that Chinese medicine is unchanged or unchanging, neither of which is true.”<sup>18</sup> Indeed, the contemporary practice of TCM is grounded in modern biomedical science. Just as a physicist needs to know engineering science to build functional machines, a TCM practitioner needs to know biomedical science to care for a human body. A complete TCM curriculum for TCM practitioners today include studies in subjects such as anatomy, microbiology and toxicology.<sup>19, 20</sup> In clinical practice, TCM practitioners need to understand some Western biomedicine in order to cooperate and complement conventional medicine with appropriate TCM therapies. TCM practitioners also need to collaborate with and refer patients to Western biomedicine professionals according to patient situations.<sup>21</sup>

The College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario states that:

Traditional Chinese Medicine (TCM) was originated in ancient China and has a history of over two thousand years. Influenced by ancient Chinese philosophy, culture, and science and technology, Chinese medicine uses the theory of Yin and

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<sup>18</sup> Scheid, *Chinese Medicine in Contemporary China Plurality and Synthesis*, 3.

<sup>19</sup> HKBU, ‘Bachelor of Chinese Medicine and Bachelor of Science (Hons) in Biomedical Science’, accessed 7 November 2017,


[http://scm.hkbu.edu.hk/en/education/undergraduate\\_programmes/bachelor\\_of\\_chinese\\_medicine\\_and\\_bachelor\\_of\\_science\\_Hons\\_in\\_biomedical\\_science/index.html](http://scm.hkbu.edu.hk/en/education/undergraduate_programmes/bachelor_of_chinese_medicine_and_bachelor_of_science_Hons_in_biomedical_science/index.html).

<sup>20</sup> OCTCM, ‘Acupuncture School |’, Acupuncture school | Ontario College of TCM Toronto, accessed 7 November 2017, <https://www.studytcm.ca>.

<sup>21</sup> ‘Standards of Practice · CTCMPAO Website’.

Yang and the theory of Wu Xing to explain the mechanism of balancing the function of the body.<sup>22</sup>

TCM theory is based on Qi and teaches that health is the result of the internal balance of Yin and Yang.<sup>23</sup> The differences between TCM and Western biomedicine are rooted in how medical conditions are represented. TCM often represents a medical condition with a metaphor. For example, Western biomedicine represents the condition of a headache in terms of overactive pain receptors or vasoconstriction of cerebral blood vessels, but in TCM, a headache is represented as a syndrome such as Wind-Cold or Hyperactivity of Liver Yang. In translating TCM from the logographic Chinese language to the descriptive language of English, many TCM metaphors become nonsensical descriptions for many.

For example, the symbol of Yin Yang Theory  is a metaphor that depicts two opposing matters which co-exist and are interdependent. Yin and Yang transform into each other. This implies that within a healthy body system, Yin and Yang dynamically rebalance each other and transform from one to another. In TCM, this metaphor plays an important role in guiding the choice of herbs, acupuncture methods, exercise or diets in therapy. If the translation of the logo is simply described as a circle with half of it being black colour with a white dot and the other half being white colour with a black dot, the metaphor is lost. The translation does not have any meaning to TCM. The epistemological and ontological

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<sup>22</sup> 'About TCM · CTCMPAO Website', accessed 28 September 2017, <https://www.ctcmpao.on.ca/public/about-tcm/>.

<sup>23</sup> Changguo Wu, *Basic Theory of Traditional Chinese Medicine*, ed. Wu Guochang (Shanghai: Shanghai College of Traditional Chinese Medicine Press, China, 2002), 11.

differences between TCM and Western biomedicine remain a barrier for many to understand TCM.<sup>24</sup>

Leon Antonio Rocha explains that:

One noticeable gap in our understanding of Chinese medicine remains: the narratives, subjectivities, and experiences of patients. I am especially interested in how an individual becomes a patient of Chinese medicine: the multiple ways through which a patient encounters and comes to elect acupuncture and Chinese herbal medicine.<sup>25</sup>

In my personal experience, most patients in Canada consider TCM only if Western biomedicine fails to help them. TCM patients often are not familiar with TCM and readily accept TCM as a black box. To them, TCM is a complementary medicine when there are no better options. This patient characteristic can make them especially vulnerable to unethical practice and deserves our attention. In section II of this thesis, the findings of the empirical study reveal some patient characteristics among the participants.

Regardless of the differences between TCM and Western biomedicine, TCM is a healthcare intervention. A visit to a TCM practitioner in Canada would be a standard process of giving consent, obtaining a diagnosis, formulating a treatment plan and then receiving the therapy accordingly.

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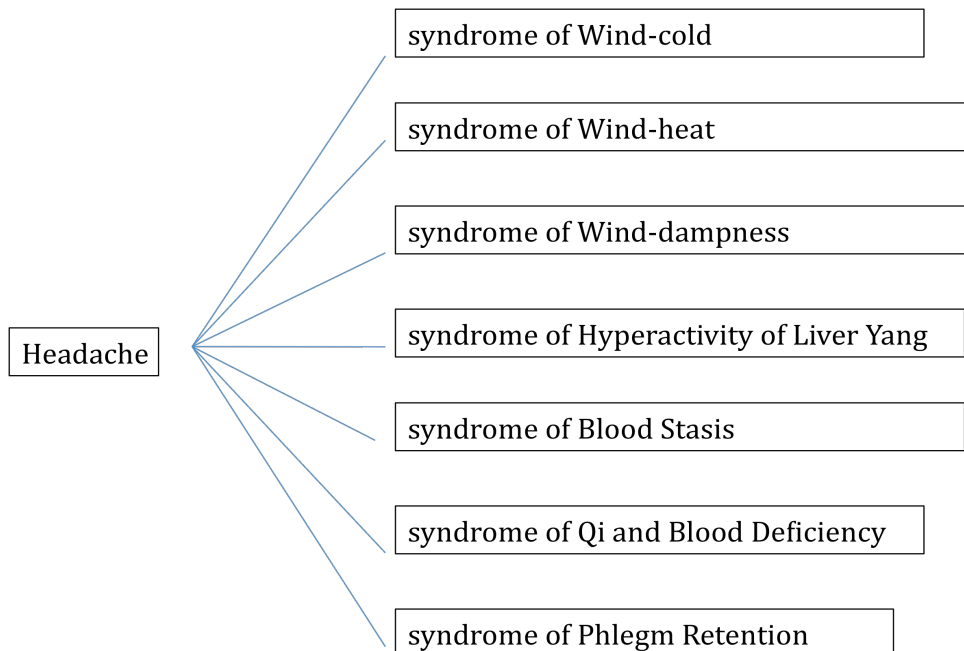
<sup>24</sup> Fengli Lan, *Culture, Philosophy, and Chinese Medicine: Viennese Lectures.*, Culture and Knowledge ; v. 22 (Frankfurt am Main ; New York: Peter Lang, 2012), 274.

<sup>25</sup> Howard Chiang, *Historical Epistemology and the Making of Modern Chinese Medicine* (Manchester University Press, 2015), 238.

TCM diagnosis (also known as Bianzheng lunzhi 辨証論治 ) is an essential step in a TCM treatment process. Its principle is to represent a patient's condition in TCM syndrome differentiation (also known as pattern differentiation). Scheid writes that:

Bianzheng lunzhi is thus remembered today as the defining feature of Chinese medicine. Its complex history has been rewritten so that for patients and practitioners alike; comparisons between Chinese medicine and Western medicine now naturally evoke the opposition between pattern and disease differentiation.<sup>26</sup>

In Western biomedicine, physicians prescribe treatment based on the disease diagnosis. In TCM, practitioners prescribe treatment based on the TCM syndrome differentiation. Again, I use a headache as an example to explain the contrast. In TCM, a headache can be represented by different syndromes as illustrated below:



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<sup>26</sup> Scheid, *Chinese Medicine in Contemporary China Plurality and Synthesis*, 228.

In Western biomedicine, the treatment for different types of headache may be the same class of prescription drugs. However, in TCM, a different TCM syndrome requires a different TCM treatment plan. For example, a Wind-Cold headache needs a different treatment from that of a Qi and Blood Deficiency headache. Therefore, the same biomedical disease, a headache, can require different TCM treatments. Two patients with the same biomedical disease may have two different syndromes and require different TCM treatments. The same patient with the same biomedical disease at different times may have different syndromes and require different TCM treatments. This feature of “the same disease with different TCM treatments” is a unique characteristic of TCM. It is also an important factor of why TCM is difficult to standardize or become evidence-based medicine.

### **TCM Ethical Frameworks**

Although TCM is a medical system which has its own complete set of theories and treatment methods, there is no universal TCM ethical theory or framework for moral reasoning. After reviewing several sources of TCM ethics, I conclude that TCM ethics in Canada are influenced by three different sources: Chinese philosophy, TCM masters and provincial regulations.

Influenced by various schools of Chinese philosophy such as Confucianism, Buddhism and Daoism, TCM ethics gravitate towards principles such as “Ren 仁,” which is often translated as “compassion” and “benevolence”; “Yi 義,” which is often translated as “righteousness”;

“De 德,” which is often translated as “virtuosity”; and “Zhi 智,” which is often translated as “wisdom” and “knowledge”.<sup>27, 28</sup> Nie claims that:

As TCM evolved in China, its practitioners...developed some core principles of professional ethics including the concepts of the virtuous physician (liangyi), medicine as the art of humanity or humaneness (yi nai renshu), sincerity or moral excellence (cheng), and compassion (ci).<sup>29</sup>

Similar to Western virtue ethics, Chinese philosophy often emphasizes the cultivation of moral character.

*Lun Dayi Jingcheng* is another source of TCM ethics. The book is written by an influential TCM master, Sun Simiao (581-682). Lan translates one of Sun’s most famous paragraphs, which states that “a great doctor should be expert in medical skills and sincere to the patients” and that:

when well-qualified doctors treat patients, they should be calm and concentrated without any desire or avarice. First of all, they should have great sympathy for the patients and then be determined to save people from suffering. When patients come to ask for help, they should not treat them differently by whether they are rich or poor, old or young, beautiful or ugly, enemy or friend, Chinese or foreigner, foolish or wise. They should treat all the patients like their closest relatives...Being

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<sup>27</sup> Chad Hansen, ‘Humanity and Nature in Chinese Thought | 中国哲学思想中的人类与自然观 | EdX’, accessed 26 October 2017, <https://www.edx.org/course/humanity-nature-chinese-thought-zhong-hkux-hku03x>.

<sup>28</sup> Lan, *Culture, Philosophy, and Chinese Medicine*, section II.

<sup>29</sup> Jing-Bao Nie, *Medical Ethics in China: A Transcultural Interpretation*, Biomedical Law and Ethics Library (London ; New York: Routledge, 2011), 181–82.

qualified doctors, they should regard the patients' suffering as their own and have deep sympathy for them. They should not try to avoid danger if being confronted with it. No matter in day time or night, winter or summer, no matter they are hungry or thirsty, tired or exhausted, they should treat or save patients with heart and soul without delay or worrying about personal gains or losses. Only by so doing can they become great doctors for people.<sup>30</sup>

Sun Simiao preaches selflessness, benevolence and non-discrimination as the Holy Grail of TCM ethics. Scheid explains that Sun's idea of a "good physician is characterized by four attributes: he is morally honorable in his action (xing fang 行方), has a comprehensive knowledge (yuan zhi 圓智), and is careful (xin xiao 心小) yet also courageous (dan da 胆大)."<sup>31</sup> Nie states that:

The key tenet of Sun's ethics, as the title of this important text indicates, is that a physician must be simultaneously 'jing' (proficient, or at least competent, in the study and practice of medicine) and 'cheng' (sincere in one's moral commitment, honest and virtuous). Sun Simiao was the first to put forward the ideal of 'dayi' (the Master Physician) and to articulate the ethical principles and conduct appropriate to the role.<sup>32</sup>

Regrettably, neither Chinese philosophy nor the study of Sun's *Lun Dayi Jingcheng* are mandatory education in a typical TCM curriculum in Canada. Chinese philosophy and Sun's

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<sup>30</sup> Lan, *Culture, Philosophy, and Chinese Medicine*, 170.

<sup>31</sup> Scheid, *Chinese Medicine in Contemporary China Plurality and Synthesis*, 150.

<sup>32</sup> Nie, *Medical Ethics in China*, 187.

*Lun Dayi Jingcheng* are rarely taught in a TCM school in Canada. Their influence in Canada is limited.

The third sources of influence on TCM ethics are the Standards of Practice and the Code of Ethics developed by the provincial regulations. In Ontario, “the Standards of Practice reflect the knowledge, skills and judgment R. TCMPs and R. Acs need in order to perform the services and procedures that fall within the scope of practice of the profession.”<sup>33</sup> The Standards of Practice provides a reference to the Code of Ethics for TCM practitioners in Ontario as follows:

Under the College’s Standards of Practice R. TCMPs and R. Acs are expected to be:  
Competent - meaning to have the necessary knowledge, skills and judgment to ensure safe, effective and ethical outcomes for the patient. This means that R. TCMPs and R. Acs must maintain competence Standards of Practice in their practice, must refrain from acting if not competent, and must take appropriate action to address the situation.

Accountable - meaning to take responsibility for decisions and actions. This means that R. TCMPs and R. Acs must accept the consequences of their decisions and actions and act on the basis of what they in their clinical judgment, believe is in the best interests of the patient.

Collaborative - meaning to work with other members of the health care team to achieve the best possible outcomes for the patient. This means that that R. TCMPs and R. Acs are responsible for communicating with other members of the health

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<sup>33</sup> ‘Standards of Practice · CTCMPAO Website’.

care team, and taking appropriate action to address gaps and differences in judgement about care provision.<sup>34</sup>

TCM practitioners must adhere to the Standards of Practice and the Code of Ethics set by the College and the Bylaws. The Standards of Practice also include other topics such as communication, record keeping, advertising, and the prohibition of a sexual relationship with a patient, etc. These guidelines strive to provide a model for TCM practitioners to ensure safe, effective and ethical outcomes for patients.<sup>35</sup>

### **TCM is Non-Evidence-Based Medicine**

Evidence-based medicine is an approach that integrates individual expertise and the best available data from clinical research into clinical decision-making.<sup>36</sup> In other words, evidence-based medicine is “the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.”<sup>37</sup> In the context of treating a patient, evidence-based medicine “requires a health care provider to locate evidence about different treatments for the patient’s condition and apply the one

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<sup>34</sup> ‘Standards of Practice · CTCMPAO Website’.

<sup>35</sup> ‘Standards of Practice · CTCMPAO Website’.

<sup>36</sup> David Sackett *et al.*, ‘Evidence Based Medicine: What It Is and What It Isn’t’, 1996’, accessed 1 February 2018, [https://uottawa-primo.hosted.exlibrisgroup.com/primo\\_library/libweb/action/dlDisplay.do?vid=UOTTAWA&afterPDS=true&docId=TN\\_medline17340682&loc=adaptor,primo\\_central\\_multiple\\_fe](https://uottawa-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/dlDisplay.do?vid=UOTTAWA&afterPDS=true&docId=TN_medline17340682&loc=adaptor,primo_central_multiple_fe).

<sup>37</sup> Colleen M. Flood *et al.*, *Just Medicare What’s in, What’s out, How We Decide*, Canadian Electronic Library. Books Collection (Toronto [Ont.], Toronto: University of Toronto Press, 2006), 45, <https://login.proxy.bib.uottawa.ca/login?url=http://site.ebrary.com/lib/oculottawa/Doc?id=10219133>.

supported by the best evidence about effectiveness”<sup>38</sup>. The purpose of an evidence-based approach is to offer medical practitioners and patients more accurate and up-to-date information about treatment options. It has the potential benefit of enhancing clinical decision making and optimization of clinical outcomes.<sup>39, 40, 41</sup> In 1992, the Evidence-Based Medicine Working Group of American Medical Association claimed that:

...evidence-based medicine de-emphasizes intuition, unsystematic clinical experience, and patho-physiologic rationale as sufficient grounds for clinical decision-making, and stresses the examination of evidence from clinical research. Evidence-based medicine requires new skills of the physician, including efficient literature-searching, and the application of formal rules of evidence in evaluating the clinical literature.<sup>42</sup>

The importance of evidence-based medicine was established. Evidence-based medicine has been the new paradigm for medical practice and shaped the education and practice of biomedicine since the 1990s.<sup>43, 44</sup> Greschner claims that the evidence-based approach “now encompasses evidence-based health care, which aspires to extend the principles of evidence-based medicine to every corner of the health care system, including management,

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<sup>38</sup> Flood *et al.*, 45.

