

Chinese Tourists' perception for Medical Tourism Services in Bangkok, Thailand



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จุฬาลงกรณ์มหาวิทยาลัย

บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR)
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การรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการด้านการท่องเที่ยวเชิงการแพทย์ใน
กรุงเทพมหานคร ประเทศไทย



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาสาขารณศาสตรมหาบัณฑิต
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ชวง หลู : การรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการด้านการท่องเที่ยวเชิงการแพทย์ในกรุงเทพมหานคร ประเทศไทย (Chinese Tourists' perception for Medical Tourism Services in Bangkok, Thailand) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: ดร. นุชนาฏ หวนนากลาง, 101 หน้า.

วัตถุประสงค์ของงานวิจัยนี้เป็นงานวิจัยแบบภาคตัดขวาง 1) เพื่อวิเคราะห์องค์ประกอบคุณลักษณะการรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการทางด้านการท่องเที่ยว 2) เพื่อศึกษาความสัมพันธ์ระหว่างการรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการทางด้านการท่องเที่ยวเกี่ยวกับคุณลักษณะทางด้านประชากรและสุขภาพของนักท่องเที่ยวชาวจีน วิเคราะห์ข้อมูลโดยใช้การวิเคราะห์องค์ประกอบเชิงสำรวจ โดยวิธีสกัดองค์ประกอบและหมุนแกนองค์ประกอบแบบตั้งฉาก ด้วยวิธีแวนิแมกซ์ เครื่องมือที่ใช้ในการวิจัยคือแบบสัมภาษณ์การรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการทางด้านการท่องเที่ยวในกรุงเทพมหานคร กลุ่มตัวอย่างในการศึกษาคั้งนี้เป็นนักท่องเที่ยวชาวจีนจำนวน 481 คน ที่เดินทางท่องเที่ยวมาประเทศไทยโดยผ่านตัวแทนบริษัทนำเที่ยวทั้งที่มาเป็นกลุ่มและที่เดินทางมาด้วยตนเอง ใช้การเลือกตัวอย่างแบบเฉพาะเจาะจง

ผลการศึกษาพบว่า 1. การรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการทางด้านการท่องเที่ยวแบ่งออกเป็น 4 องค์ประกอบได้แก่ 1) สภาพแวดล้อมในประเทศ 2) แหล่งท่องเที่ยวที่เป็นจุดหมายปลายทาง 3) ค่าใช้จ่ายในการท่องเที่ยวเชิงการแพทย์ 4) บริการและสิ่งอำนวยความสะดวก และ 2. ความสัมพันธ์ระหว่างระดับการศึกษากับการรับรู้ของนักท่องเที่ยวชาวจีนต่อการรับบริการทางด้านการท่องเที่ยวเชิงการแพทย์ แหล่งท่องเที่ยวที่เป็นจุดหมายปลายทาง ค่าใช้จ่ายในการท่องเที่ยวเชิงการแพทย์ และบริการและสิ่งอำนวยความสะดวก มีความสัมพันธ์ทางลบ ซึ่งมีค่าสหสัมพันธ์เท่ากับ -0.27, -0.20, -0.14 และ -0.37 ตามลำดับ

งานวิจัยที่ควรทำในอนาคต ควรเป็นการศึกษาในมิติต่อไปนี้ 1. การศึกษาบทบาทของตัวแทนการท่องเที่ยวเชิงการแพทย์ 2. การศึกษาผลกระทบทางเศรษฐกิจของการท่องเที่ยวเชิงการแพทย์ต่อประเทศที่กำลังพัฒนา และ 3. การศึกษาค่าใช้จ่ายและการให้บริการของการท่องเที่ยวเชิงการแพทย์ในประเทศที่พัฒนาแล้ว

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The objectives of this research, a cross-sectional study, were twofold: 1) to investigate the factor structure of medical tourism perception among Chinese tourists, 2) to investigate the correlation between medical tourism perception and demographic, health characteristics among Chinese tourists. The data were analysed by performing Exploratory Factor Analysis (EFA) with varimax rotation method. The questionnaire was distributed to the samples covering 481 Chinese tourists currently travelling to Thailand through travel agency as tour group and as Free Individual Tourists (FIT). The purposive sampling technique, a non-probability sampling, was used for data collection.

The research findings can be summarized as follows: a) the Chinese tourists' perception for medical services consists of 4 factors: 1) country environment 2) tourism destination 3) medical tourism cost and 4) medical facility and services, b) the tourists' education level correlated with total perception, tourism destination, medical tourism cost and medical tourism facility and services, the coefficient correlation constituted -0.27; -0.20; -0.14 and -0.36, respectively. Besides, the results indicated that the structure of Chinese tourists' perception towards medical tourism services corresponded to the previous studies. Worth pointing out is that, the samples' level of education has negative correlation to their medical tourism services perception.

It is recommended that the further study of medical tourism should focus on the following aspects: 1. the role of medical intermediaries in medical tourism, 2. the economic impacts of medical tourism on developing countries and, last but not least, the steady increase of medical tourism costs and services in developed countries.

Field of Study: Public Health

Student's Signature

Academic Year: 2017

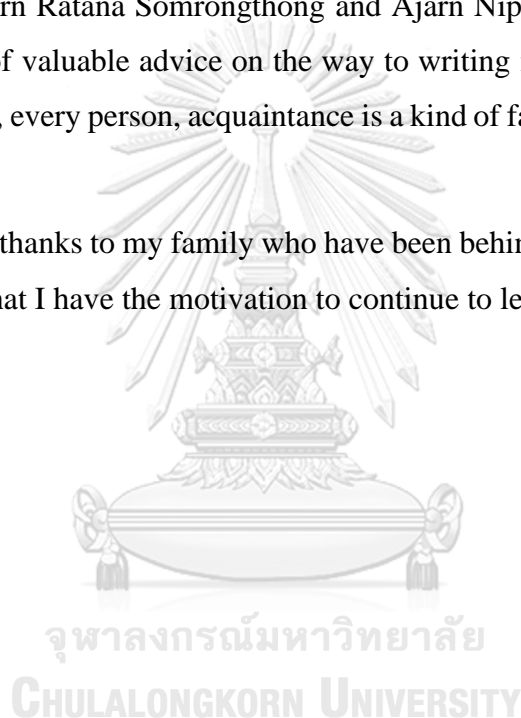
Advisor's Signature

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Chapter I

Introduction

It has been recognized that medical tourism is playing an important role in tourism industry. According to the World Health Organization, by 2020, healthcare related services will be the world's largest industry, tourism and related services are in the second place, accounting for 22% of global GDP when combined (China Market Research Network 2016). Tourism accounts for 11% of global exports of goods and services. In terms of tourist purposes, 50% of international tourists go on holiday abroad, 25% visit friends and relatives, and 16% go on business trips covering medical and religious purposes (Travel Exhibitions 2007).

Medical tourism has a long history which originated in Europe (Wang Hongfang 2012). In the past, well-to-do medical tourist people from less developed countries travelled to the western countries which have a higher quality of health care services. Besides, tourists from oil-rich Middle Eastern countries travelled to the United States for medical treatment; moreover, medical tourists from many countries in the world travelled to such countries as Thailand, Singapore, Korea etc. to get medical treatment. However, this trend has changed significantly. Because there is an increase of medical tourists from developed countries visiting developing countries for medical tourism services apart from going there for holiday or other purposes (Erik Cohen 2008).

In the early of 1989, the Organization for Economic Cooperation and Development (OECD) reported that health services trade gives a competitive opportunity for the developing countries because they had sufficient labor and adequate medical financing and skills (OECD 1989). Many countries benefit greatly from medical travel, investing in the medical industry is a way to increase GDP, improve services, earn foreign exchange, create a more favorable trade balance, and promote tourism development. Moreover, it prevents the brain drain of health professionals (Ramirez de Arellano 2007). Global health tourism has affected the economies of India, Poland, Cuba, Costa Rica, Mexico, Yemen, Thailand and South Africa, where the cost of medical procedures is a small part of the United States or Europe (Nolan nd).

The growing health care market has also attracted health care providers and patients. An article in the Times magazine described the towns of the Nuevo Progressive and Los Algodones in northern Mexico as “tooth oases”, attracting large numbers of patients from Minnesota and California who come to find more affordable dental care (Kher 2006). The market drivers of medical tourism are cost savings, higher quality care and shorter waiting time, leading to more accessibility in health care (Keckley 2008). According to the U. S. Census of population, an estimated 46 million Americans have no health insurance. It is estimated that the \$250 million policies may not cover the cost of certain medical procedures. Other procedures are usually only partially covered and are co-financed by the patient's own pocket, sometimes exceeding the total

cost of the same operation in another country (Newman 2006). As a result, more and more Americans are traveling to Thailand, Costa Rica and Malaysia for cosmetic, orthopedic, coronary and other medical and dental treatments, which cost between 20 percent and 80 percent less than in America (Alsever 2006). The estimated cost savings for a specific operation at an international medical destination range from \$35,400 to \$53,900.

At present, Asia has become the global “International Medical Tourism Center” (Bi Zhiqiang 2011). According to the statistics in 2016, Chinese tourists through Ctrip travel agencies signed up to participate in overseas medical examinations and other medical tourism five times as many as the previous year (CtripReport 2016). The report predicted that more than 500,000 Chinese tourists will travel abroad in 2016. Japan and South Korea are the top destinations for overseas medical tourism for Chinese tourists, also the report medical travel showed that (Sohu 2017) plastic surgery is the most popular among Chinese tourists in South Korea's medical program. Japan is a global leader in cancer prevention and early detection system. Moreover, India is known as “The World Pharmaceutical Factory”, with good quality and high medical standards. Going to India has become a cost-effective way to get medical treatment (Sohu 2017). Regarding medical programs, overseas physical examination is the most popular accounted for more than 50%, including general health examination, early anti-cancer examination, heart examination. Beauty and plastic surgery is also very popular among

female tourists from many countries. There is also placenta anti-aging, live cell anti-aging convalescence, hepatitis C medicine, physiotherapy, etc. It is obvious that vacation medicine in Southeast Asian countries have becoming more popular among foreign tourists globally (Sohu 2017).

Bangkok, the capital and largest city of Thailand is regarded as the Asia's second largest city. Bangkok tourism industry developed well and was selected as the most popular tourist city in the world in 2013 (Beijing Olympic flame city 2015). Currently, Thai government has extended visa from 60 days for regular tourists to 90 days for medical tourists coming from the China, Laos, Vietnam, Cambodia, Myanmar, etc. The policy aims to promote Thailand to be “health” tourism destination and world-class medical center, and this adjustment is considered Thailand’s Medical Center strategic plan (2017-2026) (Health news 2017). With the establishment of the Thailand dental council in 1994, a unified qualification for dentists was established, which directly affected the medical and dental teaching plans. Recently, the Public Health Ministry has contributed to the development of health care in Thailand and science education (R Khampang 2013). Some medical technologies in specific areas, such as transsexual operation, also made Thailand a popular destination for medical tourists. According to the government statistics in 2013, medical tourists contributed as much as US\$4.7 billion into Thailand's economy (Mellor 2014). Thailand has become one of the leading countries with a growing number of medical tourism per year (Xiayu 2017).

Base on the number of Chinese tourist arrivals to Thailand, it is obvious that Thailand has seen an increasing number of the tourists continuously. For example, in 2016 and 2017, the number of Chinese tourists visiting Thailand accounted for 8.5 and 10 million, respectively. Also, Chinese tourists were ranked number one among international visitors to Thailand (see figure 5), However, few-if any- researches about perception of Chinese tourists in Bangkok exist. Therefore, it is vital to explore their perception for medical tourism services in Bangkok, Thailand.

This research uses perception as the framework and employs Exploratory Factor Analysis (EFA) approach to study the factor structure of Chinese tourists' perception and the correlations between Chinese tourists' perception and their demographic, health characteristic. It aims to extend medical tourism research and to provide the guideline for tourism stakeholders and medical tourism related organizations to establish the medical tourism policy more productively and efficiently.

Research Questions:

1. What are the components of Chinese tourists' perception for medical tourism services factor structure?
2. What is the correlation between demographic, health characteristic and medical tourism perception among Chinese tourists?

Research Hypothesis:

1. H₀: There is no potential factor structure in medical tourism perception among Chinese tourists.

H₁: There is potential factor structure in medical tourism perception among Chinese tourists.

2. H₀: There is no correlation between demographic, health characteristic and medical tourism perception among Chinese tourists.

H₁: There is correlation between demographic, health characteristic and medical tourism perception among Chinese tourists.

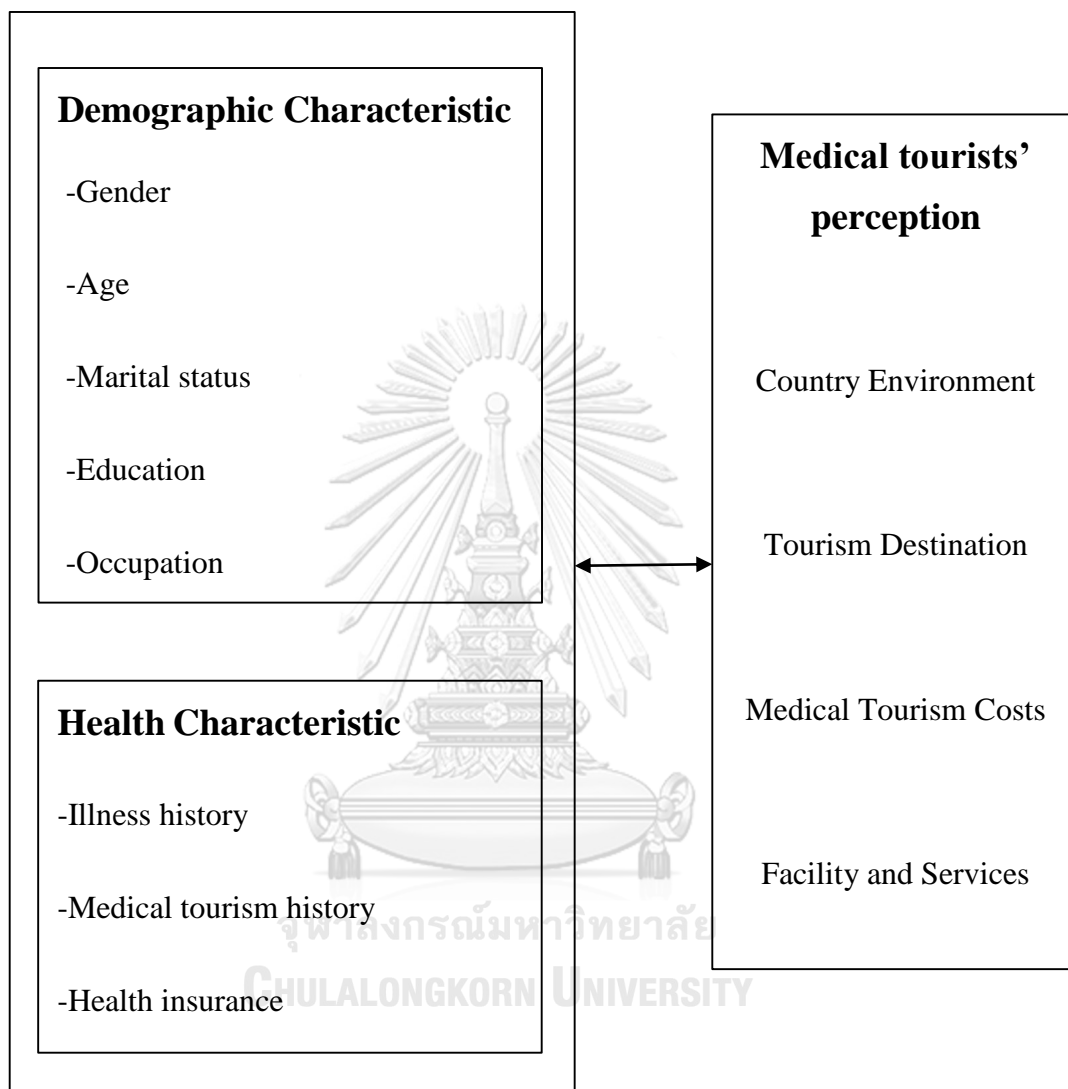
Objectives:

General objectives: To investigate the components of Chinese tourists' perception for medical tourism services factor structure in Bangkok.

