

# MEDICAL TOURISM: SPECIFIC PREFERENCE OF FOREIGN TOURISTS IN SELECTED HOSPITALS IN BANGKOK, THAILAND

by
SOMKANUENG LAWTHAWEESAWAT

A Thesis submitted in partial fulfillment of the requirements for the degree of

Master of Business Administration in Tourism Management

Graduate School of Business Assumption University Bangkok, Thailand

April, 2009

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#### **ACCEPTANCE**

This dissertation was prepared under the direction of the candidate's Advisor and Committee Members/Examiners. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Master of Business Administration in Tourism Management in the Graduate School of Tourism Management of Assumption University of Thailand.

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#### **ABSTRACT**

Medical tourism became a niche market and offered the businesses opportunity to many stakeholders. This research was conducted in Bangkok to study the specific preferences and characteristics of a sample of foreign tourists and elements of medical tourism. The data was collected by a set of questionnaire distributed to 152 foreign tourists who obtained medical treatment and at the same time intended to do some tourism activities (before or after the medical treatment) in Thailand during the month of December 2008 to March 2009. Descriptive statistics along with One-way Anova, independent sample t-test were performed to test the Hypothesis.

The research outcomes revealed that the age of the majority respondents was more than 50 years without health insurance. The majority group of respondents was Asian and Buddhist. They selected Thailand as the destination because of reasonable cost of treatment, quality of care, ease and affordability of international air travel.

The outcomes revealed that under the leisure driven elements of medical tourism, the respondents expressed the highest importance to "Airport pick-up services" while "Vacation prior to surgery/local tours/ sight-seeing/ shopping" was considered as the lowest importance.

Under the medical driven elements of medical tourism at hospital, the respondents have the highest importance to "Safety and quality of care" while "Medical care providers pay attention to religious, dietary and cultural needs" was considered as the lowest importance.

The hypothesis testing results revealed that medical tourists had different age and insurance status do not differ in their importance for all leisure driven elements and medical driven elements of medical tourism, while the medical tourists with different nationality and religion differ in terms of importance for selected leisure and medical driven elements. For example, Muslim medical tourists need attention on their religious (prayer room), dietary (do not eat pork) and cultural needs than other religions as part of the medical service offered in Bangkok, Thailand.

The difference of medical tourists' characteristic and preferences can support the marketers' decision making to design appropriate marketing activities and services to meet their characteristics and preferences.

Keywords: Medical tourism, Leisure driven element, Medical driven element,

Preference

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#### **CHAPTER I**

#### **GENERALITIES OF THE STUDY**

#### 1.1 Background of the Study

Medical tourism is a new form of niche tourism that has emerged from the tourist industry. While some writers have continued to use the phrase 'health tourism' to cover all forms of health-related tourism (e.g. Garcia-Altes, 2005), "medical tourism" can be distinguished as involving specific medical interventions. Today authors such as Connell (2006) defines medical tourism as a popular mass culture "where people travel often-long distances to overseas destinations (India, Thailand, Malaysia) to obtain medical, dental and surgical care while simultaneously being holidaymakers, in a more conventional sense..."

Medical tourism is emerging as a unique and rapid growth industry where people from all around the world are traveling long distances to other countries to obtain medical, dental and surgical care, along with any necessary recuperation, while at the same time touring, vacationing, and experiencing the attractions, culture, and leisure sports of those countries they are visiting. In other words, medical tourism incorporates central features of the medical as well as and the tourism industries at a destination. There are many factors leading to the recent increase in popularity of medical tourism such as the high costs of treatment in developed countries, long waiting time and lists (for what is not considered as priority surgery), ease and affordability of international air travel, favorable currency exchange rates in the global economy, rapidly improving technology and standards of care, the proven safety of medical treatment in selected

foreign countries and the aging of the often affluent post-war baby-boom generation (Connell, 2006). These have all led to the rise of medical tourism. Another reason for the increased levels of medical tourism may be the result of a natural progression or well being pursuits within health tourism; spa resorts, yoga, meditation camps and boot camps or weight-loss health farms (Caballero-Danell and Mugomba, 2006). More medical tourists are traveling abroad when the alternatives such as affordability, enjoyable and safety are comparable in their home countries. Medical tourists are generally residents of the developed countries and primarily come from the United States, Canada, Great Britain, Western Europe, Australia, and the Middle East. They are seeking a destination that provides both enjoyment while on vacation and to obtain medical treatment at a reasonable price (http:en.wikipedia.org).

#### 1.1.1 What is Medical Tourism?

The concept of healthcare tourism developed in the early 1980s, it evolved informally from medical tourism to health-care tourism to health tourism. The concept was eventually published (Goodrich & Goodrich, 1987) and spawned more research in the United States and the United Kingdom.

Healthcare tourism is defined as "the deliberate attempt on the part of a tourist facility (e.g., hotel) or destination (e.g., Baden, Switzerland or Bath, England) to attract tourists by promoting health-care services and facilities, in addition to regular tourist amenities" (Goodrich, 1993). These medical services may include medical examination by qualified doctors and nurses at the resort or hotel, special diets, acupuncture,

transvital injections, vitamin-complex intakes, special medical treatments for various diseases such as arthritis, and herbal remedies.