<sup>39</sup> Prasad Kameshwar, ‘Fundamentals of Evidence Based Medicine - Springer’, 1, accessed 24 September 2017, <https://link-springer-com.proxy.bib.uottawa.ca/book/10.1007/978-81-322-0831-0/page/1>.

<sup>40</sup> Masic, Miokovic, and Muhamedagic, ‘Evidence Based Medicine – New Approaches and Challenges’.

<sup>41</sup> Flood *et al.*, *Just Medicare What’s in, What’s out, How We Decide*, 46.

<sup>42</sup> Gordon Guyatt, ‘Evidence-Based Medicine: A New Approach to Teaching the Practice of Medicine’, *JAMA* 268, no. 17 (4 November 1992): 2420, <https://doi.org/10.1001/jama.1992.03490170092032>.

<sup>43</sup> Guyatt, 2424.

<sup>44</sup> Sackett *et al.*, ‘Evidence Based Medicine’, 71.

purchasing, and professional regulation.”<sup>45</sup>

Masic *et al.* comment that “the key difference between evidence-based medicine and traditional medicine is not that EBM considers the evidence while the latter does not. Both take evidence into account; however, EBM demands better evidence than has traditionally been used.”<sup>46</sup> Being non-evidence-based medicine is not the equivalence of having no evidence or sham medicine. There are different levels of evidence and what counts as evidence is crucial.<sup>47</sup> According to the Oxford Centre, the highest quality evidence is the evidence generated by randomized clinical trials; in the middle level of the ladder are the cohort or case studies; and at the bottom are opinions, experience or intuition, etc.<sup>48</sup> Hence, non-evidence-based clinical decisions may be based on insufficient evidence or low-quality evidence such as an expert opinion.<sup>49</sup> In comparison to evidence-based, non-evidence-based clinical decisions may not be optimized. Non-evidence-based medicine may imply higher uncertainties and less consistency. The safety and efficacy of non-evidence-based medicine may be biased by the clinical experience of a practitioner or simply an outcome of chance.<sup>50</sup>

High-quality data is the essence of evidence-based medicine. High-quality data from clinical research is essential to support any claim for the safety or efficacy of medicine. Among

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<sup>45</sup> Flood *et al.*, *Just Medicare What's in, What's out, How We Decide*, 45.

<sup>46</sup> Masic, Miokovic, and Muhamedagic, ‘Evidence Based Medicine – New Approaches and Challenges’.

<sup>47</sup> Flood *et al.*, *Just Medicare What's in, What's out, How We Decide*, 44.

<sup>48</sup> ‘Oxford Centre for Evidence-Based Medicine - Levels of Evidence (March 2009)’.

<sup>49</sup> ‘Oxford Centre for Evidence-Based Medicine - Levels of Evidence (March 2009)’.

<sup>50</sup> Kameshwar, ‘Fundamentals of Evidence Based Medicine - Springer’, 39.

different clinical research methods, Julie Buring claims that randomized clinical trial (RCT) is the gold standard to obtain the best quality data.<sup>51</sup> It is because a randomized clinical trial can minimize alternative explanations, the role of chance, the role of bias, and the role of confounding in research findings. She thinks that the unique niche of randomized trials is that they are optimal to detect statistically small to moderate but clinically worthwhile treatment effects.<sup>52</sup> Therefore randomized clinical trial is the bedrock of evidence-based medicine. Evidence from randomized clinical trials is regarded as the highest level of clinical evidence for biomedicine.<sup>53</sup>

The qualities of TCM evidence are often considered as low or insufficient in comparison to biomedicine. A search of “Traditional Chinese Medicine” or “acupuncture” in the Cochrane Library database (<http://www.cochrane.org>) would yield over two thousand reviews on various studies on TCM therapies. For example, in acupuncture for fibromyalgia, the reviewer’s conclusion is that:

...there is low to moderate-level evidence that compared with no treatment and standard therapy, acupuncture improves pain and stiffness in people with fibromyalgia. There is moderate-level evidence that the effect of acupuncture does not differ from sham acupuncture in reducing pain or fatigue, or improving sleep or

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<sup>51</sup> Julie Buring, ‘Why Are Clinical Trials Important? Lecture | Why Are Clinical Trials Important? | HSPH-HMS214x Courseware | EdX’, accessed 23 October 2017, [https://courses.edx.org/courses/HarvardX/HSPH-HMS214x/2013\\_SOND/courseware/aa057b54817048a29ecd50c1ae205c79/7c39039dd1e747a69c49f3009927ae6d/?child=first](https://courses.edx.org/courses/HarvardX/HSPH-HMS214x/2013_SOND/courseware/aa057b54817048a29ecd50c1ae205c79/7c39039dd1e747a69c49f3009927ae6d/?child=first).

<sup>52</sup> Lawrence M. Friedman, Curt D. Furberg, and David L. DeMets, *Fundamentals of Clinical Trials* (New York, NY: Springer New York, 2010), <https://doi.org/10.1007/978-1-4419-1586-3>.

<sup>53</sup> ‘Oxford Centre for Evidence-Based Medicine - Levels of Evidence (March 2009)’.

global well-being.<sup>54</sup>

For another example in stroke rehabilitation, the reviewer's conclusion is that:

From the available evidence, acupuncture may have beneficial effects on improving dependency, global neurological deficiency, and some specific neurological impairments for people with stroke in the convalescent stage, with no obvious serious adverse events. However, most included trials were of inadequate quality and size. There is, therefore, inadequate evidence to draw any conclusions about its routine use. Rigorously designed, randomised, multi-centre, large sample trials of acupuncture for stroke are needed to further assess its effects.<sup>55</sup>

More evaluations pointing to insufficient evidence or low-quality evidence can also be found in other examples such as therapies for insomnia, dysmenorrhea, hyperthyroidism and Bell's palsy, etc. Ironically, they are common conditions for which patients seek TCM treatment.

In a review of evidence-based research on TCM, Jin-Ling Tang *et al.* conclude that there are a large and rapidly increasing number of randomized clinical trials on TCM therapies. However, the qualities of the trials are usually low and need improvement. The researchers identify methodology issues including sample size, randomization method and the control

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<sup>54</sup> 'Acupuncture for Fibromyalgia | Cochrane', accessed 17 March 2018, <https://doi.org/10.1002/14651858.CD007070.pub2>.

<sup>55</sup> 'Acupuncture for Stroke Rehabilitation | Cochrane', accessed 17 March 2018, <https://doi.org/10.1002/14651858.CD004131.pub3>.

groups experiments.<sup>56</sup> In light of the lack of scientific vigour for clinical trials in TCM, Siu-wai Leung and Hao Hu published a TCM clinical trial methodology which:

...emphasized the importance of (a) experimental controls (placebos or active controls) to demonstrate the efficacy, (b) randomization to avoid biases in sampling and group allocation, (c) proper sample size calculation to avoid invalid statistical inference, (d) blinding to avoid performance bias and detection bias, and (e) ethical practices to avoid research misconduct.<sup>57</sup>

But some scholars think that the solution is not as straightforward. Yeh Ching Linn comments that there are inherent difficulties in pursuing an evidence-based medicine approach for TCM.

The individualized approach and the degree of variation involved make standardization for an EBM type analysis seem daunting. Format of the placebo either in acupuncture or herbal medicine trial poses further challenge to the blinding process in RCTs for TCM.<sup>58</sup>

Earlier in the discussion of TCM characteristics, I pointed out that TCM syndrome differentiation makes TCM difficult to standardize. Unlike biomedicine, TCM cannot use a uniform solution to target a specific disease. In addition, TCM customizes each treatment according to factors such as the body constitution of each individual, season and environment. Indeed, TCM is a personalized medicine and attributes its effectiveness to

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<sup>56</sup> Jin-Ling Tang, Si-Yan Zhan, and Edzard Ernst, 'Review of Randomised Controlled Trials of Traditional Chinese Medicine', *BMJ* 319, no. 7203 (17 July 1999): 161, <https://doi.org/10.1136/bmj.319.7203.160>.

<sup>57</sup> Siu-wai Leung and Hao Hu, eds., *Evidence-Based Research Methods for Chinese Medicine* (Singapore: Springer Singapore, 2016), 2, <https://doi.org/10.1007/978-981-10-2290-6>.

<sup>58</sup> Yeh Ching Linn, 'Evidence-Based Medicine for Traditional Chinese Medicine: Exploring the Evidence from a Western Medicine Perspective', *Proceedings of Singapore Healthcare* 20, no. 1 (1 March 2011): 14, <https://doi.org/10.1177/201010581102000103>.

adequate customization for each individual. In TCM, clinical precision means proactive and timely variations from treatment to treatment, in accordance with the disease process. In adjusting the treatment by varying the choice or dosage of herbs, acupuncture points or lifestyle recommendation, for example, the TCM practitioner aims at altering the disease process ahead of its progress.

In order to enable TCM to become compatible with an evidence-based approach, there seems to be a disproportionate amount of research already focusing on quality data or randomized clinical trials. Randomized clinical trials are very expensive undertakings.<sup>59</sup> Few organizations are capable of funding randomized clinical trials for the exhaustive lists of TCM therapies. Most cutting-edge TCM randomized clinical trials target the development of specific biotechnologies or pharmaceutical products.<sup>60, 61, 62, 63</sup> Their research may pave the way for the commercialization of innovative TCM products, but not necessarily advance the overall development of TCM. The success of a few particular randomized clinical trials is unlikely to enable TCM to become evidence-based medicine in the near term.

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<sup>59</sup> Daniel Polsky and Henry Glick, 'Costing and Cost Analysis in Randomized Controlled Trials: Caveat Emptor', *Pharmacoeconomics* 27, no. 3 (2009): 179–88.

<sup>60</sup> American Association for the Advancement of Science, 'The Art and Science of Traditional Medicine Part 2: Multidisciplinary Approaches for Studying Traditional Medicine', *Science* 347, no. 6219 (16 January 2015): 337–337, <https://doi.org/10.1126/science.347.6219.337-c>.

<sup>61</sup> Dennis Normile, 'The New Face of Traditional Chinese Medicine', *Science* 299, no. 5604 (10 January 2003): 188–90, <https://doi.org/10.1126/science.299.5604.188>.

<sup>62</sup> Richard Stone, 'Lifting the Veil on Traditional Chinese Medicine', *Science* 319, no. 5864 (8 February 2008): 709–10, <https://doi.org/10.1126/science.319.5864.709>.

<sup>63</sup> Wing Lam, Scott Bussom, and Fulan Guan, 'The Four-Herb Chinese Medicine PHY906 Reduces Chemotherapy-Induced Gastrointestinal Toxicity | Science Translational Medicine', accessed 6 November 2017, <http://stm.sciencemag.org/content/2/45/45ra59>.

I am skeptical of the feasibility of making TCM an evidence-based medicine. Bridie Andrews comments that, “ironically, given the long history of trying to make Chinese medicine more compatible with biomedicine, this East-West contrast has sometimes been encouraged in China.”<sup>64</sup> The epistemological and ontological differences between TCM and Western biomedicine are difficult to reconcile.<sup>65, 66</sup> William Spence and Na Li put forward that “Few studies have addressed: the applicability of Evidence Based Medicine (EBM) to TCM, the application of EBM by TCM practitioners, and their understanding of EBM.”<sup>67</sup> Having quality data is one thing. Asking practitioners to integrate the data into a clinical decision is something else. But this is outside the scope of this thesis.

In a larger context, Ole Döring suggests that “it would amount to cultural suicide if a society would invest greater efforts in creating a technical infrastructure according to the state of the art in biomedicine than to encourage and nurture humanity, including ethics.”<sup>68</sup> I think that it rings true for the TCM community as well. TCM evidence is important, so are the ethics of the practice of TCM. This research thesis is to focus on the potential ethical issues arising as a result of practicing non-evidence-based medicine. I shall identify the potential ethical issues using principlism as a starting point.

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<sup>64</sup> Bridie Andrews, *The Making of Modern Chinese Medicine, 1850-1960*, Contemporary Chinese Studies (Vancouver British Columbia: UBC Press, 2013), 212, <https://login.proxy.bib.uottawa.ca/login?url=http://books.scholarsportal.info/viewdoc.html?id=/ebooks/ebooks3/upress/2014-06-27/1/9780774824347>.

<sup>65</sup> Lan, *Culture, Philosophy, and Chinese Medicine*, 274.

<sup>66</sup> Chiang, *Historical Epistemology and the Making of Modern Chinese Medicine*, ch 1.

<sup>67</sup> William Spence and Na Li, ‘An Exploration of Traditional Chinese Medicine Practitioners’ Perceptions of Evidence Based Medicine’, *Complementary Therapies in Clinical Practice* 19, no. 2 (1 May 2013): 64, <https://doi.org/10.1016/j.ctcp.2013.02.003>.

<sup>68</sup> Ole Döring, ‘8.4. Teaching Medical Ethics in China. Cultural, Social and Ethical Issues’, 4, accessed 28 June 2017, <http://www.eubios.info/ABC4/abc4255.htm>.

## II. Respect for Autonomy

Beauchamp and Childress's principlism is grounded in what they refer to as "common morality theory" that everyone in a society shares a set of universal norms. Norms can be principles and rules, virtues, ideals or rights. Beauchamp and Childress select four principles: respect for autonomy, nonmaleficence, beneficence, and justice to construct a normative framework for biomedical ethics.<sup>69</sup> The principle of the respect for autonomy contains both a negative and a positive obligation. The negative obligation is non-interference of preference. The positive obligation is to enable autonomous decision-making.<sup>70, 71</sup>

Without sufficient or high-quality evidence, it is difficult for a TCM practitioner to optimize a clinical decision objectively. The outcomes of non-evidence-based medicine can be inconsistent and have higher uncertainties in comparison to evidence-based medicine. The safety and efficacy of a TCM treatment can be an outcome of chance.<sup>72</sup> If patients are not aware of the clinical uncertainties, they may not have the right expectation about TCM treatment. An irrational expectation of TCM treatment is counter-productive in terms of healing and personal finances for the patient. I propose that TCM practitioners should

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<sup>69</sup> Beauchamp, 'The Theory, Method, and Practice of Principlism', 13.

<sup>70</sup> Tom L. Beauchamp, 'The Theory, Method, and Practice of Principlism', 16 July 2015, 6, <https://doi.org/10.1093/oxfordhb/9780198732365.013.31>.

<sup>71</sup> Beauchamp, *Principles of Biomedical Ethics*, 102.

<sup>72</sup> Kameshwar, 'Fundamentals of Evidence Based Medicine - Springer', 39.

inform the patients about this situation in order to fulfill the positive obligation of informed consent before treatment.

Merrill uses an empirical study to collect data from interviews and questionnaires with patients and physicians in order to derive her theory.<sup>73</sup> The approach can “provide a method for showing what matters most to people as people, especially in the context of medical needs.”<sup>74</sup> I was inspired to use an empirical study in the form of a survey in order to include qualitative data in my thesis.

## Survey Methodology

An empirical study can be qualitative research, quantitative research or a combination of the two. According to DeFranzo:

Qualitative Research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. Qualitative Research is also used to uncover trends in thought and opinions, and dive deeper into the problem. Qualitative data collection methods vary using unstructured or semi-structured techniques. Some common methods include focus groups (group discussions), individual interviews, and

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<sup>73</sup> Sarah Bishop Merrill, *Defining Personhood: Toward the Ethics of Quality in Clinical Care*, Value Inquiry Book Series ; v. 70 (Amsterdam ; Atlanta, Ga.: Rodopi, 1998), Forward.