Specific objectives: 1. To investigate the components of Chinese tourists' perception for medical tourism services factor structure.

2. To investigate the correlation between demographic, health characteristic and medical tourism perception among Chinese tourists.

Conceptual Framework



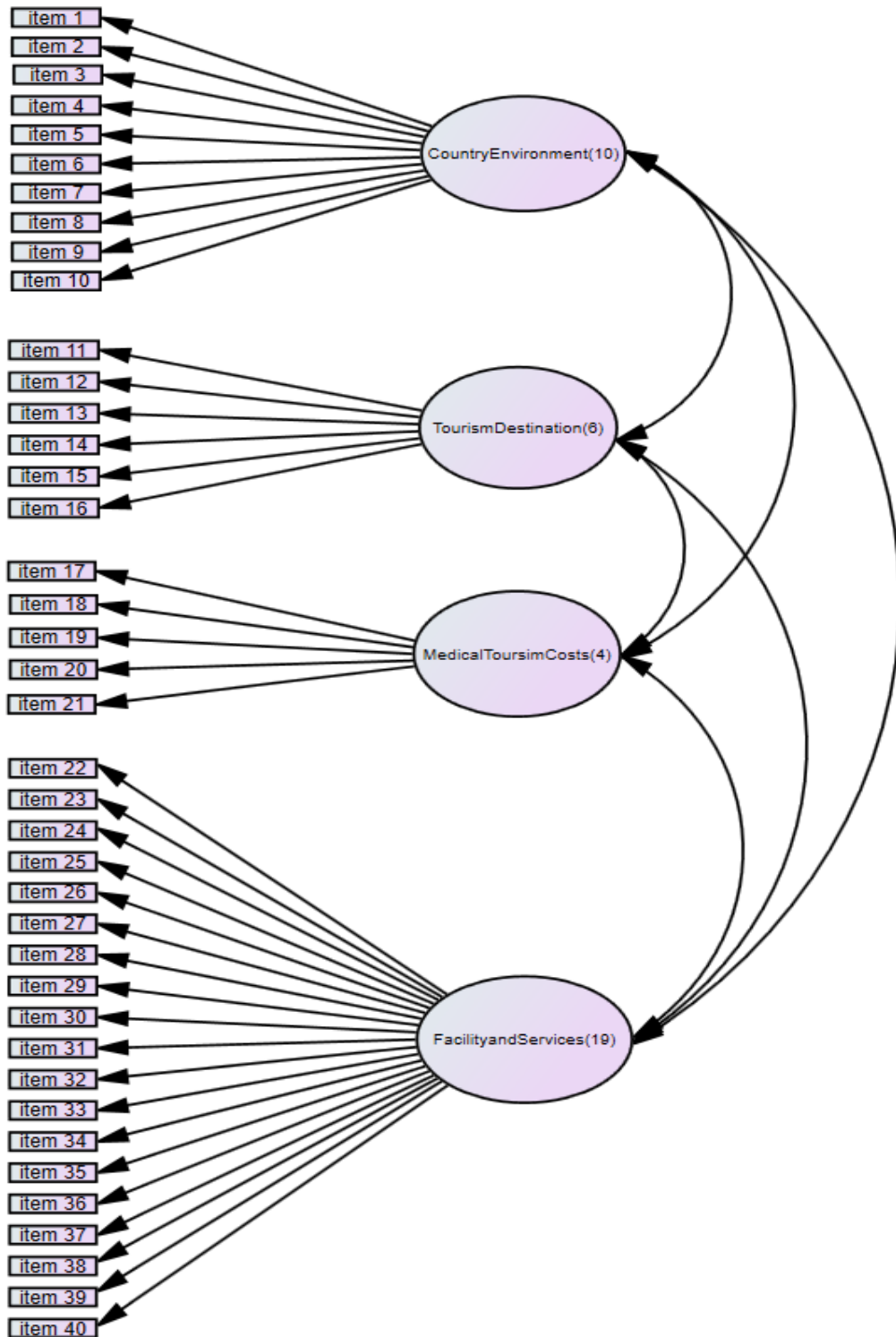


Figure 1: Preset measurement model of Medical Tourism perception

(Marc Fetscherin 2016)

Operational definitions :

Medical tourism: Medical tourists choose to travel across international borders for receiving some form of medical treatment which include the full range of medical services.

Chinese medical tourists: Chinese tourists who travel alone or with groups to Thailand for receiving medical services.

Chinese Tourists' perception for medical services: Chinese tourists choose Thailand as a destination for medical services, which is determined by the characteristics of the country environment, tourism destination, medical tourism costs, facility and services.

Country environment: It focused on the image, overall environment, political environment, political stability and general economic conditions of Thailand as well as cultural similarity between China and Thailand.

Tourism destination: It focused on the overall attractiveness of Thailand as a tourism destination.

Medical tourism costs: It focused on health services cost as well as financial assistance or payment plans of Thailand.

Facility and services: It focused on the quality of the hospitals and medical facilities and also the quality of physicians and nurses in Thailand.

Expected Outcomes:

1. To understand the factor structure of the Chinese tourists' medical perception.
2. To obtain the characteristics of Chinese tourists on the medical tourism perception in Bangkok and provide relevant information for the development of Thailand's medical tourism market.
3. To understand the correlation between the demographic, health characteristics and factor structure of Chinese medical tourism perception.
4. To be the guidelines for tourism related organizations to map out the medical tourism policy more efficiently.



Chapter II

Reviews of Related Literature

Based on the reviews of related literature derived from various sources, i.e., academic journals, research papers, articles, reports, etc., the researcher has divided this chapter into 2 parts. Part 1: overview of medical tourism. Part 2: current scenario of international medical tourism development.

Part I: Overview of medical tourism

1.1 Key related concepts and classifications of medical tourism

There are many definitions and classifications about the medical tourism and health tourism in all kinds of articles. Due to different research contents and different perspectives, scholars also have different types of medical tourism and health tourism. According the World Health Organization definition: medical tourists elect to travel across international borders to receive some form of medical treatment and the treatments may span the full range of medical services, most common: dental care, cosmetic surgery, elective surgery, and fertility treatment (Edward Kelly 2013). On the basis of the world tourism organization, medical tourism is health care, rehabilitation training for the theme of Tourism. The broad definition of health tourism refers to people who leave their place of residence for health reasons, including the maintenance,

enhancement or restoration of the individual's well-being in mind and body. In addition to conventional health services, this definition also includes cosmetic surgery, addiction treatment, spas, retirement communities and some alternative health services (Huff-Rousselle 1995, Carrera 2006). Henderson (Henderson 2004) stated that the health care considered from medical tourism through cosmetic surgery to spas and alternative therapies. Health tourism and medical tourism are two different but related concepts. Medical tourism is conceptually a subset of health tourism (Carrera 2006). The following figure 2 shows present scope of medical tourism which accepted by most scholars.

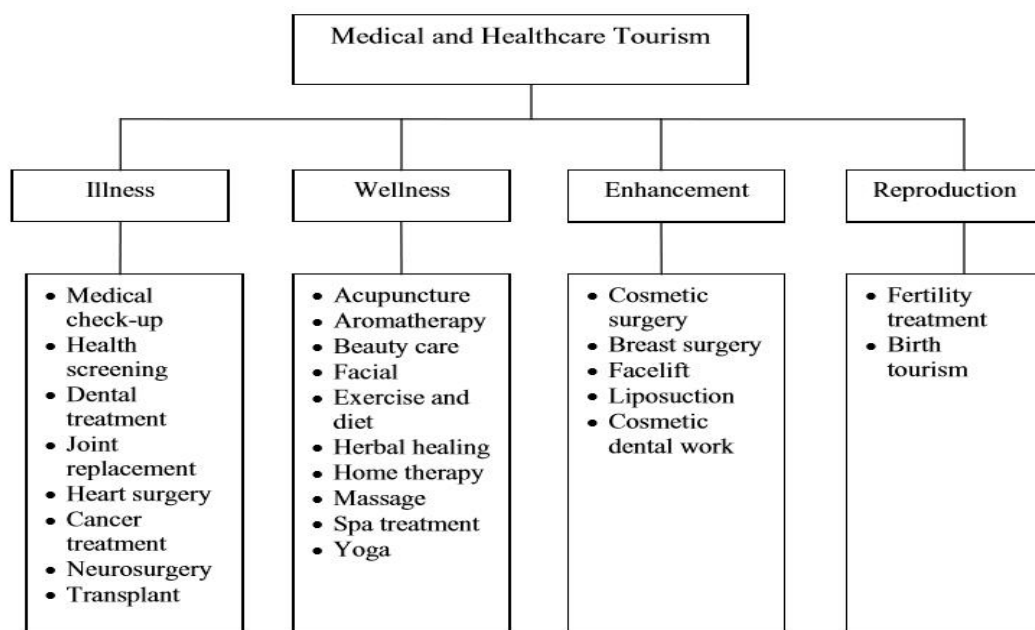


Figure 2: Medical and Healthcare Tourism Segment (Tourism Research and Marketing 2006)

1.2 The factors contributing to the international medical tourism expansion

Zhang Wenju (Zhang Wenju 2008) summed up the reasons for the rise of medical tourism as internal motivation, external conditions and other factors. The huge difference in medical costs between developed and developing countries is the fundamental reason for the rise of medical tourism (Zhang Caixia 2011), stimulate medical tourism for patients from developed countries to developing countries. Certainly, a large number of tourists are moving from developing countries to developed countries in order to get quality medical services or products. In addition, differences in treatment effectiveness between countries, differences in coverage of medical insurance, acceleration of the process of world integration, and the development of network communication technology have all contributed to the development of international medical tourism. See the table 1 for details.

Table 1 Motive factors of the development of international medical tourism

Motive factors	Developed country	Developing country
Medical cost	Under the influence of labor price, management cost, medical accident insurance, etc., the price is high.	Low prices, such as heart replacement surgery in the United States, insured or uninsured people to pay 7.5 times and 16.7 times as much as India, Thailand 6.8 times and 15.2 times.
Medical insurance	Developed countries have limited health insurance: some people do not have health insurance; some insurance does not include teeth, eyes diseases, in the United States this part of the population is about 120 million people.	Some medical tourism institutions and insurance institutions jointly launch special medical tourism insurance to protect the rights and interests of medical tourists.

Table 1 Motive factors of the development of international medical tourism (Cont's)

Motive factors	Developed country	Developing country
Medical quality and service	Public and private hospitals differ greatly and their medical effectiveness is lower than that of some hospitals in developing countries.	Concentration of top domestic resources, and some hospitals have been awarded international certification of JCI, ISO*.
Time of treatment	Some patients need to wait for a long time, especially in the United Kingdom and Canada, under the constraints of the medical insurance system and other factors.	Professional organizations and practitioners, in conjunction with medical tourism consumers, design medical procedures, that is, there is no need to wait for surgery.
Additional benefits such as tourism	Local treatment, no additional benefits from tourism, etc.	Part of the medical tourism destination is a tourist destination, and some medical tourism projects have strong national characteristics, and can obtain tourism benefit such as sightseeing and shopping.
Special needs satisfaction	Prohibition of the use of some medical technologies and methods.	Some medical techniques and methods have legitimacy.
Other factors	Currency exchange rate, integration of the world economy, Internet communication technology, reduced air travel costs, aging population, increased awareness of personal privacy, surge in demand for special medical services, emergence of professional medical tourism companies, and promotion by state government departments. Enterprises and insurance institutions begin to work together to outsource medical services when premiums and medical costs rise	

Remarks: *JCI is Joint Commission International, ISO is International Organization for Standardization. Both are internationally recognized medical and health certification bodies.

1.3 The main factors influencing medical tourism

There are many different factors that make travel destinations attractive to medical tourism, which can be divided into four categories. The first is the image and overall environment of the host country. The second is attractiveness of tourism destination in the host country. The third is medical tourism costs of host country and, last but not

least the fourth is the quality of medical facilities and services. These four factors are related to each other (Marc Fetscherin 2016).

1.3.1 Country Environment

There are many factors that affect the attractiveness of a country's medical tourism destination. The most important factor is the national image. A large number of studies have shown that the overall image of the destination is the main driver of tourism and medical tourism (Alhemoud 1996, Gallarza 2002, VivienRunnelsaP.M 2012, Nolan nd). Another factor driving medical tourism is the political environment (Smith 2011) or political stability including low corruption and good rule of law, and also the general economic conditions (Yu 2012) a described by Connell (Connell 2006) “The state of the economy affects the supply of medical products and services”. In addition, the Medical Tourism Association (Medical Tourism Association 2013) indicated that “cultural and religious matching” or cultural similarities are also important factors in medical tourism. Besides, the cultural differences or resemblances are related to the similarity of language. Fluency in the patient's language is identified as one of the drivers of medical tourism (Medical Tourism Association 2013). Some scholars (Connell 2006) pointed out other factors, such as “favorable exchange rate” (Yu 2012) “distance from the place of residence” (Alleman 2011) or a ticket to an overseas destination and convenience of travel (Alleman 2011).

1.3.2 Tourism Destination

As Heung, Kucukusta and Song (Heung 2011) suggested, “people travel long distances to get medical, dental and surgical services”. One of the most frequently cited factors in this regard is the country's overall appeal as a tourist destination. For some medical travelers, the opportunity to travel to a popular or exotic destination is an added benefit. “A lot of people are trying to find a popular tourist country where they can enjoy their travel during treatment” (Moghimehfar 2011).

1.3.3 Medical Tourism Costs

One of the studies (Yu 2012) point out that medical tourism is a “combination of medical services and tourism”. One of the most cited factors in the health care industry may be the host country's overall health care system. In addition, Connell (Connell 2006) concluded that due to economic liberalization and private hospitals expanded, it is easier to import technology and medical products, so the rapid development of medical infrastructure and systems makes medical services more attractive and leads to lower overall healthcare costs; specifically, the differences in medical costs between the home country and the host country is identified as a key driver. As Smith and Forgione (Smith 2007) pointed out that the steady rise in healthcare costs continue to drive demand for medical tourism. Likewise, another study indicated that the number-one factor in American health care travel abroad is cost (Connell 2006, Yu 2012). There are also such factors as financial assistance or payment plans (Connell 2006, Yu 2012), clinical

support systems for continuing care, and shorter wait times (Connell 2006, Horowitz 2008, Yu 2012).