#### 1.1.2 Brief Historical Perspective of Medical Tourism

The historical perspective of medical tourism started with a natural type of tourism in ancient times when many people traveled to nearby rivers and mineral springs for their alleged curative properties and for relaxation. There is a long tradition of medical tourism in Europe, going back to the water cures of the spas, where the healing mineral water offered miracle cures of all known diseases. By the 18<sup>th</sup> century, numerous spas were operating in many parts of Europe and elsewhere. People have used mineral water to cure such ailments as rheumatism, skin infections, and poor digestion. Many cities such as Baden, Lausanne, St. Moritz, and Interlaken in Switzerland; Baden-Baden and Wiesbaden in Germany; Vienna, Austria; and Budapest, Hungary (Goodrich & Goodrich, 1987) grew up around mineral springs and health spas. The ancient Romans and English visited Bath in England to bathe in the warm springs and mineral waters and drink some of the water for its supposed health benefit (Hembry, 1990).

Today some people believe that bathing in the Dead Sea is healthy because of its high mineral content that is beneficial to health as it cures skin problems. Several health resorts in the area provide facilities for bathers (World Book Encyclopedia, 1984).

Before the Revolutionary War in the United States, residents of the American colonies traveled to mineral springs, seaside resorts and spas such as Yellow Springs near Philadelphia, Stafford Springs in Connecticut, and Berkeley Springs in Virginia. The modern spas and resorts attracted the rich and famous, but more convenient travel and

accommodations have made the spas, seaside resorts, and mineral springs more accessible to the expanding population of travelers (Babcock, 1983).

However, popularity has declined since the turn of the century, and many have gone out of business. In the Caribbean Islands, the tourists and the local people regularly enjoy sea bathing as a healthy activity during the weekend in many islands such as Cuba, Jamaica, St. Lucia, and the Bahamas. Moreover, medical tourism has also spread to many cruise lines (e.g., Carnival and Royal Caribbean) for their passengers to enjoy higher incomes, devote more time to leisure/recreational activities, and seek longer, healthier lives. As well, the cruise lines and hotels the worlds over have added special fitness and wellness seminars to regular spas, pools, and exercise gyms. It is said that the earliest forms of medical tourism were directly aimed to enhance better health and increased well being through relaxation, exercise or a visit to a spa (Connell, 2005).

# 1.1.3 The Medical/Tourism Interaction

In modern times, there has always been a medical/ tourism interaction. The SINCE 1999 aspect of health most commonly considered in relation to tourism is the health of the tourist, and a special discipline called "emporiatrics" deals with this. It has been estimated that 20% to 50% of tourists suffer from some ailment during their travel (Alleyne, 1990). The aspect of tourist health has been so important that an international Association of Tourist Health has been formed, and tourist health has been promoted as a new branch of public health (Alleyne, 1990). Although the illnesses of tourists are generally mild, some tourists suffer heart attacks, life threatening accidents, and death.

Today, high-risk behavior on the part of some tourists, such as drug use and unsafe sex, can also imperil their health.

Perhaps the most visible signs of medical/tourism interaction are:

- (1) the requirement of (tourist) vaccinations against several diseases, such as smallpox, chicken pox, and yellow fever;
- (2) the usual advice to take preventive medicines against such ailments as malaria in the tropics, and to take medicines along on a trip; and
- (3) the tourist industry's concern for the provision of safe, clean food at tourist destinations. This concern is of paramount importance since few things have a more negative impact on a tourist establishment than an outbreak of food-borne illness.

#### 1.1.4 Worldwide Popularity of Medical Tourism

There is no definitive information about how many patients receive medical treatment in medical tourism. A major difficulty in determining the magnitude of medical tourism is the fact that the reported numbers may include expatriates from other nations, business travelers and tourists who require medical care while they are in these destinations for other purposes. The accuracy of reported information cannot be validated. Despite these limitations, it is clear that a substantial number of patients participate in medical tourism (Horowitz & Rosenweig, 2007).

The absence of defined characteristics to collect statistics means that the actual market size of medical tourism is unknown except from the claims by governments and medical groups about the annual medical tourists that visit their destinations.

Measures of the flow of medical tourists vary enormously, partly because it defies easy categorization (e.g., in terms of patients and accompanying family members, etc.). One estimate was of 150,000 medical tourists visiting India alone in 2002, almost half of whom came from the Middle East (Neelankantan, 2003). In 2005, another estimate for 2004 put the annual inflow to India between 10,000 and 20,000 foreign patients (www.expresstravelandtourism.com). At the end of the last century, the number of foreign patients seeking medical treatment in Malaysia was estimated to have been around 400,000 over a two-year period (Chaynee, 2003).

It has also been reported that in 2004 some 247,238 Japanese, 118,701 American, 95,941 British and 35,092 Australian patients were treated in Thai hospitals, though this also includes locally based expatriates and other injured and sick tourists (Levett, 2005).

Certainly, numbers are steadily rising in most destinations, but there are no reliable national figures for any country (Connell, 2006).