<sup>74</sup> Merrill, 68.

participation/observations.<sup>75</sup>

On the other hand:

Quantitative Research is used to quantify the problem by way of generating numerical data or data that can be transformed into usable statistics...Quantitative Research uses measurable data to formulate facts and uncover patterns in research. Quantitative data collection methods are much more structured than Qualitative data collection methods.<sup>76</sup>

Since I focused on the opinion of TCM patients and expected the data sample to be small, I did not aim at generating practical statistics for generalization. I chose to conduct a qualitative research instead of a quantitative research. Hence, the results of my survey has no statistical power for generalization. The conclusions are limited to be applicable to the participants of my survey.

In qualitative analysis, there are different data types such as text, images, and sound.

According to Guest *et al.*, text “is by far the most common form of qualitative data analyzed in the social and health sciences”<sup>77</sup> and

...text can be analyzed as a proxy for experience in which we are interested in individuals' perceptions, feelings, knowledge, and behavior as represented in the

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<sup>75</sup> Susan DeFranzo, 'Difference between Qualitative and Quantitative Research.', Snap Surveys Blog, 16 September 2011, <https://www.snapsurveys.com/blog/qualitative-vs-quantitative-research/>.

<sup>76</sup> DeFranzo.

<sup>77</sup> Greg Guest *et al.*, *Applied Thematic Analysis* (Los Angeles: Sage Publications, 2012), 8, <https://login.proxy.bib.uottawa.ca/login?url=http://methods.sagepub.com/book/applied-thematic-analysis>.

text, which is often generated by our interaction with research participants.<sup>78</sup>

Therefore, the empirical study focused on collecting text and descriptive data from the participants. In addition,

...giving voice to 'the other' is a hallmark of humanism and humanistic anthropology, and this tradition has carried over into qualitative research in general. The notion of open-ended questions and conversational inquiry, so typical in qualitative research, is founded on this principle as it allows research participants to talk about a topic in their own words, free of the constraints imposed by the kind of fixed-response questions typically seen in quantitative studies. Simultaneously, the researcher learns from the participants' talk and dynamically seeks to guide the inquiry in response to what is being learned.<sup>79</sup>

Hence, I also used open-ended questions in the survey questionnaire.

The small sample size did not justify the use of word-based techniques or software to perform a thematic analysis. My data analysis process was a manual process of grouping, sorting and resorting the data on two-dimensional spreadsheets. Then I looked for patterns, themes, or ideas in the small sample. Braun and Clare claim, "a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set."<sup>80</sup> Guest *et al.* define a theme as "a unit of meaning that is observed (noticed) in the data by a reader of the text."<sup>81</sup> The findings and

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<sup>78</sup> Guest *et al.*, 9.

<sup>79</sup> Guest *et al.*, 16.

<sup>80</sup> Virginia Braun and Victoria Clarke, 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology* 3, no. 2 (2006): 82, <https://doi.org/10.1191/1478088706qp063oa>.

<sup>81</sup> Guest *et al.*, *Applied Thematic Analysis*, 50.

interpretation are summarized later in this section. They are qualitative data and reflect the themes or patterns only among the participants of my survey.

The questionnaire survey and data collection took place from 15 October, 2017, to 15 January, 2018. During this period, I randomly invited any clients who visit any one of the following locations in Ottawa: TEAL Wellness at 570 Montreal Road, Hunt Club Physiotherapy Clinic at 2446 Bank Street or International Academy of TCM at 380 Forest Street. The clients could be patients being treated with TCM, chiropractic therapy, other naturopathic therapies, physiotherapy or massage, etc. Not all of them were TCM patients. Some of them had never met me nor knew of TCM. My intention was to collect data from a diverse pool of clients. I was solely responsible for the recruitment of participants at the survey locations. The questionnaire was in English only. Each of the invitation packages includes a recruitment letter, an implied consent form, a questionnaire and a stamped self-addressed envelope. I estimated that each questionnaire would take approximately 10 minutes to complete. The participants were encouraged to complete the questionnaire at their convenience and in private. There was no observation of them during the survey.

### **Survey Research Ethics (REB File Number: 1360.6/17)**

The participation of the survey was anonymous and voluntary. The participants did not have to answer any questions that they did not want to answer. The survey used an implied consent method. The decision of a participant to complete and return the survey was interpreted as an implied consent to participate. No consent signature or personal

information was collected on the survey. Therefore, after I received a completed survey, the participant could not withdraw from the survey, as there would be no identification on the questionnaire for retrieval.

There was no observation of the participant in this survey. Once the participant completed the survey, the participant could drop it off at the office or mailed it in the stamped self-addressed envelope provided. If I did not receive the survey by 15 January, 2018, I considered that the participant refused to participate. There was no follow-up with the participants about it.

Some participants were my patients and the survey might create an apparent conflict of interest or coercion to participate in my research. By asking the participants to complete the survey anonymously and giving them the option to return the questionnaire in a stamped self-addressed envelope, I resolved the potential conflicts.

The College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario (CTCMPAO) independently governs my professional conduct and competency. My duty to the patients was not affected by their participation or refusal to participate in this research.

The research result in the form of my thesis will be tentatively available by request after 15 January, 2019. The returned questionnaires are to be scanned into a digital file. The original paper records are to be destroyed after the final submission of the thesis. The

digital file will be kept in a secured personal computer for five years. The only person who have access to the research data will be me.

During the course of the survey, the process was in compliance with the approved research ethics proposal. One deficiency was in the design of the questionnaire for a small sample group. Asking detailed demographic information from a small sample group could expose a participant's identity to me. The anonymity of some participants could be compromised because of excessive details in the demographics section. The remedy was to remind the participants that they did not have to answer any question that they did not want to answer.

### **Survey Participants**

The participants were randomly selected among the clients who visited any one of the three locations in Ottawa (TEAL Wellness at 570 Montreal Road, Hunt Club Physiotherapy Clinic at 2446 Bank Street. or International Academy of TCM at 380 Forest Street . ) The clients could be patients being treated with TCM, chiropractic therapy, other naturopathic therapy, physiotherapy or massages. My intention was to collect data from a more diverse pool of patients. I was solely responsible for the recruitment of participants at the survey locations. Table 1 below summarizes the demographic data.

**Table 1: Demographic Data (n=17)**

<b>Characteristics</b>	<b>Number (n)</b>	<b>Percentage%</b>
<b>Sex:</b>		
Male	2	11.76%
Female	15	88.24%
Other	0	0.00%
No answer	0	0.00%
<b>Age:</b>		
Under 20	1	5.88%
20-40	7	41.18%
41-60	4	23.53%
Over 60	5	29.41%
No answer	0	0.00%
<b>Education:</b>		
None	0	0.00%
High school or equivalent	1	5.88%
Post secondary or equivalent	16	94.12%
No answer	0	0.00%
<b>Ethnicity:</b>		
White	11	64.71%
Latino	0	0.00%
Black	0	0.00%
Indigenous People	2	11.76%
Chinese	0	0.00%
Arab/West Asian	3	17.65%
East/Southeast Asian	0	0.00%
Indian/South Asian	0	0.00%
No answer	1	5.88%
<b>Frequency of using TCM:</b>		
Never	3	17.65%
Less than once per year	2	11.76%
At least once per year	11	64.71%
No answer	1	5.88%

The survey excluded any participants under 17 years of age (Ontario), parents, and parents or authorized third parties of adult participants who would be legally incompetent to give

consent. The survey questionnaire began by collecting the demographic data of the participants about their sex, age range, education level, ethnicity and how often they used TCM. Each answer was voluntary. There was no compulsion for the participants to reveal information that might identify them to me.

As of 15 January, 2018, I invited 35 people in total to participate in the survey. 31 of the invitations took place at the location of TEAL Wellness at 570 Montreal Road. Four of the invitations took place at the location of Hunt Club Physiotherapy Clinic. None of the invitations took place at the International Academy. Of the 35 invitations, 17 participants provided implied consent and returned their questionnaires with answers.

The majority of the participants are white females with age from 20 to 60. Almost all of them have post-secondary education. Many of them are my patients and have some experience of TCM. There were two lessons learned in the invitation process. First, the invitations took place mostly at one location instead of being evenly distributed among three locations. It was due to the concentration of my work schedule during the survey period at TEAL Wellness. Second, sometimes I forgot or did not have the time to invite everyone that I met on the same day. It was due to my pre-occupation with the patients during treatments. In order to increase the number and diversity of invitations among the three sites, I should have visited the three sites outside my clinic schedule and made invitations outside my clinic hours.

## Survey Findings and Interpretation

The small sample size did not justify the use of word-based techniques or software to perform a thematic analysis. The analysis was a manual process of analyzing the data on spreadsheets, looking for a pattern, themes, or ideas in the small sample. The findings and interpretation were summarized below.

**Table 2: Awareness of TCM as non-EBM and Frequency of Using TCM (n= 17)**

<b>Participant No.</b>	<b>Aware TCM non EBM</b>	<b>Use TCM Frequency</b>
1	yes	At least once per year
2	yes	At least once per year
3	yes	At least once per year
4	yes	At least once per year
5	yes	At least once per year
6	yes	At least once per year
14	yes	At least once per year
15	yes	At least once per year
16	yes	At least once per year
7	yes	Less than once per year
17	yes	Never
8	no	At least once per year
9	no	At least once per year
10	no	Less than once per year
11	no	Never
13	no	Never
12	no	No answer

Table 2 above illustrates the awareness of the participant about TCM being non-evidence-based. The participant number in the first column was randomly assigned to each returned

questionnaire for the purpose of data entry. Column two is the answer to Question1 of the questionnaire. The questionnaire explains that TCM is not considered as evidence-based medicine by Western medical standards and a TCM treatment may be effective only by chance. It asks if the participant is aware of the situation. A majority of the participants ( n=11, 64.7%) answered that they were aware of TCM being non-evidence-based medicine. Column three indicates how often the participant uses TCM. The answers can be “Never”, “Less than once per year” or “At least once per year” in the demographics section.

By sorting and grouping the data according to their answers about the frequency of their using TCM, I produced three groups (A, B, C) of data samples for further analysis. The frequency of using TCM implies their experience of TCM:

- Group A consists of participants who checked either ‘Less than once per year’ or ‘At least more than once per year’ in the demographics section. Therefore, Group A represents the participants who have relatively more experience of using TCM.
- Group B consists of participants who checked either ‘Never’ or ‘Less than once per year’ in the demographics section. Therefore, Group B represents the participants who have relatively less experience of using TCM.
- Group C consists of participants who gave no answer. These participants are neither in Group A nor in Group B.

Group A and B have overlapping participants (i.e. participants who use TCM less than once per year; n=2) The overlapping of sample data creates a larger sample size for both Group A and Group B in theme analysis. This technique also allows me to interpret the results

over a more continuous degree of TCM experience among the participants (i.e. relatively more or less experience in using TCM.)

**Table 3: Answers from Group A (participants who have more experience of using TCM n= 13)**

<b>Aware TCM non EBM</b>	<b>Verbatim Answer to Question 1a or 1b</b>
yes	I prefer to try TCM before medication. It has worked in the past for me.
yes	As an indigenous woman (or First Nations) we've been using traditional medicine's cedar, tobacco, sage, sweetgrass, sweat lodges, fast for many years. Chinese medicine is similar in history as to "not objectively verified" by current government standards, FDA approval etc. "I believe in it".
yes	Because I've had success with it in the past for treatment of my chronic pain condition.
yes	It works for me, it's quick & effective better for me than western based. I don't like pills or medication to treat ailments or pain.
yes	Very effective for cervical dystonia in combination with Botox that I receive at Civic Hospital.
yes	For relief of the relevant pain/discomfort; and for the general feeling of wellness I have after any treatment.
yes	I believe in a natural way of healing diseases. I am not against Western medicine, but through my experience, TCM helps me a lot of regaining my strength and general health.
yes	As I am amicable to holistic approaches to medicine, I find that TCM helps my physical ailments tremendously. However, one of the biggest issues is mainstream medicine not accepting or believing in TCM and insurance companies not providing any coverage for such treatments. These two areas are the most frustrating which decreases my chances to seek TCM treatments. Ideally, even if not evidence-based, mainstream doctors and insurers should give their patients/clients the freedom to choose or to seek treatments that help them feel better or heal faster.
yes	TCM may not follow "Western medical standards" but is a tried and true treatment - trial & error - it works.
yes	I was willing to try because acupuncture has been shown to help pain and fertility, even if we don't know why.
no	Because my mother did it in the past. So I decide to try because I was taking too much painkiller. Now, I reduced 3/4 of my painkiller. My hands are no longer swelling in the morning, I have more energy and I feel better in my body.
no	Having had treatments before I found they were generally beneficial to my well-being.
no	It doesn't affect my decision to use TCM

Table 3 above organizes the answers to Question 1, 1a and 1b for Group A. Table 4 below organizes the answers of Question 1, 1a and 1b for Group B. The first column of both tables contains the answer of the participants to whether they are aware that TCM is not evidence-based in Question 1. The second column of both tables contains the verbatim answer of the participants of how does being non-evidence-based affect their decision to use TCM in either question 1a and 1b. I made minimal correction of some spelling errors and grammar in the data. However, none of their content was altered during the process.

By analyzing Table 3, two themes emerge from Group A. First, the majority (n=10 or 76.9%) of participants in Group A were aware of TCM being non-evidence-based medicine. Second, in deciding to use TCM, the majority of them (n=12, 92.3%) explained the decision was based on positive past experience or expectation of future benefits such as “willing to try,” “I believe in it,” “It worked” or “I feel better”. There was little mention of concerns about uncertainties or risks associated with non-evidence-based medicine.

**Table 4: Answers from Group B (participants who have less experience of using TCM n= 5)**

<b>Aware TCM non EBM</b>	<b>Verbatim Answer to Question 1a or 1b</b>
yes	I was willing to try because acupuncture has been shown to help pain and fertility, even if we don't know why.
yes	I believe in alternative medicine.
no	It doesn't affect my decision to use TCM
no	Because if it works only by chance then I wouldn't want to risk it and pay money if it won't work. If I am going to get treated I would like the percentage of it to work much higher then if it didn't work. Not 50% yes and 50% no.
no	More hesitant about the benefits.

As shown in Table 4 above, the majority (n=3, 60%) of the participants in Group B were not aware of TCM being non-evidence-based medicine. Some participants in Group B indicated concerns over the risks associated with the use of TCM. The sample size of Group B is small. Nevertheless, the data shows the contrast between Group A and Group B.

Group C has only one participant who did not provide an answer to the frequency of using TCM. The participant was not aware of TCM being non-evidence-based medicine. The verbatim answer is “I tried physiotherapy, physiotherapy with trigger point dry needling; very little benefit and very painful needling. Problem persists.” Group C was not included in any theme analysis because the group has only one participant.

Question 2 of the survey provides a brief explanation of four ethical principles (autonomy, beneficence, justice and nonmaleficence). Then it follows to ask the participant to rank the priority (1, 2, 3 or 4) for each ethical principle in TCM. The rank of “1” indicates the highest priority and the rank of “4” indicates the lowest priority among the four principles. The participants can choose more than one principles to have the same rank.

There was a printing error in Question 2 in twelve of the questionnaires. Instead of “Autonomy”, it was printed as “Consent”. Therefore, all responses related to the ranking of “Autonomy” or “Consent” were subsequently not used my analysis.

**Table 5: Awareness of TCM as non-EBM and the Corresponding Rankings of “Beneficence”, “Justice” and “Nonmaleficence” (n=17)**

<b>Aware TCM non EBM</b>	<b>Priority of Beneficence</b>	<b>Priority of Justice</b>	<b>Priority of Nonmaleficence</b>
no	1	1	1
no	1	1	1
no	1	1	1
no	1	1	3
no	1	4	1
no	3	4	3
yes	1	1	1
yes	1	1	1
yes	1	1	1
yes	1	1	1
yes	1	1	1
yes	1	1	2
yes	1	3	2
yes	1	4	3
yes	3	3	4
yes	4	3	3
yes	4	4	4

Sorting the data first by the participants’ awareness of TCM being non-EBM, second by the ranking of “Beneficence” and third by the ranking of “Justice” yielded Table 5 above. The top six rows of the data came from participants who were not aware of TCM being non-EBM. The bottom eleven rows of the data came from participants who were aware that TCM being non-EBM.