1.3.4 Quality of Facilities and Services

As far as factors related to the quality of medical facility and services are concerned, a study indicated that (Smith 2007) believe that one of the major factors in American patients is “taking into account the characteristics of international facilities” such as: hospital standards (ISO) and international accreditation (Gan 2011, Gill 2011, Yu 2012) “high standard of medical equipment situation” (Connell 2006); “hospital reputation” (Heung 2011) or “medical treatment quality indicator” i.e., postoperative (Medical Tourism Association 2013). It also included factors related to the quality of service of doctors and nurses (Medical Tourism Association 2013). Another study (Mattoo 2006) indicated that the key factors for choosing medical destination cover medical facilities like doctor/dentist professional knowledge and qualification; whereas some studies indicated that overall care quality (Berkowitz 1980) and doctor's reputation (Heung 2011), are important factors.

The above literature review Outlines the most important and widely discussed factors. There still are other factors, such as the higher rate of nurses per patient (Demicco 2006), and hospital staff experience (Boscarino 1982) were also discussed, to a certain extent. The cleanliness of the facility (Berkowitz 1980), patient reviews,

ratings and word of mouth (Medical Tourism Association 2013) or the degree of friendship between staff and doctors (Gill 2011).

Part II: Current scenario of international medical tourism development

2.1 Current scenario of international medical tourism destination countries

At present, the international medical tourism market has been developed, and many countries have become international medical tourism destinations: South Africa; India, Thailand, Singapore, Malaysia, South Korea in Asia; Mexico, Cuba, Brazil, Argentina, Costa Rica in Latin America; Switzerland; Germany, Hungary, Lithuania, Poland in Europe and Dubai, Lebanon, Jordan, the United Arab Emirates, Saudi Arabia in the Middle East, in particular, Dubai are building health care cities to keep more medical tourists (Jiang weina 2017).

In the past, medical tourism in developed countries in Europe and the United States relied on advanced medical technology to attract patients from developing countries to seek medical treatment. Germany's medical tourism market is dominated by wealthy Gulf countries (Jiang weina 2017). In 2008, nearly 68,000 patients from 169 countries in the world went to Germany for hospitalization (Wang Hongfang 2012). In recent years, the European Union has invested about 78 million euros (\$91.73 million) in the development of international medical tourism, and many social security agencies in EU member states have also paid for Hungarian hot spring health care for their nationals

(Li Donghui 2007). In 2003, Hungary defined its tourism theme as “Healthy Tourism Year”, this country’s unique natural hot spring geothermal resources attract a large number of tourists to the treatment. There are 11 private hospitals in Lakeside Lake in Switzerland that specialize in cosmetic surgery, plastic surgery, cell activation therapy and other rejuvenation treatments (Li Donghui 2007). However, due to the high cost of medical treatment or the long waiting time for free reservations, medical tourists to Europe and the United States are gradually losing.

At the same time, Asia is becoming the world's “international medical tourism center” because of rising medical standards and cheap medical costs. According to the JCI website, there are now 21 JCI certified hospitals in India, 35 in Thailand, 21 in Singapore, 12 in Malaysia, 14 in Taiwan and 30 in China (Wang Xiufeng 2015). Korea promotes plastic surgery tourism development by performing arts, and combines the therapeutic cosmetic plastic surgery industry with tourism functioning as the international medical tourism development strategy in the 21st century. Relying on its advantages in cancer and cardiovascular disease prevention, Japan provides high-end medical diagnosis and treatment services to foreign patients (Zhang Guimin 2011). The Southeast Asian countries are also the center of international medical tourism destinations. In the 1970s, Thailand became the first choice for international medical tourism with its unique transgender surgery. The cost of breast surgery is much cheaper than in the United States (Liu Tingfang 2009). India has a wide range of medical and

health tourism products, attracting tourists from all over the world with its most distinctive advantages such as Ayurvedic medicine, Sidar medicine, yoga and so on (Xu Fei 2006). According to India's Commerce Ministry, the medical tourism revenue in India was nearly \$2 billion in 2010, up to 30.0%, and medical tourism could create 40 million jobs for India every year (Wang Hongfang 2012). Singapore combines its strengths with Asia's quality healthcare systems to promote health checks, cutting-edge surgery, cancer treatment and professional care (Hou Shengtian 2013), In addition, the Singapore International Medical Network including such language as Chinese, English, Indonesian, Vietnamese, etc. is set up to provide guidance for people who come to Singapore for medical purposes. The cost of health care in Malaysia is only 1/5 of that of similar services in the UK, making it attractive to European customs (Wang Hongfang 2012). In addition, the Philippines hopes to attract more Philippines doctors and nurses working to return to work with international medical tourists (Cheng Li 2008).

The Middle East is famous for its high quality medical tourism services. Jordan is the main destination for medical tourism in the Middle East, which is good at treating female infertility; Saudi Arabia's flourishing pilgrimage has led to medical tourism such as beauty, dentistry (Zhang Wenju 2007); The cost of Cardiac bypass surgery in Iran, the United States is twice as much as in Iran and the United Kingdom is four times as much as in Iran (Connell 2006); It is worth noting that Dubai is building a health care

city, introducing a large number of Germany's first-class doctors, with high-end services, precious raw materials, luxury enjoyment as a bright spot, take the high-standard route, attracting the world's rich people.

Latin America and other countries in recent years have also attached great importance to the development of the medical tourism industry, Cuba's skin specialist; plastic surgery in Argentina and Brazil has attracted a large number of Americans to Latin America for medical travel. In addition, South Africa's cosmetic surgery also plays an important role in the world's medical tourism. Its international medical tourists mainly come from countries near the sub-equator, earning about 279 rand (\$20.2 million a year (Witepski L nd).

2.2 Current scenario of development of tourist countries which participating in international medical tourism

Most of the medical tourists in developing countries with a low standard medical treatment to get better medical conditions would travel to another country with high standard of treatment. Nowadays, medical tourists mainly come from three categories of countries, i.e., 1) the countries with high medical costs such as the United States of America, 2) the countries with limited medical socialization and medical insurance, such as Canada, Britain, France and Australia, etc. 3) the countries traditional medical technology such as the Middle East, Cambodia, Myanmar, etc. (Zhang Wenju 2007). The United States was once one of the major destinations for international medical tourism. However, in recent years, the United States' medical costs have skyrocketed

with high insurance costs, and many medical insurances do not cover a high proportion of its own expenses such as dentistry and cosmetic surgery. Many Americans choose international medical travel to reduce medical costs. The main destination countries are Mexico, India, Thailand and other Asian countries (Wang Hongfang 2012). Clearly, the American Medical Tourism Association predicts that up to 23 million Americans will travel abroad by 2017, costing up to \$79.5 billion a year. The United States has become the world's largest source of medical tourism (Liu Huayun 2014).

For example, figure 3 showed that four well-known hospitals in developing countries (India, Mexico and Thailand) and a comparison of the specific surgical costs of a United States hospital with Joint Commission international accreditation (JCI) and ISO quality certification.

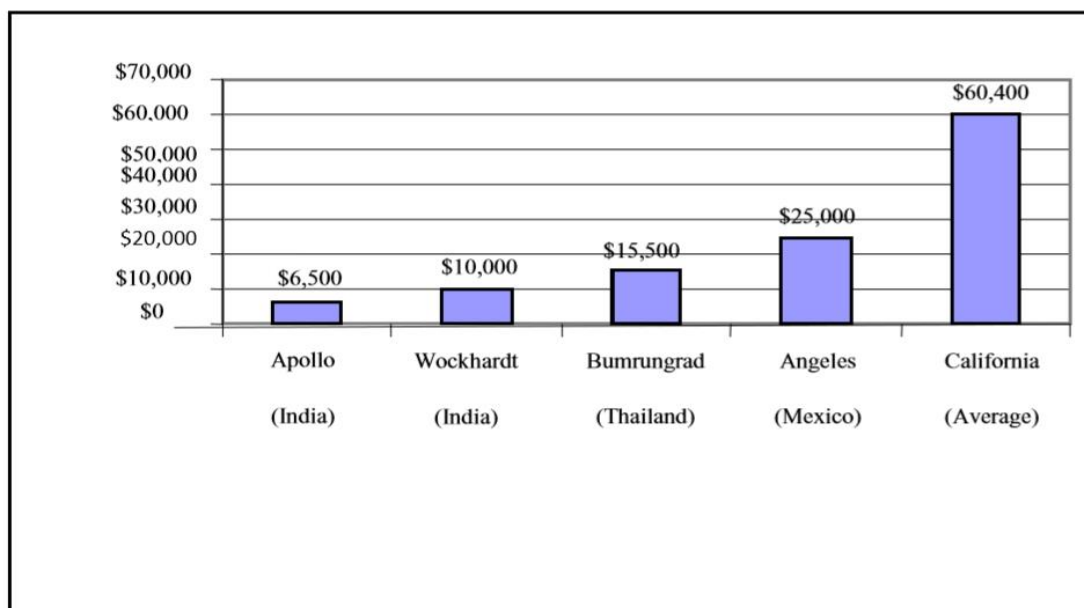


Figure 3: Comparison of average expected facility

(Hospital-Reported Combined Average Expected Facility and Professional Fees in 2005 for Elective Coronary Artery Bypass Graft Surgery)

Source: Hearing before the Special Committee on Aging United States Senate One Hundred Ninth Congress, Second Session,

2006

Although health care has been socialized and virtually every citizen has access to government-provided health insurance, the public health care system is overburdened and patients have to wait a long time to get treatment. So many Canadians are starting to try international medical travel. In the United Kingdom, the health sector subcontracted part of the health services contract to India because the public had been waiting for treatment in the national public health system for too long and could not afford the expensive medical costs of private hospitals (Zacharia L 2007). Although the UK, France and Australia have lower medical costs than the United States, the

government has strict management of medical insurance, with a greater limitation, therefore, many tourists decide to travel to developing countries for medical treatment. Worth pointing out is that such countries as Cambodia, Myanmar, Africa and other regions have pursued medical technology and equipment to continue participating in **the international medical tourism (Jiang weina 2017).**

2.3 Current scenario of overseas medical tourism demand of Chinese

With the improvement of living standard of Chinese people, going abroad to see a doctor will soon become a new hot spot. According to the National Tourism Administration (Tian Yating 2014), the number of Chinese citizens leaving the country reached 98.1852 million in 2013, an increase of 18.0 percent over 2012. Similarly, health statistics indicated that government spending on health has increased from 177.89 billion yuan in 2006 to 1.05907 trillion yuan in 2014. The number of Chinese was ranked the highest among international arrivals to South Korea, since the Chinese arrivals to South Korea is increasing every year: 4,725 in 2009 and 32,500 in 2012, accounting for 20.4% of the total number of South Korean overseas medical tourists, surpassing the United States, Japan and other countries for the first time. More than 50.0% of Chinese tourists who went to Korea to receive medical services were women, and 36.5% received plastic surgery (Tian Yating 2014). The number of Chinese patients at the Massachusetts General Hospital affiliated to Harvard Medical School in 2013 has risen from 40 in the previous year to 100 (Liu Yanqing 2015). It can be seen from this that Chinese tourists' demand for medical services has gradually increased, ranging

from the health examination called “light medical care”, weight loss and molding, treatment to serious illness, and huge market demand. On the one hand, this demand is due to the small number of private and foreign medical institutions in China, and the fact that public hospitals are incompatible with the positioning of light medical care, and their service attitude is poor, which leads to medical travel abroad for light medical care patients; On the other hand, severe patients go abroad expect to obtain advanced medicine, equipment and medical technology.

However, the cost of medical tourism is much higher than that of ordinary tourism. Therefore, the target market of Chinese tourism is divided into three categories: the elderly market, the female market and the middle-aged market with strong health awareness. By the end of 2013, there were 202 million people aged over 60 in China, with an aging level of 14.8%, the above indicators were higher in some of China's big cities. The huge elderly market is becoming the target market with strong consumption ability in the medical tourism market. They have both the demand of health care and the economic strength; 42.8% of the elderly people in the city have deposits. Each year the total of the old people's retirement pension, the income of the employment, the support of the children and so on can reach 400 billion yuan (Hou Tianyi 2013). With the change of modern social concept, the status and income of women have been increasing, and their demand for tourism products has gradually tended to be individualized. The health examination and beauty items in the medical tourism market

meet the needs of the female market, and stimulate the continuous expansion of the female market in the medical tourism market. In addition, the middle aged 35-55 years old is a group of people with a certain wealth accumulation in China, but the pressure of life is greater, the decline of their physiological function and bad psychological state leading to serious attention in terms of health and security. Health related element such as the hot springs, forest baths and other medical tourism activities developed in recent years are favored by them, and they are expected to become the main prospective in overseas medical tourism (Jiang weina 2017).

It can be seen from this that the market for Chinese medical tourism abroad has broad prospects and huge demand. Boston Consulting has reported that by 2020, the number of wealthy people in China will increase from 120 million to 280 million, and the incidence of cancer and other complications in China is rising rapidly (Liu Yong 2013), the population is aging more rapidly, and the environment is seriously polluted. Domestic medical service is not perfect, under this background, outbound medical tourism will become more and more popular trend in China.

Regarding the popular medical tourism destination for Chinese tourists, according to the Department of Tourism Thailand data, from 2016 to 2017, the number of Chinese tourists was ranked first for traveling to Thailand (Ministry of Tourism & Sport 2017). It is interesting to note that in 2016, the top 10 most popular tourism destinations for medical tourism among Chinese tourists are as follows: 1. Japan, 2. South Korea, 3.

The United States, 4. Taiwan, 5. Germany, 6. Singapore, 7. Malaysia, 8. Switzerland, 9. Thailand and 10. India (see figure 4).

2.4 Tourism and medical tourism in Thailand

Thailand is famous overseas for its beautiful and charming subtropical scenery, extensive Buddhist culture and unique folk customs, attracting tourists from all over the world to visit and become one of the most important tourist destinations in the world. The National Tourism Administration of Thailand is using the slogan “Amazing Thailand Always Amazes You” to continuously strengthen and promote the image of Thailand's tourism brand and industry. In 2008, Thailand attracted more than 10 million overseas tourists, making it the world's third-largest tourist destination. In 2010, about 90 percent of the world's medical tourists travel Thailand, Singapore and India as destinations, with Thailand and Singapore being the most popular destinations. However, Singapore in comparison with Thailand in terms of expenses, it is evident that the costs of transportation, accommodation and medical treatment are much higher than Thailand. So Thailand has been treated as a more favorable destination for medical tourism (Fu Shengyu 2012).

At present, many hospitals have reached the highest level in Thailand, comparable to, or even better than, the United States. It is known that Bumrungrad Hospital in Bangkok, whereas approximately 40.0% of the patients are foreign nationals, tourists or medical tourists from 190 different countries (Bumrungrad international hospital

2012). It is estimated that about six million people take medical tourism every year, estimated to be worth \$100 billion (Deloitte 2009). Bangkok Hospital as one of the top 10 medical tourism hospitals in the world by MTQVA (Global Medical Tourism Union) and was awarded the Royal Medal by King Bhumibol of Thailand, Bangkok Hospital has become one of the only two hospitals in Thailand to receive the award. The hospital has the first European Aeronautical Safety Council certified medical rescue airline in Asia, which is unique in Thailand and even in Asia. Some hospitals in Bangkok also provide targeted services, including specialized Japanese departments, and employ interpreters in 22 languages, including Swedish, Cambodian and other languages that are not often used (Fu Shengyu 2012).