Medical tourism in Asia is currently generating US\$1.3 billion in revenue and is expected to grow to US\$4.4 billion by 2012. The major countries competing for medical tourists in Asia are Thailand, Singapore, India and Malaysia. Thailand has presented itself as a leader in medical tourism in this region with more than a million patient visits in 2005, generating revenues of US\$615 million (www.asiabiotech.com). The Confederation of Indian Industry, in consultation with McKinsey and Company reports that medical tourism in India produces annual revenue of US\$300 million, with projected growth to US\$2 billion by 2012 (The Economic Times , 2005).

Medical care providers, should however, consider more than absolute patient numbers when accessing their competitiveness. A small portion of affluent patients are

willing to pay more for world-class treatment, and frequently travel to "gold standard" destinations such as the United States and British. Wealthy individuals in Asia who prefer first-world quality treatment within the region tend to visit Australia or Singapore. The inelastic demand among such patients represents a more lucrative revenue stream, more loyalty, and even a willingness to travel further distances (<a href="www.asiabiotech.com">www.asiabiotech.com</a>).

#### 1.1.5 The rise of Medical Tourism in Asia

Medical tourism has grown in a number of countries, such as India, Singapore and Thailand, many of which have deliberately linked medical care to tourism, and thus boosted the attractions of nearby beaches, and the like. But medical tourism has also developed in South Africa and in countries not hitherto associated with significant levels of Western tourism such as Belarus, Lithuania and Costa Rica. Eastern European countries have become important for dental care and plastic surgery. Jordan serves patients from some parts of the Middle East while Israel caters both to Jewish patients and others from nearby countries, through specializing in female infertility, in-vitro fertilization and high-risk pregnancies.

South Africa has also grown in prominence in recent years, especially for cosmetic surgery, since its costs are less than half those in the United States, from where most of its patients come. Argentina is noted for plastic surgery. The Caribbean has found it more difficult to enter the medical tourism market since, despite its proximity to the United States; its prices cannot compete with those in Latin America (Huff-Rousselle, Shepherd, Cushman, Imrie, & Lalta, 1995). Some Caribbean states have sought to get

around this by specialization. Hence, Cuba specializes in skin diseases and Antigua in dentistry.

Dubai has just built Healthcare City (DHCC) to capture the Middle Eastern market to try to divert attention or popularity from Asia. Unable to compete on price, the Middle East has largely competed on quality, with Dubai bringing in German doctors to guarantee high skill standards, and Lebanon stressing its many doctors trained in Europe and American. Saudi Arabia has sought to link medical tourism, and especially cosmetic surgery and dentistry, with pilgrimage (Hajj) visits to the country, with most patients being from other Gulf countries (Arab News, 27 July 2005).

#### 1.1.6 Thailand Medical Tourism

Medical tourism growth in Thailand has been largely led by the private sector. When revenue from private Thai patients dried up on the onset of the Asian Financial Crisis in 1997, Bumrungrad Hospital began to venture out to source for overseas patients. It was through these pioneering efforts that Thailand's medical tourism industry was born. Since then, other private medical care groups have followed suit. The hospital started to lure Westerners with a combination of modern medical facilities, cheap prices, and beautiful beaches. Since then, they have perfected a formula of luxury accommodations, high quality of care with Western-trained doctors, and procedures that are not normally covered by insurance such as cosmetic dental surgery (www.asiabiotech.com).

Thai medical tourism can attract people from a long distance to obtain medical treatment while simultaneously being holidaymakers (Connell, 2005). The popularity has

grown dramatically in recent years because of the rise of the Internet, advertisements that stress the advanced technology, quality reliability and overseas trained doctors. Globalization and improved communication technology (Sharpley, 2003) as externalities within the global economy also may help to develop this kind of tourism. People from countries outside the hosting country, where medical tourism is pursued, can access information about medical treatment abroad and even consult with doctor and experts in foreign countries by video conferencing, among many other such communication media. Importantly, a broker between an international patient and a hospital network has played an important role in driving the popularity of medical tourism (Connell, 2006). Travel agencies are specializing in medical tourism for individuals and companies are arranging medical tours for their employees, including the scheduling of surgeries and the booking of flights, tours and activities as well as accommodations.

The high cost of treatment and unavailable procedures in developed countries such as the United States, a long waiting list in Great Britain and Canada have forced clients to less developed countries such as Thailand which is well-reputed as a tourist haven, with a variety of existing tourist attractions and beautiful beaches for recuperating patients, a relatively low cost of living, expat-friendly, and a respectable quality of medical care, especially in niche areas such as cosmetic surgery" (<a href="www.asiabiotec.com">www.asiabiotec.com</a>). A myriad of options exist for medical tourists from elective procedures such as rhinoplasty, liposuction, breast augmentation or reduction, LASIK eye surgery and so on, to more serious and life-saving procedures such as joint replacement, bone marrow transplants, and cardiac bypass surgery.

#### 1.1.7 Linkage Between Medical Establishments and Tourism

In Thailand, major private hospitals advertise their services in newspapers, travel periodicals, and even on television. That practice has been extended into the international sphere, where competition is no less fierce. Hospitals focusing on medical tourism advertise their services on the Internet, in brochures and tourist publications.

Few hospitals provide non-medical services to their foreign clients and, when they do, they are often limited to airport transportation and accommodation for accompanying persons. Most hospitals are not, in general, able or willing to provide such services.