One theme emerges from Table 5. Among the participants who were aware of TCM being non-EBM, 8 out of 11 (i.e. 72.7%) ranked “1” for Beneficence, 6 out of 11 (i.e. 54.54%) ranked “1” for Justice and 5 out of 11 (i.e. 45.45%) ranked “1” for Nonmaleficence. The participants who were aware of TCM being non-EBM considered the principle of beneficence having a higher priority over nonmaleficence in TCM. This theme is in agreement with the theme derived from Table 3 for Group A. The more experienced TCM patients were often aware of TCM being non-EBM. They focused on the potential benefits of TCM in their verbatim responses with little mention of the risks associated with TCM.

By rearranging the columns of Table 5 and sorting the data accordingly to first by the ranking of “Beneficence”, second by the ranking of “Justice” and third by the ranking of “Nonmaleficence” yielded Table 6 below. One theme emerges from Table 6 below. The number of participants who ranked “1” for Beneficence is 13 out of 17 (i.e. 76.47%), ranked “1” for Justice is 10 out of 17 (i.e. 58.82%) and ranked “1” for Nonmaleficence is 9 out of 17 (i.e. 52.94%). The majority of all participants also considered the principle of beneficence having a higher priority over justice or nonmaleficence in TCM. The theme agrees with the previous themes found in Table 3 and Table 5.

In addition, regardless of the data of the ranking of “Autonomy” or “Consent” (as in the misprinted questionnaires), Table 6 shows that less than half ( $n=8$ , 47%) of the participants consider all the ethical principles are equally important to them in TCM.

Table 6: Rankings of “Beneficence”, “Justice” and “Nonmaleficence” of All Participants (n=17)

Priority of Beneficence	Priority of Justice	Priority of Nonmaleficence	Aware TCM non EBM
1	1	1	yes
1	1	1	yes
1	1	1	yes
1	1	1	yes
1	1	1	yes
1	1	1	no
1	1	1	no
1	1	1	no
1	1	2	yes
1	1	3	no
1	3	2	yes
1	4	1	no
1	4	3	yes
3	3	4	yes
3	4	3	no
4	3	3	yes
4	4	4	yes

### Conclusions of the Survey

The participants’ awareness of TCM being non-evidence-based medicine showed correlation with their experience of using TCM. Participants who had more TCM experience were more often aware of TCM being non-evidence-based medicine. Participants who had less experience with TCM were less aware of TCM being non-evidence-based medicine.

For participants who had more TCM experience, the information of TCM as non-evidence-based medicine showed little impact on their decision to use TCM. Their verbatim responses indicated their past and individual experience of TCM affected their decision to

use TCM. They gave a higher priority to the principle of beneficence over nonmaleficence in TCM. They focused on the potential benefits of TCM instead of the uncertainties. For TCM practitioners to fulfill the positive obligation of the respect for autonomy, it is important that they conscientiously remind TCM patients to consider the uncertainties associated with TCM over benefits. For example, patients should not delay having a biomedical diagnosis because of using TCM or replace effective biomedicine with TCM therapy without high-quality evidence.

For participants who had no or relatively less experience with TCM, the survey showed that their verbatim responses expressed some considerations of risks over the benefits of using TCM. The disclosure of TCM being non-evidence-based medicine might have an impact on their decision to use TCM. Therefore, the disclosure would be material information to help them make the decision of using TCM. Based on the positive obligation under the principle of respect for autonomy, TCM practitioners should inform new patients that TCM is non-evidence-based medicine. It can be incorporated into the mandatory process of obtaining informed consent before treatment. It will help new TCM patients to make autonomous decisions and set the right expectation of TCM accordingly.

There were lessons learned. One lesson was that excessive details in the demographics section for a small sample size could compromise the anonymity of the participants. Another lesson pertained to the scheduling of the invitation process in order to increase the size and diversity of the data.

Although this small-scale questionnaire survey uses qualitative analysis and has no statistical power for generalization, it is still a worthy experience. It hints that a larger-scale study on TCM patients can be useful and feasible in the future. With sufficient participations from multiple TCM practitioners in different locations, a larger survey may be developed to study the specific needs and expectations of TCM patients in a larger population. The findings may help TCM practitioners to identify the best practices and most productive ways to complement the conventional medicine in that population. In section II and IV, I also discuss the need for TCM research in other areas.

### III. Beneficence and Nonmaleficence

Beauchamp and Childress assert that “morality requires not only that we treat persons autonomously and refrain from harming them, but also that we contribute to their welfare.”<sup>82</sup> The principle of nonmaleficence means not to cause harm such as pain, suffering or distress to others.<sup>83</sup> The principle of beneficence obligates us to act for the benefit of others and the scope can include preventing harm, removing harm, and promoting good.<sup>84</sup> Beauchamp and Childress put forward that the four principles in principlism should have no hierarchy and they are morally weighted equally in the framework.<sup>85</sup> When these principles are in conflict with each other, the situation must be assessed in specific contexts without assuming any priority over the others. Sometimes non-maleficence is more stringent than beneficence but sometimes the reverse is also true.<sup>86</sup>

For example, inserting an acupuncture needle into a person’s body may cause harm such as pain or bruise but it simultaneously can relieve or prevent the person’s headache.

Beneficence takes priority over non-maleficence in this case. Now consider a TCM practitioner who does not have the required TCM competencies and he wants to practice

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<sup>82</sup> Beauchamp, *Principles of Biomedical Ethics*, 202.

<sup>83</sup> Beauchamp, ‘The Theory, Method, and Practice of Principlism’, 8.

<sup>84</sup> Beauchamp, 9.

<sup>85</sup> Beauchamp, 2.

<sup>86</sup> Beauchamp, *Principles of Biomedical Ethics*, 151.

acupuncture on patients. Although his intention is to help others, his action can potentially cause harm. Nonmaleficence overrides beneficence in this case.

Non-evidence-based medicine can sometimes be an expert opinion without an explicit critical appraisal.<sup>87, 88</sup> Compounded by the lack of standardization in TCM, it is often difficult for the patient as well as the practitioner to distinguish shams from effective TCM treatment. An example can be found in the earlier days when TCM was not regulated in Canada. In those days, the typical employment model for TCM practitioner was working for a herbal store. The usual role of TCM practitioner was to diagnose patients and provide free herbal prescriptions. However, purchasing the herbal prescriptions is not free. To increase profitability, herbal store owners could mandate the TCM practitioner to prescribe higher-profit-margin over lower-profit-margin herbs. Both the practitioner and the patient would have little basis to compare efficacy or safety in such case.

Some examples can also be spotted in today's marketplace. In the name of TCM, there is no shortage of innovative treatments such as "TCM detox", "TCM weight loss", "cosmetic TCM acupuncture", etc. Although a treatment may use the techniques such as acupuncture or Chinese herbs, it may not have any basis of TCM theory or TCM diagnosis. Some new treatments may also lack evidence of safety or effectiveness. TCM practitioners have the obligations to distinguish shams from effective TCM before promoting them. Not doing the due diligence or practicing unproven therapies on patients is unethical even though TCM is

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<sup>87</sup> Alastair McColl *et al.*, 'General Practitioners' Perceptions of the Route to Evidence Based Medicine: A Questionnaire Survey', *BMJ* 316, no. 7128 (31 January 1998): 361, <https://doi.org/10.1136/bmj.316.7128.361>.

<sup>88</sup> 'Oxford Centre for Evidence-Based Medicine - Levels of Evidence (March 2009)'.

considered as non-evidence-based medicine. The guidelines and methods for TCM practitioners to perform due diligence on TCM therapies is a worthy research subject. But it is outside the scope of this thesis.

TCM patients often are not familiar with TCM and rely on the practitioner to explain safety and efficacy. 71% of Canadians have used natural health products like vitamins and minerals, herbal products and homeopathic medicines.<sup>89</sup> If you ask Health Canada “How can I use natural health products safely?” their regular response will be “Talk to a health care professional like a doctor, pharmacist or naturopath before choosing a product.”<sup>90</sup> Similarly in TCM, ensuring the safety and efficacy of TCM is often the responsibility of TCM practitioners.

In section II, the results of the empirical study showed that the majority of participants consider beneficence a higher priority over nonmaleficence in TCM. More experienced TCM patients were often aware of TCM being non-evidence-based medicine. However, they were inclined to focus on the potential benefits instead of the risks. This patient characteristic makes them particularly vulnerable to TCM shams and unethical practices. A TCM practitioner who respects the principles of nonmaleficence and beneficence would likely have the professional proficiency, performing due diligence on TCM therapies, to offer

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<sup>89</sup> Health Canada and Health Canada, ‘About Natural Health Products’, organizational descriptions, aem, 26 November 2010, <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/regulation/about-products.html>.

<sup>90</sup> ‘About Natural Health Products’, aem, 26 November 2010, <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/regulation/about-products.html>.

honest health advice in the best interests of the patients. A TCM practitioner who disregards the principles of nonmaleficence or beneficence, on the other hand, is less likely to meet the required standards of practice or do due diligence on TCM treatments. Worse, an unethical practitioner may prioritize profits over patient interests and intentionally promote TCM shams to the public.

What can be the most effective way to ensure TCM practitioners adhere to ethical principles and standards of practice? I explore solutions in the cultivation of moral character and the TCM practitioner-patient relationship model as follows.

## **Moral Character**

Many medical professional standards and their codes of ethics promote certain moral values. For example, the ethical guide of the Canadian Medical Association for Canadian physicians states that:

This Code... It is based on the fundamental principles and values of medical ethics, especially compassion, beneficence, non-maleficence, respect for persons, justice and accountability. The Code, together with CMA policies on specific topics, constitutes a compilation of guidelines that can provide a common ethical framework for Canadian physicians.<sup>91</sup>

Another example is in the ethical guide of the Canadian Nurse Association. Its code of ethics lists seven primary values as:

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<sup>91</sup> CMA, 'Code of Ethics', <https://www.cma.ca/En/Pages/code-of-ethics.aspx>, accessed 25 March 2017, <https://www.cma.ca/En/Pages/code-of-ethics.aspx>.

1. Providing safe, compassionate, competent and ethical care 2. Promoting health and well-being 3. Promoting and respecting informed decision-making 4. Preserving dignity 5. Maintaining privacy and confidentiality 6. Promoting justice 7. Being accountable.<sup>92</sup>

Healthcare professionals are often required to cultivate moral character. Virtues such as “compassion, discernment, trustworthiness, integrity, and conscientiousness...are important in part for the development and expression of caring.”<sup>93</sup>

Chinese philosophy also emphasizes the cultivation of virtues. Chinese moral values such as compassion, benevolence and wisdom are honourable, praise-worthy virtues in any Chinese societies, particularly in the medical profession.

Aristotle, the founding father of virtue ethics in the West, defines virtue as a state of “involving rational choice, consisting in a mean relative to us and determined by reason – the reason, that is by reference to which the practically wise person would determine it.”<sup>94</sup>

Virtue ethics suggests that a person should live in accordance with reason and exercise prudence in conducting himself. Adhering to virtue ethics, a TCM practitioner would proactively apply the necessary Standards of Practice and Code of Ethics in order to provide safe, ethical and effective treatment. Justin Oakley asserts that:

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<sup>92</sup> ‘Nursing Ethics’, accessed 1 March 2017, <https://www.cna-aiic.ca/en/on-the-issues/best-nursing/nursing-ethics>.

<sup>93</sup> Beauchamp, *Principles of Biomedical Ethics*, 37.

<sup>94</sup> Aristotle, *Aristotle: Nicomachean Ethics*, trans. Roger Crisp, 2 edition (New York: Cambridge University Press, 2014), 31.

...a common way of expressing admiration or condemnation of another's behaviour is by saying 'What sort of person would do a thing like that?'...Virtue ethics is an approach that picks up on these common ways of judging actions. It holds that actions cannot be properly judged as right or wrong without reference to considerations of character.<sup>95</sup>

Virtue ethics attends to the importance of moral character, not just following a deontological code. Oakley adds that:

...other mainstream theories evaluate all acts in terms of 'right,' 'wrong,' 'obligatory,' or 'permissible,' and in doing so leave us with an impoverished moral vocabulary. A virtue ethics approach, by contrast, employs such evaluative terms as 'courageous,' 'callous,' 'honest,' and 'just' – as well as the more familiar 'right' and 'wrong' – and thereby provides a much richer and more fine-grained range of evaluative possibilities.<sup>96</sup>

According to Aristotle, moral character is in part the result of habit:

Virtue is of two kinds: that of the intellect and that of character. Intellectual virtue owes its origin and development mainly to teaching, for which reason its attainment requires experience and time; virtue of character is a result of habituation (ethos), for which reason it has acquired its name through a small variation on 'ethos'.<sup>97</sup>

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<sup>95</sup> Justin Oakley, 'A Virtue Ethics Approach', in *A Companion to Bioethics*, ed. Helga Kuhse and Peter Singer (Wiley-Blackwell, 2009), 91, <https://doi.org/10.1002/9781444307818.ch10>.

<sup>96</sup> Oakley, 92.

<sup>97</sup> Aristotle, *Aristotle*, 23.

To develop the relevant moral character, we need to practice prudence in the relevant activities. For example, if we want to develop the right moral character for caring people, we need to develop that moral character by practicing caring other people. In nursing education, Regner Birkelund holds a view that:

...social care cannot be taught by means of theories, but can be learnt only through practice. The master–apprentice principle of ancient Greece is stressed in connection with this as being a viable alternative to the theoretical model of education.<sup>98</sup>

Birkelund quotes Matinsen as also saying “the moral and practical aspect of nursing cannot be learned from theories about care and ethics, but from hands-on experience.”<sup>99</sup>

Scholars also point out the importance of role modeling in ethics education. Higgins and Jo claim that “For Aristotle, we become moral by living among ethical exemplars and by learning to desire what is good.”<sup>100</sup> Derek Sellman suggests “the best teachers of professional phronesis may turn out to be those practitioners (including practitioners of teaching) who exemplify the professional *phronimos* (or professionally wise practitioner).”<sup>101</sup> In some training experience, I recall observing the values of clinical

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<sup>98</sup> Regner Birkelund, ‘Ethics and Education’, 1, accessed 13 October 2017, [https://journals-scholarsportal-info.proxy.bib.uottawa.ca/details/09697330/v07i0006/473\\_eae.xml](https://journals-scholarsportal-info.proxy.bib.uottawa.ca/details/09697330/v07i0006/473_eae.xml).

<sup>99</sup> Birkelund, 475.

<sup>100</sup> Christopher Higgins and Katherine Jo, ‘Ethics and Education - Education - Oxford Bibliographies - Obo’, accessed 13 October 2017, <http://www.oxfordbibliographies.com.proxy.bib.uottawa.ca/view/document/obo-9780199756810/obo-9780199756810-0142.xml;jsessionid=3B8BDC8023E0878C565A114823E6794B>.

<sup>101</sup> Derek Sellman, ‘Practical Wisdom in Health and Social Care: Teaching for Professional Phronesis’, accessed 14 October 2017, [https://journals-scholarsportal-info.proxy.bib.uottawa.ca/details/14736853/v08i0002/84\\_pwihasctfpp.xml&sub=all](https://journals-scholarsportal-info.proxy.bib.uottawa.ca/details/14736853/v08i0002/84_pwihasctfpp.xml&sub=all).

sensitivity, humane commitment and TCM scholarship from the interactions of the TCM teachers with patients. The TCM practitioner-patient relationship can make a difference in the quality of TCM care. By managing the practical matters in a clinical environment, the teachers could convince me the values of ethics without preaching ethics.