China is the fastest growing tourist market in the world and has become the second largest tourist exporter in the world and the largest tourist destination in the Thai entry market. According to an analysis report by Thailand's Institute of Finance and Trade, five countries visited Thailand in 2011 with more than one million tourists, of whom four were Asian countries and Malaysia being the largest, with 2.47 million Malaysian tourists visiting Thailand that year. China ranked 1.76 million, Japan 1.12 million, Russia 1.014 million, and South Korea just about 200 fewer than Russian tourists (Hou Zhiqiang 2013). Thailand is one of the most important destinations for Chinese tourists to travel abroad. Siriporn and Youchen concluded that Thailand has been the first destination country for Chinese tourists since 1987. Thailand will attract a large number

of Chinese tourists by taking advantage of its geographical advantages, natural and cultural tourism resources and low-cost routes (S McDowall 2009). In recent years, the number of Chinese tourists traveling to Thailand has been increasing year by year, especially in the past 3 years, as reported in figure 5.

Additionally, in order to further expand medical tourism, the Thailand Tourism Bureau has set 4 specific objectives: 1) opening specialist outpatient clinics for foreigners who have been staying in Thailand for a long time; 2) promoting the development of medical facilities such as SPA Center; Massage Center, etc; 3) produce Thai herbal medicine and health products strictly according to WHO standards; 4) increase Thai traditional medicine and choice of diagnosis and treatment. Thailand also plans to extend its legal medical stay from 60 days to 90 days in five countries, including the United Arab Emirates, Qatar, Kuwait, Oman and Bahrain. The Thailand Tourism Bureau, which has detailed medical structure information and well-known hospitals on its website, has also worked with KrungThai Bank to issue debit cards for tourists to provide medical insurance services (Fu Shengyu 2012).

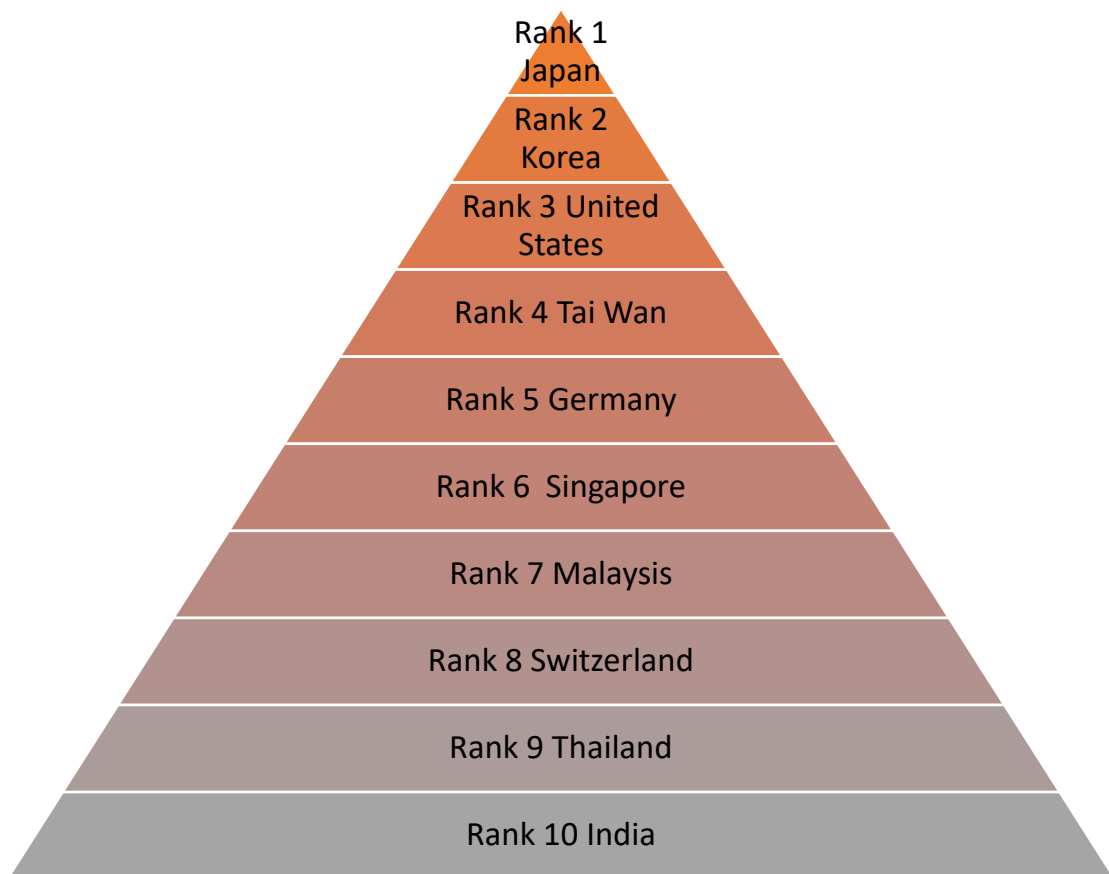


Figure 4: The top 10 most popular tourism destinations for medical tourism among Chinese (CtripReport 2016)

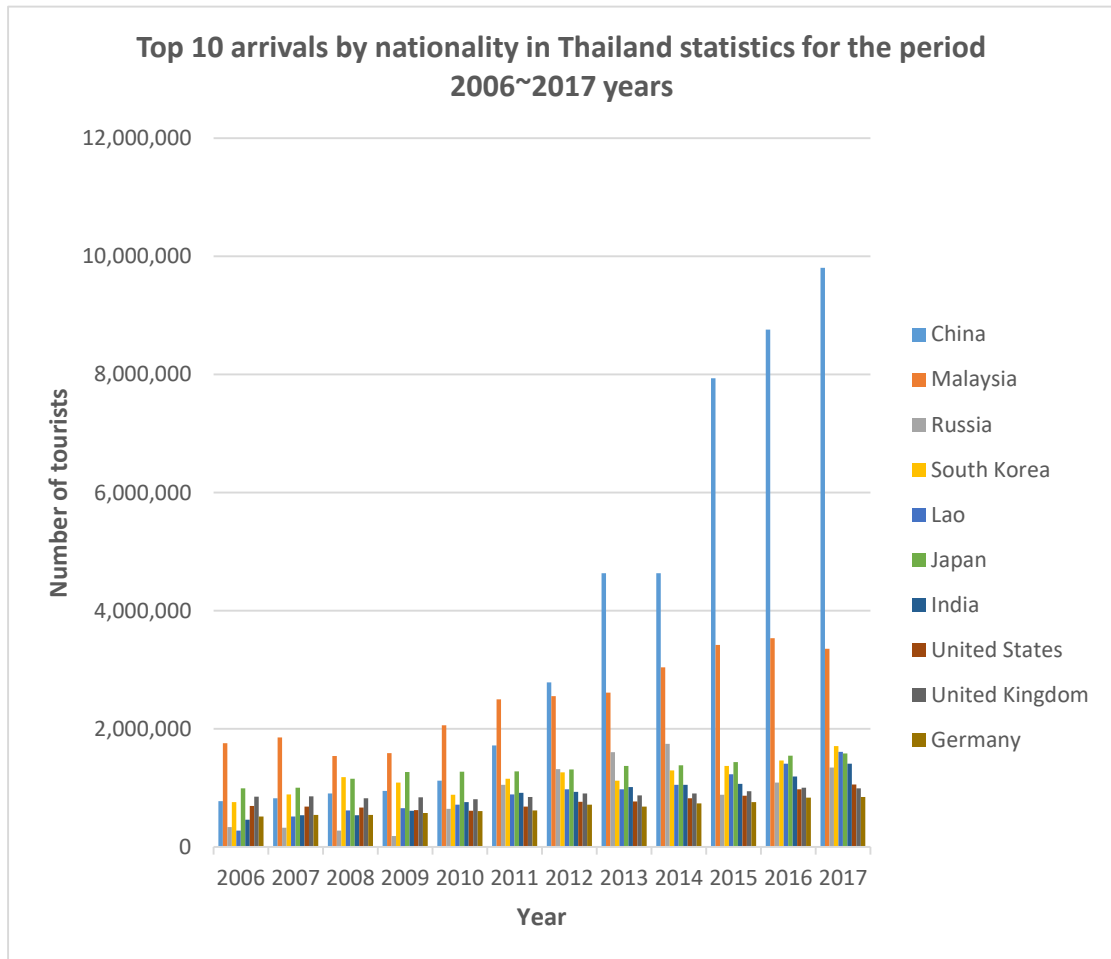


Figure 5: Top 10 arrivals by nationality in Thailand statistics for the period 2006~2017 years (Ministry of Tourism Sport 2017)

Chapter III

Research Methodology

This research has employed a cross-sectional approach with the objective of investigation the perception of medical tourism in Bangkok among Chinese tourists.

The research details cover the following items:

Research design:

This is a cross-sectional study to investigate the components of Chinese tourists' perception for medical tourism services factor structure and to investigate the correlation between demographic, health characteristic and medical tourism perception among Chinese tourists.

Population:

The population of this research is Chinese tourists who currently come to Thailand through travel agency as tour group and as Free Individual Tourists (FIT).

Sample:

The samples cover 481 Chinese who currently come to Thailand through travel agency as tour group and as Free Individual Tourists (FIT).

Sample size:

The sample size used in this research has been calculated as follows:

According to “Hair” (Hair 2010), the minimum sample size suggested in the statistical study was based on a sample of five to one and the acceptable sample size suggested in the statistical study was based on a sample of ten to one. In this study, we designed 40 items for the model of factor analysis in the questionnaire, so the recommended minimum sample size was $40 \times 5 = 200$ samples. In addition, according to “Tabachnick and Fidell” (Tabachnick 1992), for the factor analysis, 200 sample size means fair, 300 is good, 500 is very good and 1000 or more is excellent. In addition, in the process of factor analysis, Factors with eigenvalues >1 and factor loading of 0.30 or greater would be considered significant only for sample size of 350 or greater (Hair 2006). Therefore, the sample size should be more than 350 or greater.

Sampling technique:

The study employed the purposive sampling technique for data collection, it is a non-probability sampling being selected based on characteristic of a population and the objective of the study. Thanks to the good cooperation of travel agencies in Thailand in that the tourists are allowed to participate in our study, so the collection went on smoothly when there were no problems in accessibility to our targeted sampling groups. The samples were selected for this study were mainly recommended by the travel

agencies located in Bangkok. Apart from travel agencies cooperation, the researcher was also expedited by hotels where the Chinese tourists often stay. Thus, we can collect the data in the corresponding hotel. According to the Association of Thai Travel Agents (ATTA) official website (Association of Thai Travel agents nd), there are 1340 registered. Briefly, the researcher chose 5 international travel agencies which have a strong capacity for Chinese tourists' tour group during the peak season of tourism in Bangkok from May to June 2018. Each travel agency draws 5 Chinese tourist groups each month, a total of 50 groups included approximately 10 persons in each group. The 5 Thai Travel Agents are as follows: 1) Backpacker by STA Travel Thailand (Rama 1 Rd); 2) STA Travel Thailand Head office (Phayathai Rd); 3) Travex Travel Agency (Langsuan Ploenchit Rd); 4) Panda Travel Agency (Phloen Chit Rd); 5) Diethelm Travel Thailand (Pathum Wan Wireless Rd). Likewise, the 5 hotels selected are as follows: 1) The Twin Towers Hotel Bangkok (Patumwan); 2) The Emerald Hotel Bangkok (Ratchadapisek); 3) Oriental Residence Bangkok (Patumwan); 4) Banyan Tree Bangkok (South Sathon Road); 5) Design Hotel Bangkok (Patumwan).

Eligible criteria:

Inclusion criteria:

1. Chinese tourists who have Chinese nationality.
2. The Chinese tourists should have the ability to read and write Chinese.

3. Willing to participate by providing informed consent.

Exclusion criteria: Overseas Chinese.

Research Instruments:

Research Instrument used:

The self-administrated questionnaire assessed the perception for medical tourism services by Chinese tourists in Bangkok, Thailand. This questionnaire consists of 4 parts (see Appendix 1):

Part 1. General information has 7 items: 1) Gender; 2) Age; 3) Marital status; 4) Education; 5) Region; 6) Occupation; 7) Income.

Part 2. Health information has 6 items: 1) Illness history; 2) Location of hospitals providing medical services; 3) Types of hospitals providing medical services; 4) Types of medical services receive; 5) Insurance; 6) Medical service history except in Thailand.

Part 3. Tourism purpose, access to information and accommodation has 3 items: 1) Tourism purpose; 2) Source of decision to go to Thailand; 3) Accommodation booking.

Part 4. Factor influencing medical tourism has 40 items: 1) Country environment includes 10 items; 2) Tourism destination includes 6 items; 3) Medical tourism costs includes 5 items; 4) Facility and services includes 19 items.

Instrument development:

1.To obtain permission for using the questionnaire from the author of the medical tourism index: Scale development and validation (See Appendix 3).

2.To translate from English version questionnaire to Chinese version questionnaire by Chinese expert who are well verse with English language.

3.To back translate from Chinese language to English by English expert who are well verse with Chinese language.

4. To develop and revise questionnaire items according to 3 experts' comments and suggestion. Then, to obtain validity of measurements, it is the degree to which an instrument measures which is supposed to be measured. The validity mainly reflects the accuracy and validity of the test results. Rovinelli and Hambleton (Rovinelli 1977) presents the method of finding the content validity, called "Index of Item-Objective Congruence(IOC)" which has the following evaluation criteria: Scoring +1 = Certain that the test is congruent with the objectives or content, Scoring 0 = Uncertain that the test is congruent with the objectives or content, Scoring -1 = Certain that the test is not congruent with the objectives or content. The value of IOC can be calculated from the following equation: $IOC = R/N$, R = Sum of scores checked by at least three specialists, N = Number of specialists, according to Brown (Brown 1996), if the value of IOC is higher than 0.50, the test is acceptable due to its congruence between the test and objectives or content, but if it is lower than 0.50, the test is unacceptable because of the

lack of congruence. Test for validity is part 4: Factor affecting medical tourism. Questionnaire is submitted to three experts in related fields of public health for content validity testing and calculated of Item-Objective Congruence (IOC) score and overall IOC score is 0.97. Therefore all 40 items are acceptable due to its congruence between the test and objectives or content.

5. To try out the questionnaires with 30 Chinese tourists.

6. To obtain reliability of measurements, it is the degree to which an instrument measures the same way each time, it is used under the same conditions with the same subjects. Reliability mainly reflects the consistency and stability of the test results, so Cronbach's alpha for reliability test is used. The reliability coefficient of more than or equal 0.90, show that the reliability is excellent; the reliability coefficient is between 0.80 and 0.90 (include 0.80), which means good; the reliability coefficient is between 0.80 and 0.70 (include 0.70), which means acceptable; the reliability coefficient is between 0.60 and 0.70 (include 0.60), which means questionable; the reliability coefficient is between 0.50 and 0.60 (include 0.50), which means poor; the reliability coefficient is less than 0.50, which means unacceptable (Cronbach L 1951). After Reliability statistics conducted, the Cronbach's alpha=0.77, it means the reliability is acceptable.

Data Collection:

In conducting this research Data collection process can be descriptive as follows:

1. Coordinate with the tour operators/agents and hotels where Chinese tourists often stay and ask for information from the sample.
2. Provide training for research assistants who went to collect data.
3. Get assistance from travel agents or hotels to have access to Chinese tourists.
4. The research team landed to collect data.