One of the alternatives has been to link up with the tourism industry eager to exploit the emerging opportunities this novel kind of tourism offers. Cooperation has taken different forms: one has been to team up with airlines and offer packages, combining vacations with medical treatment or check-ups (Horayangura, 2005); another, to work in conjunction with tourist agencies and set up a variety of package tours that offer medical treatment with vacationing and sightseeing, making it "...possible to combine a visit to the doctor with a trip to Thailand...(as) visitors can now purchase a vacation from their local travel agent and select a (medical) check-up package at the same time" (Bassett, 2002).

Several leading Thai hospitals have also recently established comprehensive direct linkage with the countries from which many of their clients originate (Rungfapaisarn and Pusaksrikit, 2004).

Partnerships with medical establishments abroad are also emerging, as hospitals have joined forces with "well-know health and medical care providers in the Middle East for referrals of their patients to Thailand" (Pratruangkrai, 2006). In addition, several

hospitals have signed "contracts with Middle East governments to outsource some of their medical services to Thailand" (Kurz, 2006).

#### 1.2 Statement of the Problem

Although the topic of medical tourism has aroused increasing attention in some countries in recent years, only a few academic studies have been done pertaining to medical tourism (Anna, 2005; Awadzi and Panda, 2006; Connell, 2006; Forgione and Smith, 2006). The origin of foreigners seeking medical treatment in Thailand is extremely diverse. The main source of demand, however, revolves around two main sets; on the one hand, a few developed countries in which high quality medical services are prohibitively expensive or not readily accessible; on the other, developing countries, in which such services are not readily available.

The strong profitability of foreign – oriented medical business has induced ever more hospitals in Bangkok to cater to medical tourists. To attract foreign patients, leading hospitals have started raising their medical standards and making their establishments more friendly and attractive. In order to attract medical tourists, medical establishments need to adapt their services to the tourists' needs and preferences; their efforts eventually leading to the emergence of a new concept for medical establishments epitomized by hotel-spitals.

Medical care providers can appeal to at least two possible approaches, "medical" and "tourism". Establishments if focusing on "medical care", could come up with advertising appeals directed at people that wish to maintain their youthful vigor and appearance. Medical care providers can advertise about their local and international

reputation, the credentials of their physicians, the outcome of treatment, and even the maintenance of infrastructure. On the other side, if the focus is on "tourism", medical care providers in any country need to assess its general relationship with foreigners, its attractiveness as a tourist destination, and its cultural affinity with the home countries of potential patients.

In Thailand, it is argued that the reputation of the country as a tourist destination has boosted medical tourism to the extent that of the approximately one thousand overseas patients, which the Bangkok Dental spa treated in its first year, "90 percent of patients already know Thailand and love it as a holiday destination" (Levett, 2005). Tourism provides a partial basis for medical tourism.

While almost all advertisements for medical tourism stress the links between surgery and tourism, especially during recuperation, the extent to which recuperating patients may be able to benefit from 'normal' elements of tourism needs to be queried. Indeed describing a medical procedure as part of a tourist experience might seem to be in itself merely cosmetic advertising.

The statement of the problem is how medical tourists are concerned about factors pertaining to medical aspects as well as the factors pertaining to tourism?

Medical care providers in general and specifically in Thailand have overlooked significant differences in the relative importance of treatment received by tourists during their sojourns in the host country. Therefore,

- 1. What are medical tourists' characteristics?
- 2. What are medical tourists specific intentions when selecting a medical care center in Thailand?

Demographics have also had an influence on the medical tourism target market.

The increasing pressure on national healthcare systems may also be attributed to a change in the demographics of regional Western Europe and the United States. According to findings by an independent industry analysis specialist firm, Datamonitor, aging population in the United States and Western countries in general are putting a strain on healthcare systems. One of the implications of this has seen growth in outsourcing and offshore activities. Accordingly,

3. Is there any significant difference between tourists' key demographic variables (age, nationality, health insurance status and religion) and elements of medical tourism?

#### 1.3 Research Objectives

The objectives of this research are listed as the following:

- 1. To investigate the profile of medical tourists and specific preferences of medical tourists in Thailand.
- 2. To analyze the relationship between foreign tourists' demographic characteristics and elements of medical tourism.

### 1.4 Scope of the Research

This research intends to investigate the foreign tourists' perspectives and their demographic characteristics toward the elements of medical tourism at selected private hospitals in Bangkok. Medical travelers, in this study, either approached hospital representatives (located in their home country) directly for in formations about physicians, the price of procedures, and logistics. In those countries, where hospital

representatives are not present, patients find providers on the Internet after seeing news reports on medical travel or hearing about it by word of mouth. For such patients, hospitals maintain a website for advanced registration and enquiry. The sample also includes foreign tourists who travel to obtain medical treatment in Bangkok, Thailand.