### **Practitioner-Patient Relationship Model**

Emanuel and Emanuel analyze four models of physician-patient relationship. They are the paternalistic, informative, interpretive and deliberative models. In the paternalistic model, “the physician acts as the patient’s guardian, articulating and implementing what is best for the patient.”<sup>102</sup> In the informative model, the physician acts as a technologist to provide all the available facts for the patient to make the informed decision.<sup>103</sup> In the interpretive model, “the physician is a counsellor....supplying relevant information, helping to elucidate values and suggesting what medical interventions realize these values.”<sup>104</sup> In the deliberative model, “the physician acts as a teacher or a friend, engaging the patient in dialogue on what course of action would be best.”<sup>105</sup> Although there are pros and cons of each model, Emanuel and Emanuel support the deliberative model as the ideal physician-patient relationship mainly because the model embodies the ideal of autonomy, promotes evaluative discussions of health issues and avoids imposing the physician’s values.<sup>106</sup> In

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<sup>102</sup> Emanuel and Emanuel, ‘Four Models of the Physician-Patient Relationship’, 2221.

<sup>103</sup> Emanuel and Emanuel, 2221.

<sup>104</sup> Emanuel and Emanuel, 2222.

<sup>105</sup> Emanuel and Emanuel, 2222.

<sup>106</sup> Emanuel and Emanuel, 2223–26.

addition, the deliberative model of physician-patient relationship also requires the practice of caring:

The essence of doctoring is a fabric of knowledge, understanding, teaching, and action, in which the caring physician integrates the patient's medical condition and health-related values, makes a recommendation on the appropriate course of action, and tries to persuade the patient of the worthiness of this approach and the values it realizes. The physician with a caring attitude is the ideal embodied in the deliberative model...<sup>107</sup>

Intuitively, the four models are also applicable to TCM practitioner-patient relationship.

I use obesity as an example to explore how a TCM practitioner may implement the four models. Imagine that a patient is already diagnosed with obesity by his physician. He wants to seek treatment in TCM. In a paternalistic model, a TCM practitioner may pledge “I shall do my best to help you” and then proceed with the appropriate TCM diagnoses and treatments. In an informative model, a TCM practitioner may add information such as a variety of options in acupuncture, herbal treatments, diets and exercise, etc. The objective is to allow the patient to compare each treatment option and make an informed selection for himself. In an interpretative model, a TCM practitioner may also impose that “obesity adds to the risks of other diseases such as diabetes, heart disease and cancer. Being obese is unhealthy and you should lose weight.” Usually if one cares about a person, one would ask questions about the person. In a deliberative model, a TCM practitioner would likely ask the patient questions such as “how do you manage?” or “what is suitable?” or “why is it

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<sup>107</sup> Emanuel and Emanuel, 2226.

difficult?” to understand the needs, expectations and values of the patient. It may turn out that the patient does not consider the higher risk of other diseases unhealthy. The objective of the patient may be to alleviate his knee-pain due to being overweight. In this case, being pain-free means being healthy for the patient. With such an understanding, the practitioner may diligently include the measurement of pain in the evaluation of the treatment’s progress. The practitioner may also help the patient explore other therapies such as physiotherapy or massage to cope with pain. At a later stage, the practitioner can encourage the patient to consider other values of health, such as lower disease risk factors, through more evaluative discussions.

TCM is a holistic medicine. It also embodies Chinese cultural values such as ideals, rituals and beliefs. Since TCM practitioners usually include lifestyle advice to patients, such as diet or exercise, as part of the complete treatment. It is easy for TCM practitioners to impose Chinese cultural values subconsciously on patients during the consultation. The deliberative model of practitioner-patient relationship is the best model for a practitioner to safeguard the respect for patient autonomy.

The deliberative model is ideal for TCM for another reason. As mentioned earlier, TCM patients are often not familiar with TCM and rely on their practitioners to explain safety and efficacy issues. The empirical study in section II also found that the majority of participants focus on the potential benefits instead of the risks. This characteristic points to patient vulnerability to unethical practice. Using the above example of obesity, it appears that none of the four practitioner-patient relationship models can prevent an unethical

practitioner from promoting sham weight-loss products. However, in implementing the deliberative model, the patient may have a better chance to remind himself about his treatment objective and evaluate the progress in accordance with his expectation.

In order to implement the deliberative model of physician-patient relationship, Emanuel and Emanuel assert that:

...physicians currently lack the training and capacity to articulate the values underlying their recommendations and persuade patients that these values are worthy... Therefore, if the deliberative model seems most appropriate, then we need to implement changes in medical care and education to encourage a more caring approach. We must stress understanding rather than mere provisions of factual information in keeping with the legal standards of informed consent and medical malpractice; we must educate physicians not just to spend more time in physician patient communication but to elucidate and articulate the values underlying their medical care decisions, including routine ones.<sup>108</sup>

If TCM is to promote the deliberative model for the practitioner-patient relationship, TCM practitioners may also need special training.

Both the cultivation of moral character and implementation of ideal practitioner-patient relationship direct us to examine TCM training and education. TCM students are going to be our future TCM practitioners. To ensure a high standard of TCM ethics and competency for the long term, it makes sense to invest in TCM education and training.

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<sup>108</sup> Emanuel and Emanuel, 2226.

## Teacher-Apprentice Learning Model

In Canada, TCM ethics education often means reading the Standards of Practice and the Code of Ethics developed by the provincial regulations. For example, the College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario requires all TCM practitioners to study the jurisprudence handbook and pass the jurisprudence examination before registration for TCM practice. The jurisprudence handbook focuses on topics such as patient communications, safe practice, record keeping and advertising, since, “the purpose of these publications is to remind practitioners about the factors that are required to practice safely, ethically and effectively.”<sup>109</sup>

However, jurisprudence does not entail the development of moral values in practitioners. Unschuld comments that:

The mere affirmation of a code of ethics will not suffice to establish public trust. For one thing ‘formulated ethics’ utilize the relevant values of the comprehensive paradigms found in the public, but at the same time contain very concrete regulations of behaviour for the individual physician. These regulations of behaviour, as for example the forbidding of advertising, hardly seem to relate to ethics.<sup>110</sup>

Döring suggests that medical ethics education should be:

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<sup>109</sup> ‘Jurisprudence Course · CTCMPAO Website’, handbook p.8.

<sup>110</sup> Paul U. Unschuld, *Medical Ethics in Imperial China: A Study in Historical Anthropology, Comparative Studies of Health Systems and Medical Care* ; (Berkeley: University of California Press, 1979), 14.

...more fundamentally, as a way to improve the capacities of medical professionals to 'do the right thing', according to the traditional concept of medicine as an 'art of humaneness'... In this sense, medicine has an intrinsic moral drive, making it distinct from ventures that provide mere technical biomedical services or procedural skills in handling legal or political controversies.<sup>111</sup>

TCM education system in Canada can benefit from more tools or alternative solutions to supplement ethics education in the current curriculums. The TCM teacher-apprentice learning model encompasses the elements of practicing caring, habituation and mentorship. The learning model can be effective for cultivating moral character and promoting the deliberative model of practitioner-patient relationship among TCM students. It is worthy of investigation.

The teacher-apprentice learning model is not new in Chinese medicine. Unschuld explains that:

...perhaps the most common route to becoming a physician of Chinese medicine until the end of the nineteenth century was by way of apprenticeship. The modernization of Chinese medicine attempted from within the Chinese medicine circles during the late Qing and Republican eras led to the opening of schools and colleges in many cities and provinces that modeled themselves on universities and technical colleges and sought to emulate Western medical training.<sup>112</sup>

Today in China, the teacher-apprentice education is already revived in the TCM education program and integrated into institutional education. Xue *et al.* write that:

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<sup>111</sup> Ole Döring, '8.4. Teaching Medical Ethics in China. Cultural, Social and Ethical Issues', 1.

<sup>112</sup> Unschuld, *Medical Ethics in Imperial China*, 168–69.

...the Beijing University of Chinese Medicine...in 2007...adopted a ‘TCM education reform experimental program.’ Students were admitted to this program by an independent student recruitment process that selected applicants from families of TCM practitioners instead of through a college entrance examination. Once enrolled, students were assigned to different supervisors. This program is a combination of institutional education, master-apprentice education, and father-son education models.<sup>113</sup>

Implementing the TCM teacher-apprentice learning model is a tested solution in China. It is feasible to integrate it into the existing institutional system in Canada. Besides enhancing TCM ethics education, the learning model may also enhance the standards of TCM practice in two other ways. First by effective student selection and second, by increasing their clinical experience. In addition, it can facilitate continuing education among TCM practitioners.

### **Student Selection**

Selecting the right students to learn TCM is to select the right people to practice TCM in the future. In his experience of teaching biomedical ethics in China in 2002, Döring quotes from the *Yixue yu zhaxue* journal (‘Medicine and Philosophy’) that:

...only a small segment of medical students express an interest in ethical issues. Only about 19% of the students, who had been interviewed are actually interested in

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<sup>113</sup> Pei Xue *et al.*, ‘Comparison of Chinese Medicine Higher Education Programs in China and Five Western Countries’, *Journal of Traditional Chinese Medical Sciences* 2, no. 4 (1 October 2015): 228, <https://doi.org/10.1016/j.jtcms.2016.01.010>.

helping people. At stake is not only an ethically well reflected, reasonable medical practice, but also, how to gain more support from physicians and society? 19% is less than one in five of medical students.<sup>114</sup>

If a person does not believe in helping people or respecting society norms then why do we want this person to perform healthcare? It is inefficient to develop virtues such as compassion, benevolence or justice in this person. Worse, this person may exert a negative influence on other students. Döring suggests that among medical students:

...a genuine interest in 'doing the right thing' serves as a constant reminder of each one's moral inspiration. It stimulates and encourages students to develop the relevant capacities to become 'good' in doing their job right, forming a moral character, which corresponds with the moral intuitions and the professional calling that make a doctor choose his profession in the first place.<sup>115</sup>

TCM education institutions should select students who demonstrate a desire to help and care about others to practice TCM.

In Canada, almost all TCM education and training are operated as private career training institutions. For example, most TCM colleges in BC are Designated Private Training Institutions<sup>116</sup> and "Humber's Traditional Chinese Medicine Practitioner (TCMP) advanced diploma program is the first and only publicly funded program of its kind offered at a

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<sup>114</sup> Ole Döring, '8.4. Teaching Medical Ethics in China. Cultural, Social and Ethical Issues', 3.

<sup>115</sup> Ole Döring, 1.

<sup>116</sup> 'Private Training Institution Directory | Private Training Institutions Branch', accessed 6 February 2018, <https://www.privatetraininginstitutions.gov.bc.ca/students/pti-directory>.

postsecondary institution in Canada”<sup>117</sup>. Currently in Ontario, starting up a TCM career training school does not even require approval under the Private Career Colleges Act.<sup>118</sup> For a private career training institution, students are primarily the customers. Like any other type of business, it is reasonable to expect a private career training institution to welcome as many customers as possible. Being selective in the admission of student applicants can be counter-productive to profitability. It is not realistic to expect a private TCM education institution to be selective of TCM students.

Currently, the cost is probably the biggest barrier of entry to becoming a TCM student. The cost of attending an hour of training in a TCM school is about \$15 per hour. For example, in British Columbia, the minimal hours of training in a TCM Acupuncture Program is 1,900 hours. Thus, the total cost of completing a TCM Acupuncturist program in British Columbia is approximately  $\$15 \times 1,900 \text{ hours} = \$28,500$ . The academic prerequisites to enter TCM schools are stipulated by the provincial regulators and vary from province to province. For example, British Columbia TCM student applicants require two years of college or university education and Ontario TCM student applicants require Grade 12 education. In comparison to other health professions such as dental, nursing or physiotherapy degree programs at a Canadian university, it is relatively easy to be admitted into a TCM education program.

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<sup>117</sup> ‘Traditional Chinese Medicine Practitioner’, accessed 6 February 2018, <http://healthsciences.humber.ca/programs/traditional-chinese-medicine-practitioner.html>.

<sup>118</sup> Government of Ontario, ‘Private Career Colleges (PCC)’, accessed 6 February 2018, <http://www.tcu.gov.on.ca/pepg/audiences/pcc/private.html>.

In contrast to a private institutional setting, a teacher-apprentice training model is more effective in student selection. The main reason is the influence of Confucianism. According to Confucian teaching, a person cannot exist in isolation but always in a social context. The nature of a person is defined by his social relationships and responsibilities.<sup>119</sup> Volker Scheid points out that “discipleship in Chinese medicine (as in other Chinese arts and crafts) is founded on the pattern of the family and can be documented as far back as the second century B.C.”<sup>120</sup> and “social relations between master and disciple then as now are modeled on the filial relationship between father and son, one of the five cardinal relationships (wu lun 五倫) of Confucian ideology.”<sup>121</sup>

To a TCM teacher, an apprentice is like a child. Given a choice between being virtuous or wicked, any parent would prefer their children to be virtuous. Given a choice between having the intellect or lack of intellect, any parent would prefer their children to have the intellect. Therefore, in a teacher-apprentice model, a teacher has an incentive to select a TCM student with a good intellect and moral character.

The hourly wage of presenting a TCM lesson in a private career training institution in Canada is about \$35 per hour. In contrast, a TCM practitioner can earn an average of \$40 to \$120 per treatment in Canada. It is difficult to attract the best TCM practitioners to leave their practice and teach at a TCM school. In an institution, a student cannot choose his own

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<sup>119</sup> Hansen, ‘Humanity and Nature in Chinese Thought | 中国哲学思想中的人类与自然观 | EdX’.

<sup>120</sup> Scheid, *Chinese Medicine in Contemporary China Plurality and Synthesis*, 169.

<sup>121</sup> Scheid, 169.

teachers. The students have to learn from the designated teachers regardless of the quality of the teachers. However, in a teacher-apprentice model, a student can choose his own teacher. A student should be free to apply and learn from the best qualifying TCM practitioner. It follows that better TCM teachers develop better TCM students.

### **Intensive Clinical Practice**

There is an additional benefit in implementing the teacher-apprentice approach. It can directly enhance the clinical competency level of TCM graduates in Canada. In the context of Western biomedicine, J. Boudreau writes that “medical practice requires a blend of intellectual pursuits: theoretical, practical, productive and performative...Notwithstanding the multifaceted nature of medicine, the physician is primarily engaged in a practical activity.”<sup>122</sup> Many scholars support learning through practice as a better approach to the education of students in healthcare. Boudreau claims that:

...medicine aims to promote health and to relieve suffering, and its ultimate aim is the well-being of the patient. A threat to well-being is perceived when persons suffer impairments of function that interfere with the attainment of their purposes and goals in life. Thus, well-being, as lived and understood by the patient, is the touchstone of medicine and must also serve as the fulcrum upon which a medical education program is constructed.”<sup>123</sup>

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<sup>122</sup> J. Boudreau, ‘The Humanities in Medical Education: Ways of Knowing, Doing and Being’, *Journal of Medical Humanities* 36, no. 4 (1 December 2015): 329.

<sup>123</sup> Boudreau, 329.

Similarly, TCM clinical training and practical experience are crucial in preparing a TCM student to become a competent practitioner and practice independently in the future.

China has had state-run TCM postsecondary education since 1956 and their national TCM curriculum has been evolving.<sup>124</sup> Noticeably, their TCM clinical training has been much more intensive than that in Canada. Today in China, major TCM universities use an integral training model which combines a Bachelor and Master degree for their TCM students. For example, Beijing University of Chinese Medicine offers an “integrated ‘five plus three’ program which comprises 5 years of undergraduate training with preclinical courses and 3 years of internship training.”<sup>125</sup> Based on China’s National TCM course curriculum for 1997<sup>126</sup>, the total clinical training in the first five years of undergraduate training is approximately 687 hours. In addition, the subsequent internship training is practically full-time practice in TCM hospitals. I estimate the number of patient case-studies during the TCM internship training, excluding the 687 clinical hours in the first five years of undergraduate training. Based on a two-year internship, 50 work weeks and six work days per week schedule, a TCM intern spends about 600 days (i.e.  $2 \times 50 \times 6 = 600$ ) practicing TCM in a TCM hospital. In three different TCM university hospitals in China, I found that a TCM intern usually practiced an average number of 40 patient cases in a day. That means the TCM intern would practice about 24,000 (i.e.  $600 \times 40 = 24,000$ ) patient cases in the two years of internship.