In this research. The researcher assistances have the following qualifications:

1. Being Chinese nationals who can communicate well in Chinese, both spoken and written.
2. The research assistances must undertake training in data collection technique.
3. Profile of research assistances: the research team consist of 5 members: 4 Chinese female research assistances and 1 Chinese male researcher. The research assistances are from language college of Rangsit University, Thailand, they have a good educational background and have a good understanding of Bangkok's living environment. The researcher himself acts as chairman of the team.

Data Analysis:

According to the purpose of this study, the data which were collected by the researcher are analyzed and evaluated by using the following statistical methods. All analyses will be performed with IBM SPSS Version 22.

1. Descriptive Statistics

Frequency and percentage was used to describe the demographic characteristics of tourists, health characteristics, tourism purposes, access to information, accommodation characteristics. The demographic elements of the tourists were classified as gender (male and female), marital status (single, married, divorce), age (18-30, 31-40, 41-50, above 51 years old), highest level of education (primary school or below, high school, bachelor's degree or above), occupation (unemployed/housewife, official, employees of state-owned enterprises, company staff), monthly household income (10,000 yuan or below, 10,001-15,000 yuan, 15,001-20,000 yuan, 21,000 yuan or above), Region (West China, South China, Central China, North China).

The tourist's health characteristics classified by Illness history (never diagnosed, diabetes mellitus, hypertension, coronary heart disease, kidney disease, cancer, other), types of medical services receive (never, general health examination, cancer screening, x-ray, MRI/CT scan, ultrasound, diabetes mellitus, hypertension, cardiovascular, kidney disease, dental, plastic surgery, other), location of hospitals providing medical services (never, treatment in Bangkok, treatment in Chiangmai, treatment in Pattaya,

treatment in Phuket), types of hospitals providing medical services (never, government hospital, private hospital, medical clinic, beauty clinic, dental clinic, other), medical service history except in Thailand (never, Japan, South Korea, United States, Germany, Singapore, Malaysia, Switzerland, India), Overseas travel insurance (no health insurance, travel accident injury insurance, travel personal injury insurance, accommodation tourists travel accident insurance, travel accident rescue insurance, travel emergency rescue insurance, other).

Tourists' purposes, access to information, accommodation characteristics classified as travelling purpose (visit friends and relatives, have a holiday, do business, explore Thai culture, look for new experiences, have recreational activities, attend the conference, get medical treatment in Thailand, have night life experiences, do shopping, visit temples, go to places as in Thai film I saw), source of decision to go to Thailand (travel agency introduction, internet propaganda, recommended by relatives or friends, advertising of television newspaper or magazine), accommodation booking (managed by self, travel agency friends and relatives are the operators).

2. Reliability and correlations analysis

Items-to-total correlation: for reliability test, each item in a questionnaire is correlated to a total score, throw out items which have a low correlation with the total (summed) score across all items. Inter-item correlation: For getting coefficient of correlation between items. Cronbach's alpha coefficient: for testing reliability.

3. Exploratory Factor Analysis (EFA)

EFA is an interdependent technology with its main purpose to determine the potential structure among variables in the analysis and implement to explore data to provide researchers with information about how many factors are needed to represent data (Hair 2006). In this study, EFA was used to reduce and categorize the perception of medical tourism factors. Then EFA was conducted in Chinese tourist number, using common factor analysis with Varimax extraction methods as the factors were expected to be correlated. The Kaiser-Meyer-Olkin(KMO) statistics was computed to determine if the data were likely to factor well, the closer the KMO value is to 1, the more suitable for factor analysis. After that, the interitem Pearson product-moment correlation coefficients were obtained to investigate the association between items. Bartlett's test of sphericity was computed to make sure that the interitem correlation matrix did not approach an identity matrix. Multicollinearity was assessed by analyzing the determinant of the interitem correlation matrix. As mentioned previously, Factors with eigenvalues >1 and factor loading of 0.30 or greater would be considered significantly only for sample size of 350 or greater (Hair 2006).

4. Correlation coefficient

The Pearson correlation coefficient is a measure of the linear correlation between two continuous variables (SPSS Tutorials 2017). In this study, it was used to obtain: inter-correlations of MTP between the subscales (Country Environment, Tourism

Destination, Medical Tourism Costs, Facility and Services), and to get correlation coefficients between MTP subscale and age characteristics.

The Spearman's rank correlation coefficient is a nonparametric measure of rank correlation, it assesses how well the relationship between two variables can be described using a monotonic function. Spearman's coefficient is appropriate for both continuous and discrete ordinal variables (Lehman 2005). In this study, it was used to obtain correlation coefficients between MTP subscales and education characteristic.

The biserial correlation coefficient is a special case of Pearson's correlation coefficient. It measures the relationship between two variables: One variable is continuous. Another variable is binary (Sheskin 2011). In this study, it was used to obtain correlation coefficients between MTP subscales and Gender, Marital status (married and unmarried), occupation (business and non-business), illness history (never diagnosed and ever), medical tourism history (never experienced in Thailand and ever) characteristic.

(E. Cohen 2008) standard was used to evaluate the correlation coefficient to determine the strength of the relationship. Correlation coefficients between 0.10 and 0.29 represent a small correlation, coefficients between 0.30 and 0.49 represent a medium correlation, and coefficients of 0.50 or above represent a large correlation or relationship.

Ethical Considerations:

All procedures in this study were reviewed and approved by The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group (RECCU), Chulalongkorn University.

Information related directly to participants were kept confidential. Any information which could be able to identify the participants will not appear in the report. The participants can withdraw at any time and don't have to give a reason.

Participating in the research is not anticipated to cause the participants any disadvantages or discomfort. The potential physical or psychological harm or distress are as same as any experienced in everyday life.

Chapter IV

Result

This research has employed a cross-sectional method with the objective of investigating the factor structure of medical tourism perception among Chinese tourists in Bangkok. The research details cover the following items:

4.1 Demographic characteristics of Chinese tourists

A total of 563 questionnaires were distributed in this study, and 481 questionnaires were actually collected, with a response rate of 85.4%. There were 481 participants in this study, 357 (74.2%) were non-medical tourists and 124 (25.8%) were medical tourists. The demographic characteristics of the Chinese tourists were shown in the table 1, it showed that in terms of gender composition, male is slightly more than female, in the non-medical tourists group male and female accounting for 54.6% and 45.4%, in the medical tourists group male and female accounting for 57.3% and 42.7%. All tourists were over the age of 18 and the age oldest tourist was 73, the age structure was mostly 18-30 years old (45.4%) in the non-medical tourists group, while in the medical tourists group the proportion of tourists aged 31-40 years old (40.3%), 51 or above years old (30.6%) was dominant. The marital status of the tourists in non-medical group was 23.8% for single, 63.0% for married and 13.2% for divorce, in medical group was 12.9% for single, 80.6% for married and 6.5% for divorce. In terms of educational level, the

non-medical tourists group were mainly high school (43.1%) and bachelor's degree or above (45.9%), in the medical tourists group, they were mainly high school (39.5%) and bachelor's degree or above (50.0%) too. The occupation distribution of tourists in non-medical group was mainly employees of state-owned enterprises (68.6%) and in medical group was mainly employees of state-owned enterprises (62.9%) too. In terms of income, the non-medical tourists group mainly earned 15,001-20,000 yuan (28.0%) and 21,000 yuan or above (37.0%), while in medical tourists group, they mainly earned 10,001-15,000 yuan (23.4%), 15,001-20,000 yuan (27.4%), 21,000 yuan or above (41.4%). In terms of region, most of the non-medical tourists come from the north china region (51.8%) and south china region (30.0%); however, most of the medical tourists come from the northern region (58.1%) and southern region (24.2%).

Table 1 Demographic characteristics of tourist (N=481)

Demography Characteristics	Tourist		
	Total	Non-Medical Tourist (357)	Medical Tourist (124)
	n	n (%)	n (%)
Gender			
Male	266	195 (54.6)	71 (57.3)
Female	215	162 (45.4)	53 (42.7)
Age			
18-30	172	162 (45.4)	10 (8.1)
31-40	144	94 (26.3)	50 (40.3)
41-50	103	77 (21.6)	26 (21.0)
≥51	62	24 (6.7)	38 (30.6)
Min-Max	18-73	18-71	26-73
Mean (SD)	36.3 (11.02)	33.9 (9.91)	43.1 (11.23)
Marital status			
Single	101	85 (23.8)	16 (12.9)
Married	325	225 (63.0)	100 (80.6)
Divorced	55	47 (13.2)	8 (6.5)
Education			
≤Primary school	52	39 (10.9)	13 (10.5)
High school	203	154 (43.1)	49 (39.5)
≥Bachelor's Degree	226	164 (45.9)	62 (50.0)
Occupation			
Unemployed/Housewife	20	15 (4.2)	5 (4.0)
Official	50	37 (10.4)	13 (10.5)
Employees of state-owned enterprises	251	245 (68.6)	78 (62.9)
Company staff	88	60 (16.8)	28 (22.6)
Monthly household income			
≤10,000yuan	72	62 (17.4)	10 (8.1)
10,001-15,000yuan	92	63 (17.6)	29 (23.4)
15,001-20,000yuan	134	100 (28.0)	34 (27.4)
≥21,000yuan	183	132 (37.0)	51 (41.4)
Region			
West China region	21	16 (4.5)	5 (4.0)
South China region	137	107 (30.0)	30 (24.2)
Central China region	66	49 (13.7)	17 (13.7)
North China region	257	185 (51.8)	72 (58.1)

4.2 Health characteristics of tourists

The results showed the distribution of the Illness history across type of tourists (Table 2). The majority of the illness were hypertension, coronary heart disease and diabetes, accounting for 57.5%, 53.4% and 35.6% respectively. In non-medical group, the findings indicated that 77.3% had never been diagnosed; 79.0% had hypertension which is the most dominant. Whereas in medical group, 75.0% had ever been diagnosed; 54.8% had the coronary heart disease; 50.5% had diabetes: These are more obviously than the others. As for medical services history in Thailand, it was found that 74.2% never had experienced the services; whereas 25.8% had experienced it. For those having medical services in Thailand, it is 87.9% had general health examination; 54.0% had cancer screening. As far as hospital location is concern, 59.7% went to hospitals in Bangkok, while the remaining tourists went to hospitals of other provinces. Worth pointing out is that 77.4% went to private hospital, whereas 42.7% went to medical clinics. In terms of hospitals out of Thailand: for non-medical tourist group, only 6.7% of them went to different countries for medical services, i.e., 83.3% went to the United states the most, regarding 54.2% went to South Korea; 45.8% went to Singapore and 41.7% went to Japan. As for medical tourist group, 61.8% of them went to different countries for medical services, i.e., 61.8% went to South Korea the most, regarding 54.4% went to Singapore; 30.9% went to Japan. In addition, in the non-medical tourist group, there is no significant difference on insurance coverage. Most of them chose

travel accident injury insurance (64.8%) and travel personal injury insurance (67.8%).

In the medical tourist group, 64.5% of tourists have health insurance, most of them chose travel accident injury insurance (62.5%) and travel accident rescue insurance (63.8%), 35.5% of tourists did not have overseas travel insurance.

Table 2 Health and medical characteristics of tourists (N=481)

Health Characteristics	Total n	Tourist	
		Non-Medical Tourist (357) n (%)	Medical Tourist (124) n (%)
Illness history			
Never diagnosed	307	276 (77.3)	31 (25.0)
Ever (multiple choices)	174	81 (22.7)	93 (75.0)
Coronary heart disease	93	42 (51.0)	51 (54.8)
Diabetes mellitus	62	15 (18.5)	47 (50.5)
Kidney disease	37	-	37 (39.8)
Hypertension	100	64 (79.0)	36 (38.7)
Cancer	9	-	9 (9.7)
Other	33	-	7 (7.5)
Have medical services in Thailand			
Never	357	357 (100)	-
Ever (multiple choices)	124	-	124 (100)
Treatment in Bangkok	74	-	74 (59.7)
Treatment in Pattaya	30	-	30 (24.2)
Treatment in Chiangmai	25	-	25 (20.2)
Treatment in Phuket	10	-	10 (8.1)
Types of hospitals providing Medical services			
Never	357	357 (100)	-
Ever (multiple choices)	124	-	124 (100)
Private hospital	96	-	96 (77.4)
Medical Clinic	53	-	53 (42.7)
Beauty Clinic	18	-	18 (14.5)
Dental Clinic	17	-	17 (13.7)
Government hospital	8	-	8 (6.5)
Other	2	-	2 (1.6)

Table 2 Health and medical characteristics of tourists (N=481) (Cont's)

Health Characteristics	Tourist		
	Total	Non-Medical Tourist (357)	Medical Tourist (124)
	n	n (%)	n (%)
Types of Medical services receive			
Never	357	357 (100)	-
Ever (multiple choices)	124	-	124 (100)
General health examination	109	-	109 (87.9)
Cancer screening	67	-	67 (54.0)
X-ray	41	-	41 (33.1)
Cardiovascular	38	-	38 (30.6)
Kidney disease	38	-	38 (30.6)
Diabetes mellitus	35	-	35 (28.2)
MRI/CT scan	35	-	35 (28.2)
Plastic surgery	23	-	23 (18.5)
Hypertension	22	-	22 (17.7)
Ultrasound	15	-	15 (12.1)
Other	7	-	7 (5.6)
Dental	4	-	4 (3.2)
Overseas travel insurance			
No health insurance	202	158 (44.3)	44 (35.5)
Have health insurance (multiple choices)	279	199 (55.7)	80 (64.5)
Travel accident rescue insurance	136	85 (42.7)	51 (63.8)
Travel accident injury insurance	179	129 (64.8)	50 (62.5)
Travel personal injury insurance	173	135 (67.8)	38 (47.5)
Accommodation tourists travel accident insurance	128	96 (48.2)	32 (40)
Travel emergency rescue insurance	71	59 (29.6)	12 (15)
Other	7	6 (3.0)	1 (1.3)
Medical services history except in Thailand			
Never	389	333 (93.3)	56 (45.2)
Ever (multiple choices)	92	24 (6.7)	68 (54.8)
South Korea	55	13 (54.2)	42 (61.8)
Singapore	48	11 (45.8)	37 (54.4)
Japan	31	10 (41.7)	21 (30.9)
Malaysia	15	-	15 (21.7)
United States	30	20 (83.3)	10 (14.7)
Germany	13	4 (16.7)	9 (13.2)
Switzerland	9	6 (25)	3 (4.4)
India	3	-	3 (4.4)

4.3 Tourism purposes, access to information, accommodation characteristics of tourists

As for tourism purposes, the study indicated the following findings (Table 3): non-medical tourist group, tourists with shopping purposes accounting for 74.5%; those wanted to explore Thai culture accounting for 61.1% and those wanted to have a holiday accounting for 55.5%. As for medical tourist group, those who want to explore Thai culture constituted 48.6%, and those who wanted to do business constituted 48.4%, whereas, those who wanted new experience constituted 46.0%. In addition, most of the non-medical tourist group come Thailand through travel agency introduction (63.6%), and recommended by relatives or friends (52.2%), while most of the accommodation bookings were managed by travel agencies (73.9%). However, for medical tourist group their accommodations were mostly managed by relatives or friends (78.2%), internet-based bookings (51.6%) and advertising through television newspaper or magazine (47.6%), whereas the remaining bookings were managed by travel agencies (47.6%).