#### 1.5 Limitation of the Research

- 1. Lack of academic research: Being a niche market there are no obvious problems as this is a relatively new area to be explored, little academic research has been done on this particular niche market. The researcher was unable to find published research papers on the behavior of the medical tourist. The available literature is in the form of general academic approach articles or medicare related literature.
- 2. The term "medical tourism" often overlaps with terms such as "well being" and "healthcare". In this study medical tourist is an individual who visits Thailand both for tourism and medical treatment.
- 3. The difficulty to access a sample: It is the general policy of the hospitals in Bangkok not to allow a researcher to conduct face-to-face interviews or distribute questionnaires on the hospital premises. Preliminary investigation revealed that hospitals consider these acts as a disturbance and, at the same time, some foreigners might feel upset to reveal certain information concerning their identity. In Thailand, there are five to six key hospitals active in this field. The researcher selected hospitals "A" and "B" based in

Bangkok as representative of similar hospitals in Thailand. The hospitals' names need to be anonymous, as both hospitals do not allow researcher to publish their name.

- 4. Time constraint: In order to distribute and collect back questionnaires from all sample units, it took more time since the hospitals in Thailand do not permit easy access to the patients. The findings of the study are valid from October 2008 March 2009 duration only.
- 5. The research did not include expatriates living in Bangkok, Thailand, being treated in the selected hospitals during the course of this study. Patients who receive care on an emergency basis (such as ordinary tourists who become sick are also excluded from this study). Same way tourists traveling for massage or acupuncture are excluded.

# 1.6 Significance of the Study

Thailand is recognized as a reputed medical tourism destination that can bring in a large influx of foreign tourists from all over the world and gain a lot of foreign exchange to the country. Moreover, medical tourism creates job opportunities for local people and related businesses such as airlines, hotels, restaurants, travel agents, etc. The results of the research will be helpful for related parties to know the foreign tourists' perspectives towards the elements of medical treatment and business strategies that can be developed according to their perspectives and characteristics.

#### 1.7 Definition of Terms

Healthcare tourism: "The deliberate attempt on the part of a tourist facility (e.g., hotel) or destination (e.g., Baden, Switzerland or Bath, England) to attract tourists by deliberately promoting its health-care services and facilities, in addition to its regular tourist amenities". These healthcare services may include medical examinations by qualified doctors and nurses at the resort or hotel, special diets, acupuncture, transvital injections, vitamin complex intakes, special medical treatments for various diseases such as arthritis, and herbal remedies (Goodrich, 1993).

Health insurance: The term is commonly used in the United States to describe any program that helps pay for medical expenses, whether through privately purchased insurance, social insurance or a non-insurance social welfare program funded by the government (<a href="http://en.wikipedia.org">http://en.wikipedia.org</a>).

Medical tourism: a popular mass culture "where people travel often-long distances to oversea destinations (India, Thailand, Malaysia) to obtain medical, dental and surgical care while simultaneously being holidaymakers, in a more conventional sense..."

(Connell, 2006). In the study, medical tourism has been divided into medical driven elements and leisure driven elements.

**Medical driven elements:** The medical travelers' motives include lower-cost procedures, discretionary cosmetic operations, the world's most advance technology, better quality or quicker access to medical care (The McKensey Quarterly, 2008).

**Leisure driven elements:** Hospital chains have integrated into the tourism industry. They arrange airport transfers; help to arrange local tours and accommodation, car hire, or other vacation services (Connell, 2006). In this study, these travel related aspects are considered as leisure driven elements of medical tourism.

**Medical tourist:** Those involved in the procedure for a particular medical treatment along with recuperation and the concurrent enjoyment of certain activities associated with nature, culture, all unique to a particular destination (Connell, 2006).

**Medical travel agent:** An intermediary who acts on behalf of a service principle. A broker who brings buyers and sellers into negotiation and rarely becomes involved in financing or assumes any risks (Bitner & Zeithaml, 2003).

#### **CHAPTER II**

#### REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents a review of related literature and studies that cover the overview of Medical Tourism, Medical Tourism Driven Elements, Market Segmentation, Medical Tourist Decision-making, and Demographic Information.

#### 2.1 Overview of Medical Tourism

#### 2.1.1 The Healthcare Tourism Structure

Health tourism is an overall governing spectrum that includes both wellness tourism and medical tourism (Caballero-Danell & Mugomba, 2006). Simply put wellness tourism and medical tourism are both a subset of healthcare tourism (Figure 2.1).

Healthcare tourism encompasses both wellness tourism and medical tourism and is thus on the top tier while medical tourism and wellness tourism are both on the second tier. Furthermore, within medical tourism, there are two typologies: non-cosmetic (both elective and emergency) and cosmetic surgery (Caballero-Danell & Mugomba, 2006).

The tree diagram structure of Healthcare tourism (Figure 2.1) reveals significant material related to a "healthcare tourism" and a "wellness tourism" which are not mutually exclusive to the scope of medical tourism. Wellness tourism refers to spa and relaxation whereas healthcare tourism encompasses all treatments that enhance a state of well being, both internally and externally, from spa and relaxation treatment, cosmetic

surgery to elective surgery and essential surgery which includes essential procedure such as heart transplant or hip implant to remedy an injury or treat an illness (Caballero-Danell & Mugomba, 2006).

The Health Tourism Structure

Healthcare Tourism

Medical Tourism

Non-Cosmetic Surgery Cosmetic Surgery

Or
Elective Surgery

Source: Caballero-Danell & Mugomba, 2006

Figure 2.1: The Health Tourism Structure

#### 2.2 Medical Tourism Driven Elements

Medical tourism, for the purposes of this study, has been subdivided into two elements of medical treatment: Medical driven elements and Leisure driven elements (non-medical services).