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<sup>124</sup> Taylor, *Chinese Medicine in Early Communist China, 1945-63*, Ch.3-4.

<sup>125</sup> Xue *et al.*, ‘Comparison of Chinese Medicine Higher Education Programs in China and Five Western Countries’, 228.

<sup>126</sup> Taylor, *Chinese Medicine in Early Communist China, 1945-63*, 163.

Using the TCM regulations in British Columbia for comparison, the minimum total clinical training requirement for a TCM acupuncture program graduate is 500 hours.<sup>127</sup> About half of the total clinical training is observation and the other half is supervised practice on patients. A full-time TCM acupuncture student usually spends eight hours per week in clinical training. That translate into about 62.5 weeks (i.e.  $500/8 = 62.5$ ) of clinical practice. Some school clinics are busier than the others. Based on my personal experience, I estimate a TCM acupuncture student studies an average of seven patient cases in a school clinic per week. That means a TCM acupuncture student studies an average number of 437.5 (i.e.  $62.5*7=437.5$ ) patient cases in his 500 clinical training hours.

In comparison, the clinical training for TCM students in China is more intensive to that of TCM students in Canada. Although TCM students in Canada learn from the same TCM textbooks and pass similar TCM examinations, the graduates may lack clinical experience, intuition and judgment in comparison to the graduates in China. The Canadian public deserves the same quality of TCM graduates. The education of a teacher-apprentice learning model often takes place in a clinical environment similar to an internship. Not only is it an effective approach to teach TCM ethics and select TCM students, it directly increases the quantity and quality of clinical experience for future TCM practitioners in Canada.

Sun Simiao's idea of a "good physician is characterized by four attributes: he is morally honorable in his action (xing fang 行方), has a comprehensive knowledge (yuan zhi 圓智),

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<sup>127</sup> 'Education Program Review | CTCMA - College of Traditional Chinese Medicine Practitioners and Acupuncturists'.

and is careful (xin xiao 心小) yet also courageous (dan da 胆大).<sup>128</sup> It is difficult for anyone to become an excellent TCM practitioner after just 500 hours of clinical observation and practice. Hence, continuing education is important for any TCM practitioner. All registered TCM practitioners are required to obtain a certain continuing education in Canada. Currently, most continuing education is conducted in the format of institutional courses or seminars.

In some TCM university-hospitals in China, TCM practitioners regularly confer with their TCM peers as well as external biomedical professionals in resolving patient cases. Indeed, in Canada, I have met other healthcare professionals who are open and interested in TCM. Some healthcare professionals such as medical physicians, nurses and physiotherapist are open to working with TCM practitioners in resolving health issues. Considering peers and other healthcare professionals as teachers in studying patient cases, as in a teacher-apprentice learning model, can be a productive way of TCM continuing education. For some TCM practitioners in smaller cities or rural communities, their locations of practice can be far from any TCM schools or education institution. This alternative model of continuing education can reduce the burden of suspending their practices or long-distance travel to attend continuing education courses. The teacher-apprentice learning model can facilitate continuing education in their local communities.

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<sup>128</sup> Scheid, *Chinese Medicine in Contemporary China Plurality and Synthesis*, 150.

## IV. Justice

TCM therapy is not publicly funded insured health service in Canada. It is paid as an out-of-pocket expense by a TCM patient. Some patients may have private health insurance through their employment to cover some acupuncture. In general, wealthier patients have more access to TCM treatment than those who have fewer means. The access to TCM care is not equal and is based on the patient's ability to pay. Is this just?

Justice is one of the four principles of principlism. Beauchamp and Childress explain that:

...the term fairness, desert (what is deserved), and entitlement have been used by philosophers as a basis on which to explicate the term justice. These accounts interpret justice as fair, equitable, and appropriate treatment in light of what is due or owed to persons.<sup>129</sup>

Subsequently, the term distributive justice refers to fair, equitable, and appropriate distribution of benefits and responsibilities as determined by our societal norms.<sup>130</sup>

In the previous sections pertaining to the principles of respect for autonomy, beneficence and nonmaleficence, I have pointed out the potential ethical issues of practicing non-evidence-based medicine and also suggested solutions to address them. In this section, my discussion focuses on the fair, equitable, and appropriate access to TCM care in Canada.

Daniels is one of the first scholars to argue for the right to healthcare and research the

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<sup>129</sup> Beauchamp, *Principles of Biomedical Ethics*, 250.

<sup>130</sup> Beauchamp, 250.

distributive justice in healthcare. He explains that the notion of access is complicated and its consideration cannot be determined until we clarify a composite of factors such as “what the access is to,” “by “whom” and moral principles.<sup>131</sup> In order to put this section in the proper context, I situate the entire discussion in the context of Canada’s publicly funded healthcare system (medicare) and the Canada Health Act.

### Medicare and Insured Health Service

The Canada Health Act is Canada's federal legislation for medicare<sup>132</sup> and “from the top, Canada Health Act drives decision-making about what is in and what is out of Canadian Medicare.”<sup>133</sup> It sets out the primary objective of our healthcare policy as “to protect, promote and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers.”<sup>134</sup>

Canada’s medicare is a single-payer universal health care system. The system is financed by our multiple levels of governments and covers the costs of essential healthcare for all residents. It is a single-payer insurance system in which our governments collect taxes and pays for all health care costs. “Historically, the federal government encouraged the adoption of publicly administered single-payer insurance systems in the provinces through

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<sup>131</sup> Norman Daniels, *Just Health Care*, c1985, Ch.4, 59-85.

<sup>132</sup> Health Canada and Health Canada, ‘Canada Health Act’, navigation page, aem, 26 July 2004, <https://www.canada.ca/en/health-canada/services/health-care-system/canada-health-care-system-medicare/canada-health-act.html>.

<sup>133</sup> Flood *et al.*, *Just Medicare What’s in, What’s out, How We Decide*, 17.

<sup>134</sup> Canada and Canada, ‘Canada Health Act’.

the use of the federal spending power.”<sup>135</sup> Although the provinces are responsible for the direct delivery of most medical services, the federal government uses its spending power to influence Canadian health care through financial contribution known as Canada Health Transfer.

There are pros and cons of a single-payer system:

Proponents of a single-payer system argue that because there are fewer entities involved in the health care system, the system can avoid an enormous amount of administrative waste. Instead, all health care providers in a single-payer system would bill one entity for their services. Within a single-payer system, all citizens would receive high-quality, comprehensive medical care PLUS the freedom to choose providers to a greater extent than most network-based health plans allow. Paperwork would also be dramatically reduced.<sup>136</sup>

On the other hand, “a single payer system alone does not address ‘fee-for-service’ reimbursement for providers, which may encourage overuse and does not recognize quality and value.”<sup>137</sup> The bottom line is that the funding for any health care system is not unlimited. A single-payer system does not automatically resolve the limitation of resources.

Through Canada Health Transfer, the federal government provides “long-term predictable

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<sup>135</sup> Romanow, *Building on Values the Future of Health Care in Canada*, 46.

<sup>136</sup> ‘Single-Payer System Definition’, [healthinsurance.org](https://www.healthinsurance.org), 23 September 2017, <https://www.healthinsurance.org/glossary/single-payer-system/>.

<sup>137</sup> Darshak Sanghavi and Sarah Bleiberg, ‘Can Canadian-Style Healthcare Work in America? Vermont Thinks So.’, *Brookings* (blog), 30 November 2001, <https://www.brookings.edu/blog/up-front/2014/01/22/can-canadian-style-healthcare-work-in-america-vermont-thinks-so/>.

funding for health care, and supports the principles of the Canada Health Act which are: universality; comprehensiveness; portability; accessibility; and, public administration.”<sup>138</sup>

For example, Ontario hospitals are primarily funded by the Ministry of Health and Long Term Care through provincial payments allocated from Canada Health Transfer.<sup>139</sup> The funding allocation is primarily based on historical funding patterns with marginal year-over-year increases or decreases.<sup>140</sup> The Canada Health Transfer for Ontario is about \$14.36 billion in 2017-2018 and about \$14.96 billion in 2018-2019 with an increase in line with a three-year moving average of nominal Gross Domestic Product.<sup>141</sup>

The Canada Health Act establishes criteria and conditions related to the health care services that the provinces and territories must fulfill in order to receive the federal transfer payments.<sup>142</sup> The aim of the Canada Health Act is “to ensure that all eligible residents of Canada have reasonable access to insured health services on a prepaid basis, without direct charges at the point of service for such services.”<sup>143</sup> As a researcher who has worked extensively on the comparison of various publicly funded healthcare programs, Flood summarizes the founding principles of Canada’s medicare as:

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<sup>138</sup> Department of Finance Government of Canada, ‘Canada Health Transfer’, federal transfers, 1 January 2000, <https://www.fin.gc.ca/fedprov/cht-eng.asp>.

<sup>139</sup> Don Drummond, ‘Charting a Path to Sustainable Health Care in Ontario: 10 Proposals to Restrain Cost Growth without Compromising Quality of Care - Scholars Portal Books’, 27, accessed 4 December 2017, [http://books2.scholarsportal.info.proxy.bib.uottawa.ca/viewdoc.html?id=/ebooks/ebooks1/gibson\\_chrc/2010-08-20/1/10397929#tabview=tab1](http://books2.scholarsportal.info.proxy.bib.uottawa.ca/viewdoc.html?id=/ebooks/ebooks1/gibson_chrc/2010-08-20/1/10397929#tabview=tab1).

<sup>140</sup> Drummond, 28.

<sup>141</sup> Department of Finance Government of Canada, ‘Federal Support to Provinces and Territories’, federal transfers, 15 December 2014, <https://www.fin.gc.ca/fedprov/mtp-eng.asp#Ontario>.

<sup>142</sup> Canada and Canada, ‘Canada Health Act’.

<sup>143</sup> Canada and Canada.

1) that access to 'medically necessary' hospital and physician services are based on medical need, not ability to pay; and 2) that services covered by medicare are funded almost exclusively through general taxation revenues.<sup>144</sup>

Our universal health care coverage began with hospitals in the 1950s and physician services in the 1960s.<sup>145</sup> Today, it covers a wide range of medically necessary services such as:

- hospital services that are medically necessary for the purpose of maintaining health, preventing disease or diagnosing or treating an injury, illness or disability, including accommodation and meals, physician and nursing services, drugs and all medical and surgical equipment and supplies;
- any medically required services rendered by medical practitioners; and
- any medically or dentally required surgical-dental procedures which can only be properly carried out in a hospital.<sup>146</sup>

The Canada Health Act also stipulates that:

...extended health care services include intermediate care in nursing homes, adult residential care service, home care service and ambulatory health care services...which do not have to be publicly administered, universal, comprehensive, accessible or portable. In addition, provincial health care insurance plans may cover other health services, such as optometric services, dental care, assistive devices and

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<sup>144</sup> Colleen M. Flood *et al.*, 'Defining the Medicare "Basket"', 1, accessed 4 February 2018, <http://www.deslibris.ca.proxy.bib.uottawa.ca/ID/250981>.

<sup>145</sup> Romanow, *Building on Values the Future of Health Care in Canada*, 73.

<sup>146</sup> Odette Madore, 'The Canada Health Act: Overview and Options', accessed 30 November 2017, <https://lop.parl.ca/content/lop/researchpublications/944-e.htm#4insuredtxt>.

prescription drugs, which are not subject to the Act, and for which provinces may demand payment from patients. The range of such additional health benefits that are provided under provincial government plans, the rate of coverage, and the categories of beneficiaries vary greatly from one province to another.<sup>147</sup>

Currently, most extended health care services such as dental care, physiotherapy, TCM or other complementary medicine are out-of-pocket expenses for the patients.

Although the notion of medically necessary plays an important role in deciding what should be insured health service, the concept of medical necessity is not defined in the Canada Health Act:

...the Act does not set out a process for determining those medically necessary health services. Therefore, each province (in collaboration with the provincial medical association) is responsible for determining what specific services are to be insured under the public health-care insurance plan. Because provinces do not use a systematic method for determining the provision of comprehensive health-care services, public coverage for certain health services across the country is uneven.<sup>148</sup>

Romanow agrees that “the definition of what is considered medically necessary and covered under the Act needs to be updated to reflect the realities of our contemporary health care system.”<sup>149</sup> The narrow focus might have led to the neglect of other health

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<sup>147</sup> Madore.

<sup>148</sup> ‘The Canada Health Act’, accessed 31 January 2018, <https://lop.parl.ca/Content/LOP/ResearchPublications/tips/tip74-e.htm>.

<sup>149</sup> Romanow, *Building on Values the Future of Health Care in Canada*, 47.

producing measures.<sup>150</sup> The definition of medically necessary is unclear and may not meet the current needs of Canadians.

In explaining the decision-making framework in funding medicare, Flood claims that there are “significantly different approaches to funding depending on what sector we are dealing with, whether physician services, hospital services, new technologies, pharmaceuticals, or homecare”<sup>151</sup> For example in Ontario, determining what physician services are insured health services involves at least the following bodies:

(1) The Physician Services Committee, which is a joint committee comprising officials from the Ministry of Health and Long Term Care (the Ministry) and the Ontario Medical Association (OMA); (2) Medical Directors who are salaried physicians within the Ministry and may determine claims for public funding; (3) the Health Services Appeal and Review Board; and (4) the courts.<sup>152</sup>

Flood points out that “decision-making regarding which physician services are to be funded is driven by the process of fee negotiations between the Ministry and the OMA...By default these services are deemed medically necessary.”<sup>153</sup> There is a lack of transparency about the guiding principles in the decision-making process.<sup>154</sup> “Furthermore, there is enormous resistance to changing the range and types of services that we publicly fund, primarily by individuals with vested interests in maintaining public funding for certain procedures.”<sup>155</sup>

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<sup>150</sup> ‘Cost–Benefit Analysis and Health Care Evaluations, Second Edition’, 28 November 2014, 16–17, <https://www-elgaronline-com.proxy.bib.uottawa.ca/view/9781781004586.xml>.

<sup>151</sup> Flood *et al.*, *Just Medicare What’s in, What’s out, How We Decide*, 17.

<sup>152</sup> Flood *et al.*, 18.

<sup>153</sup> Flood *et al.*, 18.

<sup>154</sup> Flood *et al.*, 19.

<sup>155</sup> Flood *et al.*, 30.

As a result, there is limited flexibility for the system to replace or add new services.<sup>156</sup>

Flood concludes that currently, the decisions about the contents of medicare basket is largely shaped by the following:

1. accidents of history and long-held accommodations between governments and the medical profession; and
2. inflexible and inadequate regulations and law, and turf protection and lobbying by different stakeholders and interest groups.<sup>157</sup>

There is minimal public participation or procedural fairness in the decision-making process and Flood recommends that:

...if the process of determining what is in and what is out of Medicare could be unbuckled from determinations of which physician services to fund, then it may become possible to establish a more rigorous and principles process, infused with public participation, that would allow relatively high benefit services and technologies to be funded in place of lower benefit services and technologies.<sup>158</sup>

Based on the current decision-making process of funding insured health service, our current medicare basket may not be just. There is room for change.

### **Should TCM be an Insured Health Service?**

The purpose of this thesis is to reflect on potential ethical issues. Resolving the potential ethical issues pertaining to the principles of autonomy, beneficence and nonmaleficence

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<sup>156</sup> Flood *et al.*, 30.

<sup>157</sup> Flood *et al.*, 'Defining the Medicare "Basket"', 6.

<sup>158</sup> Flood *et al.*, *Just Medicare What's in, What's out, How We Decide*, 20.

should precede resolving distributive justice of TCM. What is the point of having equal access to TCM if the safety or efficacy of TCM is uncertain? Coincidentally, the survey in section II showed that the majority of participants also prioritized the principles of beneficence over justice.