Table 3 Tourism purposes, access to information, accommodation characteristics of tourists(N=481)

Purpose Characteristics	Tourist		
	Total	Non-Medical Tourist (357)	Medical Tourist (124)
	n	n (%)	n (%)
Thailand tourism purposes (multiple choices)			
Explore Thai culture	277	218 (61.1)	59 (48.6)
Do business	238	178 (49.9)	60 (48.4)
Look for new experiences	230	173 (48.5)	57 (46.0)
Do shopping	320	266 (74.5)	54 (43.5)
Have recreational activities	174	121 (33.9)	53 (42.7)
Have a holiday	248	198 (55.5)	50 (40.3)
Have night life experiences	209	164 (45.9)	45 (36.3)
Attend the conference	85	53 (14.8)	32 (25.8)
Visit friends and relatives	53	24 (6.7)	29 (23.4)
Visit temples	157	141 (39.5)	16 (12.9)
Go to places as in Thai film I saw	140	129 (36.1)	11 (8.9)
Source of decision to go to Thailand (multiple choices)			
Recommended by relatives or friends	294	197 (55.2)	97 (78.2)
Internet propaganda	22	158 (44.3)	64 (51.6)
Advertising of Television Newspaper or magazine	172	113 (31.7)	59 (47.6)
Travel agency introduction	261	227 (63.6)	34 (27.4)
Accommodation booking			
Travel Agency	323	264 (73.9)	59 (47.6)
Managed by self	92	54 (15.1)	38 (30.6)
Friends and relatives are the operators	66	39 (10.9)	27 (21.8)

4.4. Exploratory factor analysis (EFA)

Cronbach's alpha reliability was obtained using the Spearman-Brown formula.

Table 4 showed the reliability and correlations between items and for the total MTP-40 scale. Cronbach's alpha of the MTP-40 was 0.97 (>0.90), indicating that the scale has an excellent reliability and correlations. The Cronbach's alpha coefficients when an item was deleted were over 0.90, but below the overall coefficient 0.97, they ranged from 0.96 to 0.97 when an item was deleted. indicating that each item was necessary and of equal importance. Furthermore, if a correlation of scale to total value less than 0.20 or 0.30 which indicates that the corresponding item does not correlate very well

with the scale overall and, thus, it may be dropped (Everitt 2002, Field 2005). However, each of the 40 items' correlation coefficients with the total scale ranged from 0.43 to 0.80. Therefore, no need to remove any items.

Table 4 internal consistency of MTP-40 scale

MTP-40 items	Correlation of item with total scale	Cronbach's alpha if the item is deleted
1.Stable exchange rate	0.65	0.96
2.Safe to travel	0.63	0.97
3.Cultural similarity	0.63	0.97
4.Stable economy	0.53	0.97
5.Low corruption	0.54	0.96
6.Overall positive country image	0.60	0.96
7.Language similarity	0.60	0.97
8.Convenient to travel	0.65	0.97
9.Favorable exchange rate	0.61	0.96
10.Overall positive medical tourism image	0.59	0.97
11.Exotic tourism destination	0.46	0.97
12. Many cultural or natural attractions	0.52	0.97
13.Popular tourist destination	0.54	0.97
14.Safe tourist destination	0.45	0.97
15.Attractive tourist destination	0.54	0.96
16.Great weather	0.43	0.97
17.Low costs travel	0.55	0.96
18.Low healthcare costs	0.45	0.97
19.Low treatment costs	0.57	0.97
20.Low accommodation costs	0.56	0.97
21.Affordable travel airfares	0.57	0.97
22.High quality of healthcare	0.77	0.97
23.Internationally certified doctors	0.78	0.97

Table 4 internal consistency of MTP-40 scale (Cont's)

MTP-40 items	Correlation of item with total scale	Cronbach's alpha if the item is deleted
24.Doctors and staff can speak Chinese	0.78	0.97
25.Doctors and staff are easy to communicate	0.74	0.97
26.Internationally educated doctors	0.70	0.97
27.Hospitals/medial facilities recommend	0.77	0.97
28.Reputable hospitals/medical facilities	0.77	0.96
30.State-of-the-art medical equipment	0.74	0.97
31.Well-trained doctors	0.79	0.97
32.Well experienced doctors	0.80	0.97
33.Reputable doctors	0.79	0.96
34.Hospital/medical facilities with good quality indicators	0.80	0.96
35.Friendly staff and doctors	0.78	0.97
36.Hospital/medical facilities with high standards	0.78	0.97
37.Doctors recommend to family or friends	0.78	0.96
38.Quality treatments and medical materials	0.79	0.97
39.Internationally certified staff and doctors	0.75	0.96
40.The hospital has Chinese translator	0.76	0.97
Overall Cronbach's alpha	0.97	

In the factor analysis process, the total sample was (N=481) conducted by Exploratory Factor Analysis(EFA) using IBM SPSS Version 22. EFA was used to identify the possible latent variables of the MTP-40. Table 5 showed the results of the EFA of the scale using the principal axis extraction method with varimax rotation. Kaiser-Meyer-Olkin (KMO) measured the sampling adequacy of the 40 items as 0.94 (>0.90), and the Bartlett test results passed the significance test (approximated chi-

square=22328.33, $df=780$, $P<0.001$), indicating the adequacy of the sample and suitable factor analysis. We extracted 4 factors: Factor 1; Factor 2; Factor 3; Factor 4. The eigenvalue of each factor was greater than 1, and the load factor was greater than 0.30 for each item. Based on the previous preset model, we named each factor as follows (Table 6): Factor 1 namely Facility and Services with a reliability coefficient of 0.98 which included 19 items, item 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39 and 40, explained 46.8% of the variance. Factor 2 namely Country Environment with a reliability coefficient of 0.95 which included 10 items, item 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, explained 11.2% of the variance. Factor 3 namely Tourism Destination with a reliability coefficient of 0.87 which included 6 items, item 11, 12, 13, 14, 15 and 16, explained 5.6% of the variance. Factor 4 namely Medical Tourism Costs with a reliability coefficient of 0.82 which included 5 items, item 17, 18, 19, 20 and 21, explained 4.4% of the variance. All of the four factors in total explained 68.0% of the total variance.

Table 5 EFA of MTP-40 (N=481)

Items	Rotated Factor Loading			
	Component			
	Factor 1	Factor 2	Factor 3	Factor 4
	Facility and Services	Country Environment	Tourism Destination	Medical Tourism Costs
1.Stable exchange rate	0.26	0.75	0.15	0.14
2.Safe to travel	0.21	0.76	0.15	0.18
3.Cultural similarity	0.26	0.69	0.23	0.07
4.Stable economy	0.16	0.70	0.13	0.09
5.Low corruption	0.15	0.72	0.10	0.14
6.Overall positive country image	0.19	0.78	0.14	0.13
7.Language similarity	0.20	0.80	0.10	0.13
8.Convenient to travel	0.21	0.80	0.17	0.16
9.Favorable exchange rate	0.23	0.73	0.08	0.20
10.Overall positive medical tourism image	0.16	0.75	0.17	0.15
11.Exotic tourism destination	0.19	0.12	0.70	0.15
12. Many cultural or natural attractions	0.23	0.20	0.66	0.13
13.Popular tourist destination	0.23	0.24	0.69	0.10
14.Safe tourist destination	0.19	0.11	0.70	0.12
15.Attractive tourist destination	0.24	0.17	0.72	0.15
16.Great weather	0.13	0.19	0.69	0.10
17.Low cost travel	0.25	0.24	0.23	0.60
18.Low healthcare costs	0.21	0.16	0.10	0.65
19.Low treatment costs	0.21	0.24	0.17	0.83
20.Low accommodation costs	0.22	0.28	0.17	0.69
21.Affordable travel airfares	0.23	0.22	0.16	0.84
22.High quality of healthcare	0.80	0.19	0.16	0.14

Note: factor loading ≥ 0.30 are denoted in the bold face font.

Table 5 EFA of MTP-40 (N=481) (Cont's)

Items	Rotated Factor Loading			
	Component			
	Factor 1	Factor 2	Factor 3	Factor 4
	Facility and Services	Country Environment	Tourism Destination	Medical Tourism Costs
23.Internationally certified doctors	0.82	0.16	0.15	0.20
24.Doctors and staff can speak Chinese	0.85	0.17	0.14	0.13
25.Doctors and staff are easy to communicate	0.74	0.21	0.16	0.16
26.Internationally educated doctors	0.71	0.19	0.15	0.17
27.Hospitals/medial facilities recommend	0.79	0.20	0.16	0.16
28.Reputable hospitals/medical facilities	0.80	0.19	0.14	0.19
29.Internationally accredited hospitals/medical facilities	0.82	0.17	0.13	0.12
30.State-of-the-art medical equipment	0.81	0.15	0.14	0.12
31.Well-trained doctors	0.83	0.20	0.13	0.18
32.Well experienced doctors	0.87	0.15	0.16	0.14
33.Reputable doctors	0.80	0.19	0.19	0.19
34.Hospital/medical facilities with good quality indicators	0.83	0.21	0.18	0.13
35.Friendly staff and doctors	0.82	0.25	0.14	0.06
36.Hospital/medical facilities with high standards	0.82	0.19	0.20	0.11
37.Doctors recommend to family or friends	0.82	0.17	0.16	0.16
38.Quality treatments and medical materials	0.86	0.18	0.16	0.12
39.Internationally certified staff and doctors	0.83	0.20	0.13	0.05

Note: factor loading ≥ 0.30 are denoted in the bold face font.

Table 5 EFA of MTP-40 (N=481) (Cont's)

Items	Rotated Factor Loading			
	Component			
	Factor 1	Factor 2	Factor 3	Factor 4
	Facility and Services	Country Environment	Tourism Destination	Medical Tourism Costs
40.The hospital has Chinese Translator	0.82	0.15	0.16	0.12
Eigenvalue	18.72	4.48	2.25	1.77
Cumulative % of variance	46.8	58.0	63.6	68.0

Note: factor loading ≥ 0.30 are denoted in the bold face font.

The Cronbach's α was computed to all subscales for measuring internal consistency. The α value ranged from 0.82 to 0.97, which showed the subscales and total scale had excellent internal consistency (Table 6).

Table 6: Reliability of MTP and subscales

MTP	Questionnaire comprising the scale	Mean (SD)	Cronbach's α
Total scale	All 40 items		0.97
Subscales			
Country Environment (10)	Item-1, Item-2, Item-3, Item-4, Item-5, Item-6, Item-7, Item-8, Item-9, Item-10	4.1 (0.81)	0.95
Tourism Destination (6)	Item-11, Item-12, Item-13, Item-14, Item-15, Item-16	4.2 (0.79)	0.88
Medical Tourism Costs (5)	Item-17, Item-18, Item-19, Item-20, Item-21	4.1 (0.79)	0.82
Facility and services (19)	Item-22, Item-23, Item-24, Item-25, Item-26, Item-27, Item-28, Item-29, Item-30, Item-31, Item-32, Item-33, Item-34, Item-35, Item-36, Item-37, Item-38, Item-39, Item-40	4.1 (0.81)	0.97

The Pearson correlation coefficient was used to obtain inter-correlation coefficients between the MTP subscales. Table 7 showed that there were significant correlations

between each sub-scale and the total scale (0.39-0.74, $p < 0.01$). The correlation between the subscale Country Environment and the total scale (0.39) was lower than the correlations between subscales Medical Tourism Costs, Facility and Services and total scale (0.71-0.74). This difference of the subscale Country Environment was statistically significant compared to the subscale Tourism Destination ($p < 0.01$), Medical Tourism Costs ($p < 0.01$), Facility and Services ($p < 0.01$). The inter-subscale correlations ranging from -0.02 to 0.48 indicate considerable overlap between the subscales.

Table 7: MTP construct correlation Matrix Model

	MTP total scale	Country Environment	Tourism Destination	Medical Tourism costs	Facility and Services
MTP total scale	1				
Country Environment	0.39*	1			
Tourism Destination	0.71*	-0.02	1		
Medical Tourism Costs	0.73*	-0.02	0.43*	1	
Facility and Services	0.74*	-0.04	0.46*	0.48*	1

Note: inter-correlations between the subscales (* $p < 0.01$)

4.5 The correlation between the medical tourism perception and demographic, health characteristic among Chinese tourists

As the objective was to investigate the correlation between tourist demographic, health characteristic and MTP subscales (Table 8), it was found that indicated that in terms of gender, age, marital status, occupation, illness history, medical tourism history and insurance, which did not have correlation with MTP's subscales and total scale. In terms of education, it had low negative correlation with MTP total scale and MTP's subscales (Tourism Destination, Medical Tourist Costs). Furthermore, there was a medium negative correlation with MTP's subscale (Facility and Services).

Table 8 Correlation coefficients between demographic, health characteristic and MTP subscale scores

	Country Environment	Tourism Destination	Medical Tourism Costs	Facility and Services	Total scale
Gender	0.07	-0.08	-0.02	0.01	-0.01
Age	-0.05	0.01	-0.02	-0.06	-0.05
Marital status	0.00	-0.04	0.06	-0.07	-0.02
Education	-0.01	-0.20*	-0.14*	-0.36*	-0.27*
Occupation	0.01	0.06	-0.04	0.01	0.01
Illness history	0.02	-0.05	0.00	0.01	0.00
Medical tourism history	0.01	-0.05	-0.03	-0.01	-0.03
Insurance	0.02	0.04	-0.08	0.06	0.00

*Superscript letters indicate the probability value associated to the coefficient: $p < 0.01$



Chapter V

CONCLUSION, DISCUSSION, LIMITATION, AND RECOMMENDATION

5.1 Conclusion and Discussion

This study has two purposes: 1) to investigate the factor structure of Medical Tourism perception among Chinese tourists in Bangkok. 2) to investigate the correlation between medical tourism perception and demographic, health characteristic among Chinese tourists.

There were 481 tourists with age more than 18 years old participating in this study, 357 were non-medical tourists and 142 were medical tourists. The tourists in the non-medical tourists group was mainly 18-30 years old, while in the medical tourists group the proportion of tourists aged between 31-40 years old and 51 or above years old was in the majority. The marital status of the tourists was mainly married. Most of the tourists graduated in high school and bachelor's degree or above. The tourists were mainly employees of state-owned enterprises. In terms of household income, the non-medical tourists group earned mainly 15,001-20,000 yuan and 21,000 yuan or above, while in medical tourists group was mainly 21,000 yuan or above. Most of the tourists come from the north and south china region. It can be seen from the demographic characteristics' result of this study that there was no significant difference in gender

composition among Chinese medical tourists who came to Thailand. However, as stated in the previous literature, more than 50.0% of Chinese tourists who went to Korea to receive medical services were women, and 36.5% received plastic surgery (Tian Yating 2014), medical plastic surgery programs are favored by most women. Although the demand of medical plastic surgery for men has gradually increased in recent years, compared with the demand of women, men still belong to a small number of demand groups. In addition, South Korea's plastic surgery technology is playing a leading role in the world, and widely recognized, its reputation more than other countries. For example, in China, the tourists want to obtain a high level of plastic surgery services, an expert would be imported from South Korea to perform the surgery. It can be seen that Chinese people have a very high recognition degree of Korea's plastic surgery technology. It is possible be this is one of the reasons why there are gender composition differences among Chinese medical tourists in Thailand and Korea. In addition, with the change of modern social concept, the status and income of women have been increasing, and their demand for tourism products has gradually tended to be individualized. The health examination and beauty items in the medical tourism market meet the needs of the female market, and stimulate the continuous expansion of the female market in the medical tourism market (Jiang weina 2017).