Medical driven elements (elements of medical treatment at hospital), the medical travelers' motives such as lower-cost procedures, discretionary cosmetic operations, the world's most advance technology, better quality or quicker access to medical care (Ehrbeck, T., Guevara, C., & Mango, P., 2003). Within the realm of Leisure driven

elements (elements of medical treatment at some hospital/ hotel/resort/airport) see medical procedures as an add-on to a vacation. The hospital chains have integrated into the tourism industry, former arrange airport transfers, helps to arrange local tours and accommodations, car hire, or other vacation services (Connell, 2006).

An analysis of four 'medical group' websites indicates that the main consistent elements of a package are: medical treatment, personally tailored leisure packages to aid healing, translators, luxury accommodation during the course of the treatment, care rentals, visa and foreign exchange expertise, coordinators and emergency medical assistance (Caballero-Danell & Mugomba, 2006). The medical component of the medical tourism package may include any one or more of the following services, which would be complemented by a leisure component as well, either after or before the medical procedure.

Caballero-Danell & Mugomba (2006) describes the functions of medical tour operators and that there are, however, two main points of departure. 1) The medical tour operators are the medical groups that offer the medical procedures and thus are loyal to their geographical location, and 2) the tour operators are the primary service providers, in the other words, they are medical groups that perform the medical services while the leisure component of the package is ancillary.

#### 2.2.1 Discussion about Medical Driven Elements

#### 2.2.1.1 Cost of Treatment

Medical tourists are mainly from developed countries where the costs of medical care are very high, but where their ability to pay for alternatives is also high. Most are

from North America, Western Europe and the Middle East. European patients favour Thailand and Malaysia (Connell, 2005). The key points is that resources are insufficient for them to comfortably purchase care in their local market, but adequate for them to buy care in low-cost foreign facilities (Horowitz & Rosenweig, 2007).

The high cost of medical malpractice insurance are also driving up medical costs in developed countries, especially the United States and many medical practitioners are deserting the field for fear of being sued. Also, there is a very high propensity for patients to sue and the courts (juries) have been awarding very high damages in malpractice lawsuits (Horowitz & Rosenweig, 2007).

Adams (2005) attributed the high cost of medical care in the United States to bureaucracy and paper work. He estimates that the red tape and paperwork account for as much as 80% of medical costs, whereas in countries providing cheap medical service most of the costs go to actually paying those involved in providing medical care.

Price is the major factor that first leads patients to look overseas for medical care (www.business-in-asia.com). For example, in India dental, eye and cosmetic surgery cost about a quarter of what they cost in Western countries (Neelankantan, 2003), and a basic operation like a hip replacement in Thailand is at least 5 times cheaper than in the Unites States. Thailand can offer liposuction and breast enhancement surgery for a fifth of the rate prevailing in Germany (Connell, 2005). A heart valve that would cost \$200,000 in the United States costs only \$10,000 in India. Eye surgery that costs \$3,700 is only \$730 in Thailand. A full facelift that costs \$ 20,000 in the United States costs \$1,250 in South Africa (Hutchinson, 2005). The price differentials for cosmetic surgery are particularly significant since cosmetic procedures are not covered by insurance (Connell, 2006).

Even with the costs of travel, accommodation and other expenses, getting procedures abroad is often cheaper than getting them in the United States. The Journal of Financial Planning estimates that savings may range from 50 to 95 percent of the US cost.

Dental work is the biggest saver with medical tourism. 90% saving across the board is standard in India and Thailand which have excellent facilities (see table 2.1). Minor work on one tooth will pay for a plane ticket and a second pays for a week on the beach afterwards. Major surgery will pay for the entire family (www.business-in-asia.com).

Table 2.1: Dental Fees at Bangkok International Hospital in Thailand

Procedure	Thailand
Standard Cleaning	\$40
Root Canal	\$150-\$300 per tooth
Ceramic or Metal Crown	\$400-\$500
Full Dentures	\$300-\$450
Dental Implant (per Implant)	\$2400

Source: Business-in-Asia Website (News Clipping for Bumrungrad International)

#### 2.2.1.2 Timely Treatment

For patients from Britain, Canada and other countries where a governmental medical care system regulates access to medical care, the reason to leave the local market is the desire to have timely treatment, circumventing delays associated with long waiting lists, and because national health programs do not fund cosmetic surgery and similar type services. Patients seeking these services are driven to pursue medical tourism by the same economic forces as those from the United States (Horowitz & Rosenweig, 2007).

Similarly, in the UK, waiting times for fertility treatment may be very long, and at an important period in couples' lives, hence many 'fertility tourists' have gone overseas (Graham, 2005).

Waiting lists for non-essential surgery, such as knee reconstruction, may be as long as eighteen months in the United Kingdom. In India, the whole procedure can be done in under a week and the patients sent home after a further ten days (Connell, 2005).

Medical tourism enables countries that have long waiting lists for certain procedures to clear their backlog by sending patients to foreign countries for expedient care, at low cost, without expanding local capacity (Washington Post, October 21, 2004).