TCM has its history of struggle in Canada.<sup>159, 160</sup> Before 2012, fewer than five provinces regulated TCM practitioners in Canada. TCM acupuncture was not recognized as an important health service and had no GST/HST exemption by the federal government until Feb 2014.<sup>161</sup> Today, TCM is still not regulated in all provinces and territories. TCM practice is difficult to standardize. The quality of TCM care is not uniform. It varies among practitioners, communities and across Canada. It is not justifiable to include TCM as insured health service in medicare today. Nevertheless, TCM is gaining global popularity.<sup>162, 163, 164</sup> TCM is expected to progress and grow in Canada. Soon enough, we may need to ask if TCM should be an insured health service, and on what moral grounds?

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<sup>159</sup> 'History of CMAAC | C.M.A.A.C. – Promotion TCM and Acupuncture', accessed 22 October 2017, <http://www.cmaac.ca/history-of-cmaac>.

<sup>160</sup> Wei Yuan, 'Acupuncture Comes to Canada: The Struggle for Professional Recognition, 1970-1996.' (University of Ottawa (Canada), 2001), <http://dx.doi.org/10.20381/ruor-14751>.

<sup>161</sup> Department of Finance Government of Canada, 'Archived - Government of Canada Exempts Acupuncturists' and Naturopathic Doctors' Professional Services from GST/HST', media release, 28 March 2014, <https://www.fin.gc.ca/n14/14-047-eng.asp>.

<sup>162</sup> 'ARCHIVED - Natural Health Products in Canada - A History', aem, 30 December 2002, <https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/regulation/history.html>.

<sup>163</sup> American Association for the Advancement of Science, 'The Art and Science of Traditional Medicine Part 1: TCM Today — A Case for Integration', *Science* 346, no. 6216 (19 December 2014): 1569–1569, <https://doi.org/10.1126/science.346.6216.1569-d>.

<sup>164</sup> 'WHO | WHO Traditional Medicine Strategy: 2014-2023', WHO, accessed 3 May 2018, [http://www.who.int/medicines/publications/traditional/trm\\_strategy14\\_23/en/](http://www.who.int/medicines/publications/traditional/trm_strategy14_23/en/).

No single moral theory is capable of resolving all problems of justice. Beauchamp and Childress summarize that:

...several types of theory have been influential: Utilitarian theories emphasize a mixture of criteria for the purpose of maximizing public utility; libertarian theories lay emphasis on individual rights to social and economic liberty, while invoking fair procedures as the basis of justice, rather than substantive outcomes such as increases of welfare; communitarian theories underscore principles of justice derived from conceptions of the good developed in moral communities; and egalitarian theories emphasize equal access to the goods in life that every rational person values, often invoking material criteria of need and equality.<sup>165</sup>

Considering the fact that Canada's medicare is a single-payer system and our federal government uses Canada Health Transfer to support principles such as universality, accessibility and public administration, medicare reflects the notion of egalitarianism. Nevertheless, Flood points out that "Health policy in Canada has long been dominated by economists whose work assumes the universality of a utilitarian approach and does not allow for other important Canadian values such as equality."<sup>166</sup> In the face of limited resources, utilitarianism is another competing moral perspective in our healthcare policy.

In her policy recommendation for a just medicare, Flood recommends the consideration of multiple perspectives. For the contents of a medicare basket, she suggests that the decision should be a function of:

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<sup>165</sup> Beauchamp, *Principles of Biomedical Ethics*, 252.

<sup>166</sup> Flood *et al.*, *Just Medicare What's in, What's out, How We Decide*, 451.

1. values;
2. available resources; and
3. relative costs and health benefits.<sup>167</sup>

Each ethical theory contributes “partial and overlapping resources, not definitive, exhaustive truths.”<sup>168</sup> Competing theories can illuminate different questions and sometimes supplement each other in a complex moral deliberation.<sup>169</sup> Since costs, benefits and values are prominent factors in medicare policy, I should reflect on the question of TCM coverage with two different sets of lenses: utilitarianism and the founding values of medicare.

### Utilitarianism and Cost-Benefit Analysis

Boetzkes and Waluchow point out that “Mill’s utilitarianism is an ancestor of modern theories of cost-benefit analysis, which are assuming an ever-increasing role in controversies surrounding the allocation of money to various forms of health care.”<sup>170</sup> Cost-benefit analysis in healthcare is the analysis of healthcare resource expenditures relative to possible medical benefits. The analysis helps policymakers to set priorities when choices must be made in the face of limited resources.

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<sup>167</sup> Flood *et al.*, ‘Defining the Medicare “Basket”’, 6.

<sup>168</sup> Susan Sherwin, ‘Foundations, Frameworks, Lenses: The Role of Theories in Bioethics’, *Bioethics* 13, no. 3–4 (1 July 1999): 203, <https://doi.org/10.1111/1467-8519.00147>.

<sup>169</sup> Sherwin, ‘Foundations, Frameworks, Lenses’.

<sup>170</sup> Elisabeth Airini Boetzkes and Wilfrid J. Waluchow, *Readings in Health Care Ethics* (Peterborough, Ont.: Broadview Press, 2002), 11.

Utilitarianism begins with the idea of Jeremy Bentham that “the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness.”<sup>171</sup> Mill adds that:

...the happiness which forms the utilitarian standard of what is right in conduct, is not the agent’s own happiness, but that of all concerned. As between his own happiness and that of others, utilitarianism requires him to be strictly impartial as a disinterested and benevolent spectator.<sup>172</sup>

Social utility outweighs the happiness of an individual in utilitarianism. The right action is the action that can achieve the “greatest happiness for the greatest numbers of people.”<sup>173</sup>

Hare summarizes the three constituents of utilitarianism as consequentialism, welfarism and aggregationism:

...as constituents of utilitarianism, consequentialism – that is, the view that it is their consequences that determine the morality of actions – and welfarism – that is, the view that the consequences that we have to attend to are those that conduce to the welfare of those affected or the opposite. The remaining constituent is a view about the distribution of this welfare. It is the view that when, as usually, we have a choice between the welfare of one lot of people and the welfare of another lot, we should choose the action which maximizes the welfare (i.e., maximally promotes the

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<sup>171</sup> John Stuart Mill, *Utilitarianism*, Oxford Philosophical Texts (Oxford [England] ; New York: Oxford University Press, 1998), 55.

<sup>172</sup> Mill, 64.

<sup>173</sup> Joseph Persky, ‘Political Economy of Progress: John Stuart Mill and Modern Radicalism - Oxford Scholarship’, 1 July 2016, <http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780190460631.001.0001/acprof-9780190460631>.

interests) of all in sum, or in aggregate. We may call this constituent aggregationism.<sup>174</sup>

Through the lens of utilitarianism, I find examples of how a medicare policy can maximize the aggregate utility for the Canadian society. For example, it becomes justifiable for the government to prioritize building hospitals in city centres with high population densities instead of remote locations with little transportation access. Likewise, it is reasonable to expect universal medicare to fund vaccinations for common diseases such as influenza for all residents but not at all for vaccines of travel diseases such as yellow fever or Hepatitis B.

The sustainability of Canada's medicare is an aggregate social utility and the accessibility of TCM treatment for one person is an individual utility. According to utilitarianism, the sustainability of Canada's medicare should have priority over the access of TCM treatment for one person. Romanow claims that the sustainability of medicare:

...relies on achieving the right balance among the services that are provided, the health needs of Canadians, and the resources we are prepared to commit to the system. Finding that balance is up to those who govern the health care system – individual Canadians, communities, health care providers, health authorities and hospital administrators, and governments. The decisions they make together will determine whether or not the system is sustainable in the future.<sup>175</sup>

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<sup>174</sup> R. M. Hare, 'A Utilitarian Approach', in *A Companion to Bioethics*, ed. Helga Kuhse and Peter Singer (Wiley-Blackwell, 2009), 87, <https://doi.org/10.1002/9781444307818.ch9>.

<sup>175</sup> Romanow, *Building on Values the Future of Health Care in Canada*, 44.

In 2010, Drummond presented a proposal for sustainable health care in Ontario. He explains a deeper problem for the increasing costs of healthcare:

...under continuation of the 'status quo', Ontario's public health care spending will increase at least 6.5% annually well into the future. In contrast, we project longer-term growth in Ontario's nominal GDP and revenues, in the absence of tax rate increases, to be around 4%. Once fiscal balance is restored, Ontario must contain the growth in overall program spending to the pace of revenue collections. If health care spending roars ahead at 6.5% per annum while total spending is contained to 4% growth, then health care would comprise 80% of total program spending by 2030, up from 46% today. Everything else the government does, including providing education for its residents, would have to be squeezed into the remaining one-fifth. Clearly it is not feasible to fulfill the obligations of the province and the aspirations of its people with such a budget. Something must give.<sup>176</sup>

I agree that something has to give. But as Flood suggests, the decision process should be a more transparent and inclusive procedure for stakeholders. The decisions should be based on medical need, evidence of efficacy, and costs.<sup>177, 178</sup> In addition, Flood also suggests that:

...medical opportunity cost be a second necessary criterion for defining the contents of the basket, in addition to medical necessity. We define medical opportunity cost to be the comparative contribution to health forgone by excluding a given service from the basket.<sup>179</sup>

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<sup>176</sup> Drummond, 'Charting a Path to Sustainable Health Care in Ontario: 10 Proposals to Restrain Cost Growth without Compromising Quality of Care - Scholars Portal Books', 6.

<sup>177</sup> Colleen M. Flood *et al.*, 'Read - Defining the Medicare "Basket"', ii, accessed 4 February 2018, <http://www.deslibris.ca.proxy.bib.uottawa.ca/ID/250981>.

<sup>178</sup> Flood *et al.*, *Just Medicare What's in, What's out, How We Decide*, 449-54.

To justify a TCM treatment being an insured health service, a utilitarian approach would require TCM to present more evidence of efficacy, favourable cost-benefit analysis, and positive medical opportunity cost. The subsequent questions about evidence for which TCM treatment, how to evaluate the benefit and how to assess the cost are outside the scope of my thesis and expertise. However, I suggest two TCM clinical characteristics that are worthy of investigation in the future.

First, a TCM clinic generally has less demand for medical equipment, technology, space and labour in comparison to a primary care or acute care clinic. This characteristic implies savings on operating costs. It also makes setting up a TCM clinic relatively fast. Since rural areas often have a shortage of conventional medical clinics, the cost-benefit analysis of supplementing a rural community clinic with a TCM clinic is worthy of investigation.

Second, TCM is strong in disease prevention. For example, in treating headaches, TCM practitioners aim at preventing a headache from re-occurring. Similarly, TCM uses the preventative approach to treat diseases such as heart diseases, digestive diseases and cancer that are common diseases in Canada. Intuitively, a preventative approach is more cost-effective in medicine. Some targeted cost-benefit analyses of TCM treatments have already shown positive results.<sup>180 181</sup> However, the quantity of research is still relatively

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<sup>179</sup> Flood *et al.*, 'Defining the Medicare "Basket"', 13.

<sup>180</sup> Yi Li *et al.*, 'Cost-Effectiveness Analysis of Combined Chinese Medicine and Western Medicine for Ischemic Stroke Patients', *Chinese Journal of Integrative Medicine* 20, no. 8 (1 August 2014): 570–84, <https://doi.org/10.1007/s11655-014-1759-9>.

<sup>181</sup> L. Sun *et al.*, 'PCV34 - The Cost-Effectiveness of Four Chinese Patent Medicine in the Treatment of Angina Pectoris in China', *Value in Health* 17, no. 7 (1 November 2014): A761, <https://doi.org/10.1016/j.jval.2014.08.261>.

small in comparison to biomedicine. Most of the research also took place outside of Canada and may not be applicable in Canada. This implies that more TCM research data is needed from local practitioners and patients. The medical opportunity cost of excluding any preventative medicine such as TCM is also worthy of investigation.

### **Values of Equity, Fairness and Solidarity**

Costs are important. So are values. Values determine not only the structure or service of medicare but, also the kind of society that we want to live in.

In his report, Romanow states that:

...in their discussions with me, Canadians have been clear that they still strongly support the core values on which our health care system is premised – equity, fairness and solidarity. These values are tied to their understanding of citizenship. Canadians consider equal and timely access to medically necessary health care services on the basis of need as a right of citizenship, not a privilege of status or wealth...They want and expect their governments to work together to ensure that the policies and programs that define medicare remain true to these values.<sup>182</sup>

Equity, fairness and solidarity are the founding values of Canada's medicare. Canadians support universal access to primary healthcare services based on medical need, not the ability to pay. Although Canadians are not indifferent about the medicare benefits and costs, we want to live in a society that everyone feels obligated to care for the sick and the injured.

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<sup>182</sup> Romanow, *Building on Values the Future of Health Care in Canada*, xvi.

As Rawls, one of the most important political philosophers of the 20th century, suggests, “In justice as fairness men agree to share one another’s fate. In designing institutions they undertake to avail themselves of the accidents of nature and social circumstances only when doing so is for the common benefit.”<sup>183</sup> Canadian values foster a high level of security, stability and social cooperation in the society. Every member of the society can expect a fair opportunity to lead a decent life. Canadian citizenship is the envy of many people in the world.

I ask if the exclusion of TCM from insured health service contradicts the core values of medicare? There is no consensus on the definitions of equity, fairness or solidarity in medicare.<sup>184, 185, 186</sup> Lanoix explains that equity is tied to non-discrimination, fairness relates to the adequacy of medical services and the principle of solidarity points to a shared goal.<sup>187</sup> I take the liberty to apply her interpretations in the following discussion. My argument is that if the exclusion of TCM from insured health service contradicts any one of the above interpretations, the exclusion is not justified.

I found an example of inequity in the acupuncture treatment for physical rehabilitation.

Acupuncture treatment is a common therapy in physical rehabilitation. If a patient receives acupuncture treatment from a physician or nurse in a hospital, the treatment is deemed

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<sup>183</sup> John Rawls, *A Theory of Justice*, 2nd printing.. (Cambridge, Mass.: Belknap Press of Harvard University Press, 1972), 102.

<sup>184</sup> Romanow, *Building on Values the Future of Health Care in Canada*.

<sup>185</sup> Daniels, *Just Health Care*.

<sup>186</sup> Flood *et al.*, ‘Defining the Medicare “Basket”’.

<sup>187</sup> Monique Lanoix, ‘No Longer Home Alone? Home Care and the Canada Health Act’, *Health Care Analysis* 25, no. 2 (1 June 2017): 177–82, <https://doi.org/10.1007/s10728-016-0336-0>.

medically necessary and is covered under medicare. However, if a patient receives the same acupuncture treatment from a physiotherapist or TCM practitioner in a private clinic, the treatment is excluded from insured health service of medicare. The patient will have to pay out-of-pocket expenses. If equity is tied to non-discrimination, then the discrimination of provider in the acupuncture treatment contradicts the principle of equity. There is similar discrimination in the private health insurance sector. With some private health insurance plans, a patient who pays for acupuncture treatments performed by a physician or nurse will be reimbursed. However, under the same private health insurance plans, another patient who pays for the same acupuncture treatment performed by a TCM practitioner will not be reimbursed. But private health plans are outside the scope of my discussion here.

Conventional medicine does not always work for every patient. Some patients may experience severe side effects and some may not respond sufficiently to the medicine. There are examples from the verbatim responses in the survey in section II. The participants wrote:

- “very effective for cervical dystonia in combination with Botox that I receive at Civic Hospital”
- “Because my mother did it in the past. So I decide to try because I was taking too much painkiller. Now, I reduced 3/4 of my painkiller. My hands are no longer swelling in the morning, I have more energy and I feel better in my body.”
- “Because I've had success with it in the past for treatment of my chronic pain condition.”

- “I believe in a natural way of healing diseases. I am not against Western medicine, but through my experience, TCM helps me a lot of regaining my strength and general health.”

For these patients, TCM is an effective complementary medicine to the conventional medicine. If fairness relates to the adequacy of medical services, medicare should recognize their health needs of using TCM as a complementary medicine. The concepts of health needs are not merely medical necessity as in the Canada Health Act.<sup>188, 189, 190</sup> The Royal College of Physicians and Surgeons of Canada considers a health need to be the gap between a current state of health and a desirable state of health.<sup>191</sup> A patient-perceived health need can hint an unfilled gap by our conventional healthcare. It prompts questions such as “what causes the gap” and “how do we close the gap?”