Additionally, there was difference in age group between non-medical tourists group and medical tourists group, the medical tourism group is dominated by middle-aged

tourists. At present, the middle aged 35-55 years old is a group of people with a certain wealth accumulation in China, but the pressure of life is greater, the decline of their physiological function and bad psychological state leading to serious attention in terms of health and security (Jiang weina 2017). At the same time as people get older, the incidence of disease increases too, older people care more about their health, and the demand for medical care increases accordingly. These comprehensive factors are arguably, the reasons why the medical tourists are mainly middle-aged people.

In this study, the majority of medical tourists were high household income population and most of them were employees of state-owned enterprises that belong to the high-income group in China. Although Thailand's medical tourism expenses are more cost-effective than those in Europe and the United States, the medical tourism still has certain demands depending on income level. After all, some advanced medical treatment, medical technology and high quality services are mainly aimed at high income consumer group. By the end of 2013, there were 202 million people aged over 60 in China, with an aging level of 14.8%, the above indicators were higher than some of China's big cities. They have both the demand of health care and the economic strength, considering that 42.8% of the elderly people in the city have savings bank accounts. Each year the total of the old people's retirement pension, the income of the employment, the support of the children and so on can reach 400 billion yuan (Hou Tianyi 2013).

It was worth mentioned that most of the medical tourists came from the north of China. At present, the level of medical treatment in the south is better than the north. Another point, due to geographical location, the northern climate is cold, heating mode is mainly coal burning, which led to a serious air pollution, and people in the north mainly consume diet with high calorie to become obese population. Therefore, the prevalence of cardiovascular diseases among the population remains high (China cardiovascular disease report writing group 2014). In this study, the majority of medical tourists had cardiovascular disease, and the number of tourists who came to treat cardiovascular disease were high as well.

In the illness history, the disease hypertension, coronary heart disease, diabetes accounted for a higher proportion among the tourists. In non-medical group, hypertension and Coronary heart disease were majority, while in medical group, the coronary heart disease, diabetes, kidney disease and hypertension were in the majority. Regarding the medical services history in Thailand, most of tourists didn't experience it. In the experienced group, most of tourists selected general health examination and cancer screening, and then had medical experiences in Bangkok. In addition, private hospital and medical clinic were the most popular among tourists. As can be seen from the above results, most of the medical tourists chose private hospitals located in Bangkok metropolis, owing to the fact that Bangkok has better medical resources and environment than other provinces in Thailand. Furthermore, there are many well-

known private hospitals in Bangkok, such as Bumrungrad Hospital, whereas approximately 40% of the patients are foreign nationals among tourists or medical tourists from 190 different countries (Bumrungrad international hospital 2012); Bangkok Hospital as one of the top 10 medical tourism hospitals in the world by MTQVA (Global Medical Tourism Union) and was awarded the Royal Medal by King Bhumibol of Thailand. So far, the Bangkok Hospital has become one of the only two hospitals in Thailand to receive the award. The hospital has the first European Aeronautical Safety Council certified medical rescue airline in Asia, which is unique in Thailand and even in Asia (Fu Shengyu 2012). However, a number of Thailand's government hospitals have lower level standard than private hospitals in terms of the medical services quality and the medical environment, although their medical services costs is much lower than that of private hospitals, especially the low-cost medical services that only reserved for Thai nationals despite a long queue and waiting time. These characteristics about the choice of hospital type are clearly not needed by Chinese tourists.

Moreover, in medical tourist group, most of them have been to other countries for medical services, for example, South Korea, Singapore and Japan. As previously mentioned, the number of Chinese traveling abroad to South Korea is increasing every year, accounting for 20.4% of the total number of South Korean overseas medical tourists, surpassing the United States, Japan and other countries for the first time,

ranking first (Tian Yating 2014). Besides, there is little difference between medical and non-medical tourist groups in terms of insurance coverage, which may be due to the fact that China does not currently provide relevant overseas medical insurance. At present, most of the insurance provided by outbound travel is in favor of personal safety accidents, while Chinese residents' medical insurance can only be used in China.

In the non-medical group, their main purposes in visiting Thailand were shopping, exploring Thai culture and holiday vacation, while the medical group mostly wanted (except medical treatment) to explore Thai culture, doing business and looking for new experiences. Moreover, most of the non-medical group came to Thailand by the recommendation of travel agency, relatives or friends, and most of the accommodations were recommended by travel agencies. However, most of the medical group tourists came through the recommendation of relatives or friends, internet search and advertising through television, newspaper or magazine, and most of the accommodations were recommended or managed by travel agencies. After comparing the two groups, we found that exploring Thai culture is the main purpose of Chinese tourists, and Thailand is a world-class tourist destination, not only rich in natural resources, but also unique in cultural resources. Thailand's culture affected the Chinese tourists very strongly, such as the Thai Buddhist, architecture, marriage customs, especially the Thai ladyboy culture, a lot of Chinese tourists come to Thailand for watching a ladyboy show at such places as Pattaya and Bangkok.

This study revealed that MTP has occurred during and after the tourists received the corresponding medical services. As previously reviewed, the study combined the theory of the main factors that influencing medical tourism as a theoretical model. It is based on country environment factors, tourism destination factors, medical tourism costs factors and facility and services factors. The result shows the appropriate structure of Chinese tourists' perception for medical tourism from Exploratory Factor Analysis (EFA). Tourist perception is regarded as an important intermediary variable influencing tourist destination choice (Pearce P 1982). Li jie, Zhao Xiping (Li jie 2000) study on American tourists' perception of Xi'an defines tourism perception as a psychological process in which people obtain information about tourism objects, tourist environment conditions and so on through sensory organs. Alain Decrop (Alain Decrop 2000) defines tourist perception as the process of transforming travel information from the outside world into an internal world of thought that each of us will experience. Melinda et al (M Hillery 2001) and Petrosillo (I Petrosillo 2007) refer to the quality of the environment that tourists feel at their destination as tourist perception. The study on tourists' perception by international scholars is mainly based on empirical research. Studies by Lewis (P G Lewis 1995); Martin (Martin Oppermann 1996) and Kemal (Kemal Kantarci 2007) highlight views of tourism operators and investors about tourism as a whole to tourism destinations, which are defined by perception. The Cedric (Cedric Cullingford 1995) and Bob (Bob Mckercher 2003) et al surveys of potential tourists are mainly concerned with the content of tourist destination image and

destination service, which are defined as tourist perception. A study on tourist perception by Simon (Simon Wong ChakKeung 2000) and Atila (AtilaYtiksel 2007) based on tourists' Evaluation of tourist destination Service and Shopping experience. This study specifically found that perception factors were classified into 4 groups: country environment factors, tourism destination factors, medical tourism costs factors and facility and services factors. These 4 perception factors further indicated that the travelling of Chinese medical tourists affected by those 4 factors, which is similar to the previous findings of the KTO (Korea Tourism Organization 2009), that investigated the perception of medical tourists in South Korea's medical service satisfaction. In the survey, 544 patients were from Canada, China, Egypt, Japan, kazakhstan, South Korea, Russia, Britain, the United States and other countries. The results show that Chinese tourists are mainly focus on facility and services. Another survey was conducted by the KTO (Korea Tourism Organization 2008) to explore the importance of medical tourism services in South Korea. Samples from China, Japan and the United States tested in patients with medical tourism in South Korea, according to the survey, in medical services, patients think medical staff's skill is the most important factor, second is the ability to follow the religious medical center, the method and medical facilities and equipment is the third. In terms of other factors, patients think staff-patient-attitude first, followed by the cost (second), ease of access (third), convenient communication (fourth), service (fifth), tourism product packaging (sixth), and insurance relief (seventh). From the study of KHIDI (KHIDI 2009), which conducted a survey of

China's medical tourism market. The result is also similar to our study. Chinese tourists are also very concerned about the medical tourism costs, facility and service, Chinese tourists in choosing South Korea as a medical tourism destination, first they consider the skills of the medical personnel, followed by the medical center of the brand, medical facilities and equipment, and the cost of medical service. What they most often complained about is the high medical services cost, second is communication difficulties, next is the complexity of the airport registration and check out procedures, not credible medical diagnosis, as well as local and foreign standard of double pay patients.

Considering the correlation between demographic, health characteristic and MTP among Chinese tourists. The results indicated that gender, age, marital status, occupation, illness history, medical tourism history and insurance have no correlation with MTP. Education had low negative correlation with MTP total scale and MTP's subscales (Tourism Destination, Medical tourist Costs). Furthermore, there was a medium negative correlation with MTP's subscale (Facility and Services). Although the education had low correlation with the subscales (Tourism Destination, Medical Tourist Costs) and MTP total scale in this survey, the sample size based on this study is large and the sample size is large enough to make a small effect significant. Thus, it is too premature to make a conclusion that the correlation is statistically significant but not practically relevant. From the results, we found that among those highly educated

tourists, their perception of choosing Thailand as a medical tourist destination has decreased, which indicated that they chose Thailand as a medical tourism destination that were not because of the factors such as advanced medical facility, good quality medical service, low medical treatment costs, etc. in Thailand. Nowadays, the international medical tourism market has been developed, and many countries have become international medical tourism destinations such as South Africa, Southeast Asia, Latin America, Middle East, etc. (Jiang weina 2017). As mentioned in the previous literature, the top 10 most popular tourism destinations for medical tourism among Chinese tourists are as follows: 1. Japan, 2. South Korea, 3. The United States, 4. Taiwan, 5. Germany, 6. Singapore, 7. Malaysia, 8. Switzerland, 9. Thailand and 10. India (CtripReport 2016). Based on the above conditions, people have a wider choice of destinations for overseas medical tourism, especially those with high-level education background, they have a more comprehensive understanding of the cultural background and different medical systems of different countries, apart from having a higher standard of medical tourism experience, consequently, their perception of medical tourism is not particularly significant in Bangkok, Thailand.

5.2 Limitations:

1. This study uses the translated English questionnaire as a research tool, even though the questionnaire is translated into Chinese by experienced experts, but because of the language and culture of different countries, so there is no guarantee that every

word, every sentence can be expressed precisely in the process of translation.

2. The bias of self-administrated. It is important to consider that the analysis conducted in this study is primarily based on self-administrated data. Therefore, in some cases, due to poor memory or, for some reason, untrue answers can lead to bias.
3. Due to the use of the purposive sampling technique, it can lead to vulnerability to errors in judgment by researcher and low level of reliability and high levels of bias.

5.3 Recommendation:

The results of this study provide an important contribution to existing theories. Firstly, this study identifies and classifies the perception factors in the field of medical tourism. Secondly, the results of this study have certain theoretical significance for establishing the conceptualization of medical tourism perception factors. The study found that among those highly educated tourists, their perception of choosing Thailand as a medical tourist destination has decreased, which indicated that they chose Thailand as a medical tourism destination that were not because of the factors such as advanced medical facility, good quality medical service, low medical treatment costs, etc. According to this guidance, Thailand government or relevant institutions can cooperate with China ministry of tourism to promote Thailand's medical tourism, not only in the city, surrounding cities and counties should be vigorously promoted. The target population is Chinese with a low educational background, they would prefer choose Thailand as a destination for medical tourism than people with a higher education

background. On the other hand, the study results involve the perception of medical destination beyond the control of the hospital, the perception of the country environment, both of which relate to the overall image of the country, all of which require the government to implement effective policies. Such as maintaining the political stability of the country, making the country more secure, the cost of transportation and the degree of convenience and visa procedures more reasonable, so as to attract more tourists. It should be also focus on medical quality services and medical costs, these factors related to hospital. The experience of medical tourists dominates the development direction of the medical market, and the perception of tourists mainly comes from the quality and cost of medical services, but it is not easy to increase medical tourists. Because they are influenced by a variety of factors, such as competitors or time cycles, hospital managers should conduct regular quality of service surveys. An understanding of customer needs and expectations should also be followed by adequate market research and consultation and training for all medical personnel and staff who interact directly with customers to meet service expectations. With the increasing popularity of medical tourism and the increasing number of third parties in medical tourism, the further study of medical tourism should focus on the role of medical intermediaries in medical tourism, and the steady increase of medical costs in developed countries. Future research should focus on the economic impact of medical destination countries.

Appendix 1

A questionnaire assessing the perception for medical tourism services by Chinese tourists in Bangkok, Thailand

The explanation of questionnaire

This questionnaire is for surveying the perception for medical tourism services by Chinese tourists in Bangkok, Thailand. This questionnaire consists of 56 items, the interview time is about 45 minutes.

Part 1: General information	number 7 items
Part 2: Health information	number 6 items
Part 3: Tourism purpose, access to information and accommodation	number 3 items
Part 4: Factor influencing medical tourism	number 40 items

The data from the interviews were analyzed in total. The information obtained is useful for assessing the perception for medical tourism service and providing guidance in the development of medical tourism. If you have any questions, feel free to contact us:

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Mr. Zhuang Liu

Tel: 064-748-9248

College of public Health Sciences

Chulalongkorn University

Please answer all questions and please listen to the explanation of each interview before starting.

Thank you for your cooperation

ID.....

Date collection site.....

Date collector name.....

Questionnaire

Explanation: Please mark ✓ in the □, and other answers fill in the blanks.

Part 1: General information

1. Gender

1. Male

2. Female

2. Age.....year

3. Marital status

1. Single

2. Married

3. Divorced

4. Other (please specified)

4. The highest level of education you have completed

1. Under Primary school

2. Primary school

3. High school

4. Bachelor's Degree

5. Master's Degree



6. Doctoral Degree

7. Other (please specified)

5.Occupation

1. Unemployed/Housewife

2. Official

3. Employees of state-owned enterprises

4. Company staff

5. Trade

6. Farmer

7. Labor

8. Other (please specified)

6. Monthly household income

1. <5,000yuan

2. 5,000-10,000yuan

3. 10,001-15,000yuan

4. 15,001-20,000yuan

5. 20,001-30,000yuan

6. >30,000yuan

7. Which region of China are you from?

1. East China region



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- 2. South China
- 3. Central China
- 4. North China
- 5. Northwest region
- 6. Southwest region
- 7. Northeast region
- 8. Hong Kong, Macao and Taiwan

Part 2: Health information

1. Have you ever been diagnosed with any of the following medical conditions? (you can choose more than one answer)

- 1. Never
- 2. Ever
 - 2.1 Diabetes mellitus
 - 2.2 Hypertension
 - 2.3 Coronary heart disease
 - 2.4 Kidney disease
 - 2.5 Cancer
 - 2.6 Other (please specified)

2. Have you ever used medical services from a hospital in Thailand? (you can choose more than one answer)

- 1. Never

2. Ever

2.1 Treatment in Bangkok

2.2 Treatment in Chiangmai

2.3 Treatment in Pattaya

2.4 Treatment in Phuket

2.5 Other (please specified)

3. Where did you get medical treatment / services in Thailand? (you can choose more than one answer)

1. Never

2. Ever

2.1 Government hospital

2.2 Private hospital

2.3 Medical Clinic

2.4 Beauty Clinic

2.5 Dental Clinic

2.6 Other (please specified)

4. What kind of medicine / treatment did you do in Thailand? (you can choose more than one answer)

1. No treatment requirement

2. Have treatment requirement

2.1 General health examination



2.2 Cancer screening

2.3 X-ray

2.4 MRI/CT scan

2.5 Ultrasound

2.6 Diabetes mellitus

2.7 Hypertension

2.8 Cardiovascular

2.9 Cerebrovascular

2.10 Kidney disease

2.11 Dental

2.12 Plastic surgery

2.13 Other (please specified)



5. Which kind of overseas travel insurance do you have? (you can choose more than one answer)

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1. No health insurance

2. Have health insurance

2.1 Travel accident injury insurance

2.2 Travel personal injury insurance

2.3 Accommodation tourists travel accident insurance

2.4 Travel accident rescue insurance

2.5 Travel emergency rescue insurance

2.6 Other (please specified)

6. Which country have you been to for medical services except Thailand? (you can choose more than one answer)

1. Never been to any country for medical services

2. Ever

2.1 Japan

2.2 South Korea

2.3 United States

2.4 Germany

2.5 Singapore

2.6 Malaysia

2.7 Switzerland

2.8 India

2.9 Other (please specified).....



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Part 3: Tourism purpose, access to information and accommodation

1. What is the purpose of this visit (you can choose more than one answer)

1. To visit friends and relatives

- 2. To have a holiday
- 3. To do business
- 4. To explore Thai culture
- 5. To look for new experiences
- 6. To have recreational activities
- 7. To attend the conference
- 8. To get medical treatment in Thailand
- 9. To have night life experiences
- 10. To do shopping
- 11. To visit temples
- 12. To go to places as in Thai films I saw
- 13. Others (please specify).....