#### 2.2.1.3 Availability of medical treatment

The procedures range from elective cosmetic surgeries to complex, non-emergency joint replacements and heart surgeries, as well as fertility care such as in-vitro fertilization (Badam, 2005). Certain operations may not be available in the original countries.

Medical tourists also have greater access to different treatment types than those who choose not to travel. Stem cell therapy for heart failure is an example. Unobtainable by many patients in industrialized counties, this therapy is available in the medical tourism marketplace (<a href="www.stemcellbangkok.com">www.stemcellbangkok.com</a>). Stem cell therapies are not available to Americans, often because of restrictive government regulations. Two major programs are the use of adult stem cells to repair damaged heart tissue in Bangkok and the use of undifferentiated immune cells to create personalized cancer therapies in Singapore, both

of which have considerable academic and government support and strong track records (<a href="www.business-in-asia.com">www.business-in-asia.com</a>).

Abortions and other procedures are banned in several countries or are restricted to particular life periods. In Britain, for example, health authorities are usually unwilling to countenance stomach stapling for patients if they are aged less than eighteen; this is not the case in many medical tourism destinations where the 'customer' is more likely to be right (Connell, 2005).

#### 2.2.1.4 Safety and Quality of Care

For safety, accreditation by Joint Commission International (JCI) and/or the International Organization of Standardization (ISO) provides a useful and reassuring benchmark for patients in selecting offshore medical facilities. The Joint Commission, an American non-profit organization that accredits hospitals in the United States, has a division that does the same thing for foreign hospitals and other medical facilities. Joint Commission International uses American medical standards to evaluate foreign facilities. The Joint Commission began evaluating foreign hospitals in 1999 and has accredited more than 120 hospitals in 23 countries. The number of international entities accredited by JCI is expected to grow rapidly in a next few year from 140 to 300. Most are in Asia. (www.Jointcommissioninternational.org). It is preferred because it effectively suggests the hospital has earned the same rigorous accreditation that hospitals in the United States strive for and is, therefore, just as reliable because the quality of care provided is one of the selling points (Bethely, 2006).

Beyond safety, many people appreciate the superior services found in foreign hospitals. For example, whereas in the United States and Europe many tasks are performed by orderlies, in the medical tourism hubs there is a plentiful supply of registered nurses. Where in the west a patient might be told where to go to collect medications or see another doctor, a medical tourist can expect to be escorted. US doctors are often hurried with too many appointments and rush in and out, whereas doctors in major tourist hospitals have much easier work schedules and emphasis is placed on spending time with each patient, both as a matter of patient care and to stress a point of superiority over western hospitals. Upon checkout, medical tourists are treated courteously, and billing is often performed with less hassle and bureaucracy than in the United States (www.business-in-asia.com).

Thailand's international hospitals have a reputation for having modern high-tech equipment, excellent quality medical care and superior hospitality services. As a result, the quality of care they provided is equal to or better than the west with doctors supported by more registered nurses per patient than in the United States. This is driven by the need to build on their services and successes, because they have to meet higher standards to continue to increase business through word of mouth advertising (Adams, 2005). Unavoidably, Thailand faces credibility concerns when it comes to complex higher-end treatment. Bumrungrad Hospital, for instance, had to market and promote itself as an "American" managed hospital to avoid the perception of low quality services (www.asiabiotech.com).

#### 2.2.1.5 Skill of medical doctor/staff and overseas training

The hospitals and clinics that cater to the tourist market often are among the best in the world, and many are staffed by physicians trained at major medical centers in the United States and Europe. Bangkok's Bumrundgrad hospital has more than 200 surgeons who are board-certified in the United States, and one of Singapore's major hospitals is a branch of the prestigious Johns Hopkins University, in Baltimore. In a field where experience is as important as technology, Escorts Heart Institute and Research Center in Delhi and Faridabad, India, performs nearly 15,000 heart operations every year, and the death rate among patients during surgery is only 0.8 percent, less than half that of most major hospitals in the United States (Hutchinson, 2005).

Many doctors with international qualifications and western experience is advertised to make potential tourists more comfortable. The medical staff at the medical facilities should be first class so as to maintain high quality services. Ideally, they should be fluent in at least two languages (e.g., English and Spanish) since they will deal with people from different countries (Goodrich, 1993). India has benefited because of its widespread English-speaking ability.

The doctors are supported by more registered nurses per patient than in any Western facility, and some clinics provide single-patient rooms that resemble guestrooms in four-star hotels, with a nurse dedicated to each patient 24 hours a day. Add to this the fact that some clinics assign to patients a personal assistant during the recovery period and throw in a vacation incentive as well, and the deal gets even more attractive (Hutchinson, 2005).

Thailand's leading hospital is reported to have over 200 surgeons who are board certified in United States (Hutchinson, 2005). Thailand's Phuket hospital also provides interpreters in 15 languages and receives about 20,000 international patients a year, while the now famous Bumrungrad International Hospital in Bangkok claims to employ 70 interpreters. All its staff speak English (Connell, 2005). The Philippines has recently declared its interest, based on a new airport and the familiarity that people have, all over the world, with English-speaking Filipino doctors (Kinavanod, 2005).