In her policy report, Flood recommends that “an additional category of coverage should be considered, on a limited and experimental basis, for enhanced alternatives to services within the public core, offered on a private basis within a closely regulated framework.”<sup>192</sup> Even if the TCM treatments for these patients in this new category may incur some out-of-pocket expenses, it is an important step to recognize their health needs. In addition, patients with special health needs may be more desperate and therefore especially

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<sup>188</sup> John R Wilkinson and Scott A Murray, ‘Assessment in Primary Care: Practical Issues and Possible Approaches’, *BMJ: British Medical Journal* 316, no. 7143 (16 May 1998): 1524–28.

<sup>189</sup> John Wright, Rhys Williams, and John R Wilkinson, ‘Development and Importance of Health Needs Assessment’, *BMJ: British Medical Journal* 316, no. 7140 (25 April 1998): 1310–13.

<sup>190</sup> Quality Improvement and Innovation Partnership, ‘Needs Assessment Resource Guide for Family Health Teams’, January 2009, [www.qiip.ca](http://www.qiip.ca).

<sup>191</sup> The Royal College of Physicians and Surgeons of Canada and Lisa Little Consulting, ‘Defining Societal Health Needs Royal College Definition and Guide’, April 2012, [royalcollege.ca](http://royalcollege.ca).

<sup>192</sup> Flood *et al.*, ‘Defining the Medicare “Basket”’, 4.

vulnerable to unethical practice. Having their TCM treatments covered under a “closely regulated framework” is beneficial to vulnerable patients. For example, the framework can mandate the implementation of the deliberative model for TCM practitioner-patient relationship as discussed in section III.

The access to “medically necessary” hospital and physician services should be based on medical need, not the ability to pay.<sup>193</sup> If solidarity points to a shared goal, the common goal is that anyone who needs a medical treatment will get the medical treatment, and all members of our society share the costs. For those who support TCM, imagine replacing “medical treatment” by “TCM treatment” in the previous statement. It is the ideal solution for equal access to TCM in Canada. However, for the time being, access to TCM care can be difficult for some TCM patients. A participant in the survey of section II wrote the following:

As I am amicable to holistic approaches to medicine, I find that TCM helps my physical ailments tremendously. However, one of the biggest issues is mainstream medicine not accepting or believing in TCM and insurance companies not providing any coverage for such treatments. These two areas are the most frustrating which decreases my chances to seek TCM treatments. Ideally, even if not evidence-based, mainstream doctors and insurers should give their patients/clients the freedom to choose or to seek treatments that help them feel better or heal faster.

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<sup>193</sup> Flood *et al.*, i.

Perhaps this should prompt us to ask what kind of TCM communities do we want to develop in the interim? If solidarity exists in a TCM community, then it should imply that the members get united and organize a TCM community clinic to assist those who need TCM treatment but cannot afford it.

## Conclusion

Non-evidence-based medicine is not the equivalent of no evidence or sham medicine. Nevertheless, non-evidence-based medicine implies certain clinical realities and constraints. In this thesis, I focused on the TCM ethical issues that are particularly related to the nature of non-evidence-based medicine. In applying the ethical framework of principlism, I identified three potential ethical issues in the practice of TCM in Canada. I also made suggestions to resolve them.

In researching how to enable TCM patients to make a more informed decision to use TCM, I conducted an empirical study. The study examined the impact of TCM being non-evidence-based medicine on participants' decision-making. It uses qualitative analysis and the results has no statistical power to make generalization beyond the small sample. Among the participants, the awareness of TCM being non-evidence-based medicine is correlated with the experience of using TCM:

- Participants who had more TCM experience were often aware of TCM being non-evidence-based. But this knowledge had little impact on the decision of this group to use TCM. It is important to conscientiously remind this group of patients to balance the potential benefits of TCM with the uncertainties.
- Participants with less experience with TCM showed less awareness of TCM being non-evidence-based. They also expressed more considerations of risks in addition to the benefits of using TCM. The explicit disclosure of TCM being non-evidence-based

medicine would be material to their decision to use TCM. Therefore, the non-evidence-based disclosure should be part of the informed consent process for this group before treatment. It can help the new TCM patients to make a more informed decision and set the right expectation of TCM accordingly.

- The majority of participants prioritized the principles of beneficence over nonmaleficence in TCM. The TCM patients among the participants tended to prioritize the potential benefits over the risks of using TCM. This patient characteristic points to the vulnerability to unethical practice.
- Some participants of the survey indicated their needs to use TCM to complement conventional medicine. My small survey suggests that a larger scale research to study a bigger population is feasible and necessary. It is imperative for more TCM practitioners to conduct empirical studies in their communities to understand the needs and expectations of TCM patients. The potential findings can help the TCM practitioners to improve the quality of TCM care.

The safety and efficacy of TCM in Canada rely on the ethical standards and competency of TCM practitioners. Emphasis on moral cultivation and the ideal practitioner-patient relationship model in TCM education can effectively promote high TCM standards of practice for the long-term. The TCM education system should consider the integration of the teacher-apprentice learning model into the institutional model. Besides being effective in ethics education, the teacher-apprentice learning model also promotes student selection, intensive clinical practice and can facilitate TCM continuing education among practitioners.

The current decision-making framework for medicare's insured health service is not adequate. The coverage of medicare service is not necessarily fair today. With respect to whether TCM should be an insured health service, utilitarianism points to the need for cost-benefit analysis and medical opportunity cost for the justification of TCM coverage. Equity and fairness justify the consideration of some coverage of TCM care as a complementary medicine to the conventional healthcare. Solidarity prompts TCM communities to organize community clinics in order to offer affordable TCM care in the interim.

Notwithstanding that TCM is non-evidence-based medicine and has quality control issues, TCM practitioners witness evidence that supports the benefits of TCM in healthcare. The survey of section II showed some examples. Although the sample size is small, the data indicate that some health needs can be met by TCM as a complementary medicine. It is imperative for researchers and clinicians to further investigate the best TCM practices and most productive way for TCM to complement the conventional healthcare. I have suggested several research areas that are worthy of further investigations but outside the scope of this thesis:

- The needs and expectation of TCM patients across Canada
- Guidelines and methods for TCM practitioners to perform due diligence on TCM therapies
- Cost-benefit analysis and medical opportunity cost analysis for the common TCM therapies in Canada

The research findings may help improve the quality of TCM care in Canada.

In the context of moral theory, MacIntyre asserts that:

...a tradition is sustained and advanced by its own internal arguments and conflicts.

And even if some large parts of my interpretation could not withstand criticism, the demonstration of this would itself strengthen the tradition which I am attempting to sustain and to extend.<sup>194</sup>

By putting forward my thoughts and suggestions in this thesis, I intend to continue the research and development of TCM in Canada.

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<sup>194</sup> Alasdair C. MacIntyre, *After Virtue: A Study in Moral Theory*, 3rd ed.. (Notre Dame, Ind.: University of Notre Dame Press, 2007), 260.

## Appendix A Survey Package

Appendix A contains four items:

- The Saint Paul University Research Ethics Board approval (REB File Number: 1360.6/17) certificate
- The invitation letter to survey participants
- The implied consent form to survey participants
- The questionnaire to survey participants

**Ethics Certificate  
Research Ethics Board (REB)**

**REB File Number** 1360.6/17

**Principal Investigator / Thesis supervisor / Co-investigators / Student**

<u>Last name</u>	<u>Name</u>	<u>Affiliation</u>	<u>Role</u>
Fok	Winnie	Faculty of Philosophy	Student-Principal Investigator
Lanoix	Monique	Faculty of Philosophy	Thesis Supervisor

**Type of project** MA Thesis

**Title** An Insider View of Ethical Issues in Traditional Chinese Medicine in Canada

<u>Approval date</u>	<u>Expiry Date</u>	<u>Decision</u>
03-10-2017 (dd-mm-yyyy)	02-10-2018 (dd-mm-yyyy)	1 (approved)

**Committee comments:**

**The Research Ethics Board (REB) approved the project.  
The researcher is invited to use the reference number 1360.6/17 when  
recruiting participants.**

In accordance with the Tri-Council Policy Statement, the Saint Paul University Research Ethics Board has examined and approved the application for an ethics certificate for this project for the period indicated and subject to the conditions listed above.

The research protocol may not be modified without prior written approval from the REB. This includes, among others, the extension of the research, additional recruitment for the inclusion of new participants, changes in location of the fieldwork, any stage where a research permit is required, such as work in schools. Minor administrative changes are allowed.

The REB must be notified of all changes or unanticipated circumstances that have a serious impact on the conduct of the research, that relate to the risk to participants and their safety. Modifications to the project, information, consent and recruitment documentation must be submitted to the Office of Research and Ethics for approval by the REB.

The investigator must submit a report four weeks prior to the expiry date of the certificate stated above requesting an extension or that the file be closed.

Documents relating to publicity, recruitment and consent of participants should bear the file number of the certificate. They must also indicate the coordinates of the investigator should participants have questions related to the research project. In which case, the documents will refer to the Chair of the REB and provide the coordinates of the Office of Research and Ethics.

**Signature**



Louis Perron  
Chair  
Research Ethics Board (REB)

### **Research Participant Recruitment Letter**

**REB File Number:** 1360.6/17

Dear Client,

I am conducting a research on the ethical issues arising in Traditional Chinese Medicine in Canada. The research is part of my effort to complete the Master's degree program in Public Ethics at Saint Paul University. I invite you to participate in my research by answering several questions in a questionnaire. Your participation can provide valuable insights to my thesis.

Your participation is anonymous and voluntary. You are free to refuse to participate or answer any questions of the survey. There is no consequence to your refusal. The College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario (CTCMPAO) independently govern my professional conduct and competency. My duty to you will not be affected by your participation or refusal to participate in this research.

If you wish to participate in this study, please read the attached implied consent form and questionnaire. Your decision to complete and return this survey will be interpreted as an indication of your consent to participate. Once you have completed the survey, please return it to the office in person or in the stamped self-addressed envelope provided. I would appreciate receiving it before January 15th, 2018. If I do not receive it by said date, I shall consider that you refuse to participate. There will not be any follow-up about it.

The results of my research should be ready for publication by January 15th, 2019. I shall send you a copy of the results upon your request in the future.

Regards,

Winnie Fok, R.Ac., R.TCMP  
TCM Practitioner  
613.314.3898  
[ottawatcm@gmail.com](mailto:ottawatcm@gmail.com)



### Implied Consent Form

**REB File Number:** 1360.6/17

**Title of the study:** "An Insider View of Ethical Issues in Traditional Chinese Medicine in Canada"

**Principle Investigator/Student:** Winnie Fok, R.Ac., R.TCMP  
TCM Practitioner  
[ottawatcm@gmail.com](mailto:ottawatcm@gmail.com)  
613.314.3898

**Supervisor:** Dr. Monique Lanoix  
Associate Professor  
[mlanoix@uottawa.ca](mailto:mlanoix@uottawa.ca)  
613-236-1393, ext. : 2316  
GIG 230

**Invitation to Participate:** You are invited to participate in the abovementioned research study conducted by Winnie Fok, who is being supervised by Dr. Monique Lanoix. This project is self-funded by Winnie Fok.

**Participation:** If you wish to participate in this study, please complete the attached survey. Your decision to complete and return this survey will be interpreted as an indication of your consent to participate. The survey should take you approximately 10 minutes to complete. You do not have to answer any questions that you do not want to answer. Once you have completed the survey, please return it to the office of Winnie Fok in person or in the stamped self-addressed envelope provided. We would appreciate receiving it before January 15<sup>th</sup>, 2018. If we do not receive it by said date, we consider that you decline to participate.

**Purpose of the Study:** From this survey we wish to learn how Traditional Chinese Medicine not being evidence-based medicine would affect your decision in using Traditional Chinese Medicine and if being informed that Traditional Chinese Medicine is not considered an evidence-based medicine a priority to the issue.

**Benefits:** It can benefit the development of Traditional Chinese Medicine and its ethics.

**Risks:** You are free to refuse to answer any questions that may cause any emotional or psychological discomfort. There is no consequence to your refusal to participate in this survey. You can return the survey in the self-addressed envelope so that we will not be able to identify you or know your answers to the questions.

**Confidentiality and Anonymity:** The information that you will share will remain strictly confidential and will be used solely for the purposes of this research. The only people who will have access to the research data are Winnie Fok and Dr. Monique Lanoix. Your answers to open-ended questions may be used verbatim in presentations and publications but you will not be identified. Results will be published in pooled format. Anonymity is guaranteed since you are not being asked to provide your name or any personal information.

**Conservation of data:** The surveys will be scanned into a digital file. The original paper records are to be destroyed. The digital file will be kept in the personal computer of Winnie Fok for 5 years at which time they will be destroyed. The only people who will have access to the research data is Winnie Fok.

**Compensation (or Reimbursement):** There is no compensation and/or reimbursement of out-of-pocket expenses for your participation in this survey.

**Voluntary Participation:** You are under no obligation to participate and if you choose to participate, you may refuse to answer questions that you do not want to answer. Completion and return of the questionnaire by you implies consent.

**Information about the Study Results:** The research findings will be available to the participants in the form of a thesis document and will be available by request after January 15th, 2019.

If you have any questions or require more information about the study itself, you may contact the researcher or his/her supervisor at the numbers mentioned herein.

If you have any questions with regards to the ethical conduct of this study, you may contact the Office of Research and Ethics, Saint Paul University, 223 Main Street, Ottawa, ON K1S 1C4  
Tel.: (613) 236-1393

Please keep this form for your records.

Thank you for your time and consideration.

Researcher's signature:

Date:

**Research Questionnaire**  
(REB File Number: 1360.6/17)

**Purpose:**

The purpose of this survey is to collect qualitative data for a Master's thesis titled "An Insider View of Ethical Issues in Traditional Chinese Medicine in Canada."

**Please indicate your demographics by checking the following:**

**Sex:** Male\_\_ Female\_\_ Other\_\_

**Age:** under 20\_\_ 20-40\_\_ 41-60\_\_ over 60\_\_

**Education:** None\_\_ High school or equivalent\_\_ Post secondary or equivalent\_\_

**Ethnicity:** White\_\_ Latino\_\_ Black\_\_ Indigenous People\_\_ Chinese\_\_  
Arab/West Asian\_\_ East/Southeast Asian\_\_ Indian/South Asian\_\_

**How often do you use Traditional Chinese Medicine?:**

Never\_\_ Less than once per year\_\_ At least once per year\_\_

**Please answer the following questions:**

(1) Traditional Chinese Medicine (TCM) is not considered an evidence-based medicine by western medical standards. In general, a TCM treatment is not objectively verified. Your TCM treatment may be working only by chance. Are you aware of this information?

**Please circle:** YES or NO

(1a) If your answer is 'yes', please tell us: why do you use TCM?

(1b) If your answer is 'no', please tell us: how does TCM not being evidence-based affect your decision to use TCM?

(2) There are four important ethical principles in western medicine as follows:

**Autonomy**- The principle contains both a negative and a positive obligation. The negative obligation is not to interfere with a patient's informed preferences. The positive obligation is to enable free and informed decision-making. An example is obtaining patient consent before treatment.

**Beneficence** - The principle obligates us to act for the benefit of others. An example is removing harm such as your illness or promoting good such as health education.

**Justice** - The principle refers to fair and appropriate treatment to an individual. An example is equal access to the same treatments for everyone regardless of wealth or employment.

**Nonmaleficence** - The principle forbids us to cause any harm such as injury or distress to others. An example is adequate diagnosis and competent treatment.

**Please rank (circle 1-4) the importance of each principle to you in TCM:**  
(1=most important; 4=least important; more than one principles can have the same rank).

Autonomy            1 2 3 4

Beneficence        1 2 3 4

Justice              1 2 3 4

Nonmaleficence    1 2 3 4

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