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2. The source of your decision to go to Thailand (you can choose more than one answer)

- 1. Travel agency introduction
- 2. Internet propaganda
- 3. Recommended by relatives or friends.
- 4. Advertising of Television Newspaper or magazine
- 5. Other (please specified).....

3. In Thailand, who is responsible for managing your accommodation in Thailand?

- 1. Managed by yourself
- 2. Travel Agency
- 3. Friends and relatives are the operators
- 4. Other (please specified)

Part 4 : Factor influencing medical tourism

Explanation: The following questions are asking your opinion about choosing

Thailand as a medical tourism destination. Please check the box

mark ✓ that most closely matches your comment.

①=Strongly disagree ②=Disagree ③Neutral ④Agree ⑤Strongly agree

You choose Thailand as your destination for medical treatment because:	Degree of consent	
	Strongly disagree	Strongly agree
	① —————> ⑤	
Country Environment		
1.Has a stable exchange rate	①	② ③ ④ ⑤
2.Is Safe to travel to	①	② ③ ④ ⑤
3.Has a culture similar to China	①	② ③ ④ ⑤
4.Thailand has a stable economy	①	② ③ ④ ⑤
5.Thailand has low corruption	①	② ③ ④ ⑤
6.Thailand is a country with a good overall image	①	② ③ ④ ⑤
7.There are similar languages to mine	①	② ③ ④ ⑤
8.Is Convenient to travel to	①	② ③ ④ ⑤
9.Has a favorable exchange rate	①	② ③ ④ ⑤
10.Has overall a positive medical tourism image	①	② ③ ④ ⑤

You choose Thailand as your destination for medical treatment because:	Degree of consent
	Strongly disagree Strongly agree
	① —————→ ⑤
Tourism Destination	
11. Is an exotic tourist destination	① ② ③ ④ ⑤
12. Has many cultural or natural attractions	① ② ③ ④ ⑤
13. Is a popular tourist destination	① ② ③ ④ ⑤
14. Is safe tourist destination	① ② ③ ④ ⑤
15. Thailand is an attractive tourist destination	① ② ③ ④ ⑤
16. Has great weather	① ② ③ ④ ⑤
Medical Tourism Costs	
17. Is low cost to travel to	① ② ③ ④ ⑤
18. Has low healthcare costs	① ② ③ ④ ⑤
19. Has low treatment costs	① ② ③ ④ ⑤
20. Has low accommodation costs	① ② ③ ④ ⑤
21. Has affordable airfares to travel to	① ② ③ ④ ⑤
Facility and Services	
22. Has high quality of healthcare	① ② ③ ④ ⑤
23. Has internationally certified doctors	① ② ③ ④ ⑤
24. Has doctors and staff who can speak Chinese	① ② ③ ④ ⑤
25. Has doctors and staff who are easy to communicate with	① ② ③ ④ ⑤
26. Has internationally educated doctors	① ② ③ ④ ⑤
27. Has hospitals/medical facilities I would recommend to my family or friends	① ② ③ ④ ⑤

You choose Thailand as your destination for medical treatment because:	Degree of consent
	Strongly disagree Strongly agree
	① —————→ ⑤
28.Has reputable hospitals /medical facilities	① ② ③ ④ ⑤
29.Has internationally accredited hospitals/medical facilities(e.g.,JCI,ISQUA)	① ② ③ ④ ⑤
30.Is known for state-of-the-art medical equipment	① ② ③ ④ ⑤
31.Has well-trained doctors	① ② ③ ④ ⑤
32.Has well experienced doctors	① ② ③ ④ ⑤
33.Has reputable doctors	① ② ③ ④ ⑤
34.Has hospital/medical facilities with good healthcare quality indicators(e.g.,low infection rate)	① ② ③ ④ ⑤
35.Has friendly staff and doctors	① ② ③ ④ ⑤
36.Has hospital/medial facilities with high standards	① ② ③ ④ ⑤
37.Has doctors I would recommend to my family or friends	① ② ③ ④ ⑤
38.Has quality treatments and medical materials	① ② ③ ④ ⑤
39.Has internationally certified staff and doctors	① ② ③ ④ ⑤
40.The hospital has a Chinese Translation	① ② ③ ④ ⑤

Appendix 2

一项关于在泰国曼谷的中国游客对医疗旅游服务认知的问卷调查

问卷说明

本问卷旨在调查泰国曼谷的中国游客对医疗旅游服务的看法。问卷共 56 项。回答时间大约是 45 分钟。

- | | |
|---------------------|----------|
| 第1部分：一般信息 | 共包括7个问题 |
| 第2部分：健康信息 | 共包括6个问题 |
| 第3部分：旅游目的，信息途径，住宿安排 | 共包括3个问题 |
| 第4部分：影响医疗旅游的因素 | 共包括40个项目 |

该调查数据收集后将进行汇总然后分析，所得的信息对于评估医疗旅游服务的感知能力和医疗旅游的发展提供指导具有重要意义。如果您有任何问题，请随

时与我们联系：

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CHULALONGKORN UNIVERSITY

联系人：刘壮

电话: 064-748-9248

泰国朱拉隆功大学公共卫生学院

请在开始作答前耐心的听取作答要求并回答全部问题

感谢您的配合

问卷编号.....

调查地点.....

调查者签名.....

问卷

说明：请在方框中勾选 ✓ 作答,如为其它答案请填写在横线处。

第一部分：一般信息

1.您的性别?

1.男性

2.女性

2.您的年龄____岁

3.您的婚姻状况?

1.单身

2.已婚

3.离异

4.其它_____

4.您目前的最高学历?

1.低于初中

2.初中

3.高中

4.本科

5.硕士



6.博士

5.您目前的职业?

1.无业或家庭主妇

2.国家公务人员

3.国企工作人员

4.私企工作人员

5.商人

6.农民

7.劳力工作者

8.其它_____

6. 家庭月收入?

1.<5,000元

2.5,000-10,000元 จุฬาลงกรณ์มหาวิทยาลัย

3.10,001-15,000元 CHULALONGKORN UNIVERSITY

4.15,001-20,000元

5.20,001-30,000元

6.>30,000元

7.你来自中国的哪个地区?

1.华东地区

2.华南地区



3.华中地区

4.华北地区

5.西北地区

6.西南地区

7.东北地区

8.港澳台地区

第二部分：健康信息

1. 你是否曾被诊断患有以下任何一种疾病？(您可以选择多个答案)

1.未患有疾病

2.糖尿病

3.高血压

4.心脏病

5.肾病

6.肿瘤

7.其它_____

2. 您曾经接受过泰国医院的医疗服务吗？(您可以选择多个答案)

1.未接受过

2.接受过

2.1.在曼谷接受过治疗

2.2.在清迈接受过治疗



2.3.在芭提雅接受过治疗

2.4.在普吉接受过治疗

2.5.其它_____

3. 您或您的家人在泰国哪种类型的医院接受过医疗服务? (您可以选择多个答案)

1.未接受过

2.公立医院

3.私立医院

4.医疗诊所

5.美容诊所

6.牙科诊所

7.其它_____

4. 您这次需要哪种类型的检查或者治疗? (您可以选择多个答案)

1.无需要

2.普通健康体检

3.肿瘤筛查

4.X线检查

5.CT或者磁共振检查

6.超声检查

7.糖尿病治疗

8.高血压治疗



9.心血管疾病治疗

10.脑血管疾病治疗

11.肾病治疗

12.牙科治疗

13.整形外科治疗

14.其它_____

5.您目前有哪种境外旅游保险? (您可以选择多个答案)

1.无任何旅游保险

2.旅游意外伤害保险

3.旅游人身意外伤害保险

4.住宿游客旅游意外保险

5.旅游意外救助保险

6.旅游紧急救援保险

7.其它_____

6.除泰国外,您曾经在以下哪些城市接受过医疗服务? (您可以选择多个答案)

1.没有在任何城市接受过

2.日本

3.韩国

4.美国

5.德国



- 6.新加坡
- 7.马来西亚
- 8.瑞士
- 9.印度
- 10.其它_____

第三部分：旅游目的，信息途径及其住宿安排

1.您这次来泰国的目的是什么？（您可以选择多个答案）

- 1.拜访亲友
- 2.度假
- 3.做生意
- 4.探索泰国文化
- 5.寻找新的体验
- 6.参加娱乐活动
- 7.参加会议
- 8.来泰国就医
- 9.寻找夜生活体验
- 10.购物
- 11.参观寺庙
- 12.去一些曾在电影上看到过的地方
- 13.其它_____



2. 您通过获得以下哪种信息途径并最终选择去泰国? (您可以选择多个答案)

1.旅行社推荐

2.网络宣传

3.亲戚或朋友推荐

4.电视广告、报纸或杂志

5.其它_____

3. 谁负责管理您在泰国的住宿事宜?

1.由自己管理

2.旅行社

3.亲戚或者朋友

4.其它_____



第四部分：影响医疗旅游的因素

说明: 以下问题将询问您对选择泰国作为医疗旅游目的地的看法。请在最

接近您看法的程度上打钩“√”。

①=强烈不同意 ②=不同意 ③=中立 ④=同意 ⑤=强烈同意

如果您选择泰国作为你的医疗目的地，是因为：	同意程度	
	强烈不同意	强烈同意
	①—————→⑤	
国家环境		
1.有稳定的汇率	① ② ③ ④ ⑤	
2.旅行过程是安全的	① ② ③ ④ ⑤	
3.文化与中国相似	① ② ③ ④ ⑤	
4.泰国具有稳定的经济状态	① ② ③ ④ ⑤	
5.泰国国家腐败程度低	① ② ③ ④ ⑤	
6.泰国国家的整体形象是积极的	① ② ③ ④ ⑤	
7.与我所用的语言类似	① ② ③ ④ ⑤	
8.方便前往	① ② ③ ④ ⑤	
9.具有有利的汇率	① ② ③ ④ ⑤	
10.从整体上看泰国具有积极的医疗旅游形象	① ② ③ ④ ⑤	
旅游目的地		
11.泰国是一个奇特的旅游胜地	① ② ③ ④ ⑤	
12.泰国有很多文化或自然景观	① ② ③ ④ ⑤	
13.泰国是一个受欢迎的旅游目的地	① ② ③ ④ ⑤	
14.泰国是一个安全的旅游目的地	① ② ③ ④ ⑤	
15.泰国是一个有吸引力的旅游目的地	① ② ③ ④ ⑤	
16.泰国气候好	① ② ③ ④ ⑤	

如果您选择泰国作为你的医疗目的地，是因为：	同意程度	
	强烈不同意	强烈同意
	①	⑤
	—————→	
医疗旅游花费		
17.旅行成本低	①	② ③ ④ ⑤
18.具有较低的护理费用	①	② ③ ④ ⑤
19.治疗费用低	①	② ③ ④ ⑤
20.住宿费用花费较低	①	② ③ ④ ⑤
21.可负担得起的机票价格	①	② ③ ④ ⑤
设施和服务		
22.具有高质量的医疗护理	①	② ③ ④ ⑤
23.具有国际认证的医生	①	② ③ ④ ⑤
24.有医生和工作人员能够说中文	①	② ③ ④ ⑤
25.医生和工作人员容易沟通	①	② ③ ④ ⑤
26.具有接受过国际教育的医生	①	② ③ ④ ⑤
27.医院/医疗设施，值得推荐给家人或朋友	①	② ③ ④ ⑤
28.医院/医疗设施出名	①	② ③ ④ ⑤
29.具有国际认可的医院/医疗设施(例如，JCI认证)	①	② ③ ④ ⑤
30.以最先进的医疗设备而闻名	①	② ③ ④ ⑤
31.有训练有素的医生	①	② ③ ④ ⑤
32.拥有经验丰富的医生	①	② ③ ④ ⑤
33.有著名的医生	①	② ③ ④ ⑤

如果您选择泰国作为你的医疗目的地，是因为：	同意程度	
	强烈不同意	强烈同意
	① → ⑤	
34.医院/医疗设施有良好的医疗质量口碑(例如，感染率低)	① ② ③ ④ ⑤	
35.具有有好的工作人员和医生	① ② ③ ④ ⑤	
36.医院/医疗设施具备高标准	① ② ③ ④ ⑤	
37.具有值得推荐给家人或朋友的医生	① ② ③ ④ ⑤	
38.在治疗方面和医用材料方面具有保障	① ② ③ ④ ⑤	
39.有国际认证的员工和医生	① ② ③ ④ ⑤	
40.医院配有中文翻译	① ② ③ ④ ⑤	

Appendix 3

The permission for using the questionnaire from the author of the medical tourism index: Scale development and validation

☆

Marc Fetscherin

回复: Request for Questionnaire Permission

收件人: liuzhuangqingmai@gmail.com

18:54

MF

Of course, the items/questions are in the paper

Sent from my iPhone = iTypos. iApologize.

[更多来自"liuzhuangqingmai@gmail.com"的内容](#)

在“已发出邮件 - Doctor-liu(qingmai)”邮箱中找到
➤

liuzhuangqingmai@gmail.com

Request for Questionnaire Permission

收件人: mfetscherin@rollins.edu

18:01

L

Dear Sir/Madame:

I'm Zhuang Liu.A MPH student at college of Public Health Sciences,Chulalongkorn University,Bangkok,Thailand,and currently conducting a research project on Chinese Tourists' perception for Medical Tourism Services in Bangkok,Thailand.

While developing our research questionnaire.I have come across your article on The Medical tourism index:Scale development and validation and,thus would like to ask for your permission to use&modify parts of your questionnaire which i found very resourceful,published in Tourism Management 52(2016)539-556.

Your prompt and kind permission would be highly appreciated.

Yours sincerely.

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2009-2010, In the Fourth Clinical Hospital of Harbin Medical University internship, internship sections are: blood rheumatology, obstetrics, cardiology, gastroenterology, general surgery, respiratory medicine, Radiology and many other departments.

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