## 2.2.1.6 Technology standard of treatment is comparable back home

To become the most important global destination the hospitals have upgraded technology, absorbed Western medical protocols and emphasized low cost and prompt attention. Since the economic liberalization in the mid-1990s, private hospitals in Thailand have expanded and found it easier to import technology and other medical goods, thus bringing infrastructure to western levels in the best hospitals (Connell, 2005).

Tourists are surprised to find brand new facilities and equipment as hospitals and medical tourism hubs around the world join in the fierce competition for this fast growing market (<a href="www.business-in-asia.com">www.business-in-asia.com</a>). The advancement in medical technologies increases patient's mobility and the demand for immediate quality medical care (<a href="www.asiabiotech.com">www.asiabiotech.com</a>).

According to Porter (2004), emerging industries or niche markets are created by "technological information, shifts in relative cost relationships, emergence of new consumer needs, or other economic and sociological changes that elevate a new product or service to the level of a potentially viable business opportunity". Therefore, medical

tourism's evolution has depended on technological improvement such as a more efficient global transport and communication system and the consolidation of the Internet.

India has top-notch centers for open-heart surgery, pediatric heart surgery, hip and knee replacement, cosmetic surgery, dentistry, bone marrow transplants and cancer therapy, and virtually all of India's clinics are equipped with the latest electronic and medical diagnostic equipment. Unlike many of its competitors in medical tourism, India also has the technological sophistication and infrastructure to maintain its market niche, and Indian pharmaceuticals meet the stringent requirements of the U.S. Food and Drug Administration. Additionally, India's quality of care is up to American standards, and some Indian medical centers even provide services that are uncommon elsewhere. For example, hip surgery patients in India can opt for a hip-resurfacing procedure, in which damaged bone is scraped away and replaced with chrome alloy--an operation that costs less and causes less post-operative trauma than the traditional replacement procedure performed in the U.S. (Hutchinson, 2005).

# 2.2.1.7 Medical providers pay attention to religious, dietary and cultural needs

A key part of training for staff taking care of international patients has been in teaching sensitivity. Apart from bedside manner, hospital staff members are also being recruited to accommodate to religious, dietary and cultural needs.

With the growth of medical-related travel and aggressive marketing, Bangkok has become a centre for medical tourism. Bangkok's International Medical Centre offers

services in 26 languages, recognizes cultural and religious dietary restrictions and has a special wing for Japanese patients (MacIntosh, 2004).

#### 2.2.1.8 Privacy and confidentiality

Distance enables anonymity. Some medical procedures such as sex changes/ realignment have become a small but significant part of medical tourism, where recuperation and the consolidation of a new identity may be better experienced at a distance from standard daily life. Similarly, cosmetic surgery patients may prefer recuperation in a relatively alien environment. For many, what makes medical tourism so appealing is that no one need know there was anything medical about the trip (Connell, 2005). Furthermore, the myriad parties who can access these documents in the United States cannot view their medical records.

Hospitals in the United States or the British that are experienced in seeing royalty, politicians, prominent businessmen or celebrities are even trained to manage anonymity concerns, such as the use of code names for all cases, as well as confidentiality agreements (<a href="https://www.asiabiotech.com">www.asiabiotech.com</a>).

#### 2.2.2 Leisure Driven Elements (Non-medical services)

Medical care providers do need to consider how non-medical services are key to encouraging patient access. Medical care providers are starting to offer non-medical services such as logistics arrangements and hospitality services, as discerning patients increasingly demand a total consumer experience even when seeking medical treatment. The leisure component of the medical tourism package is one of the critical unique

selling point of the product; consumers have the opportunity to heal in an environment different from their home-the ideal offer of escapism (Caballero-Danell & Mugomba, 2006).

## 2.2.2.1 Exchange rate

Medical tourism yields many benefits for the economies of countries that choose to partake in the tourism industry. Apart from being good for the country's image, expenditures by in-bound medical tourists contribute to the national reserve of foreign currency thus increasing the host countries national income, which ideally is re-invested into the economy through the provision of public services (Caballero-Danell & Mugomba, 2006). "The rewards to the tourist industry, and especially the hotel sector, are considerable" because of the often necessary stay required of the patient for recuperative purposes (Connell, 2006).

Experts pinpoint another advantage of medical tourism being it is non-seasonal. Therefore, it is unlikely that medical procedure will have different prices depending on the time of the year a summer or winter price (Nautiyal & Dogra, 2005). While stable prices are a strong factor for a medical tourist destination, as with other forms of tourism (ski tourism in Are or the Swiss Alps), medical tourist arrivals in any destination are subject to adverse effects from the national economy such as unfavorable currency fluctuations. If the currency of a medical tourism destination strengthens then this increases the price for the potential foreign medical tourist. Thus they may seek this service elsewhere, at more cost-effective rates (Caballero-Danell & Mubomba, 2006).

The South African has such a long-standing low rate on the foreign-exchange market, medical tourism packages there tend to be perpetual bargains, as well (Hutchinson, 2005).

#### 2.2.2.2 Ease and affordability of international air travel

The dramatic growth in the speed, quality and efficiency of international transportation and communication has reduced the transaction costs of multinational interchange thus awarding firms economies of scale (Porter, 1990). The low cost of air transportation can motivate foreign patients to go beyond their borders for medical tourism.

According to an opportunity model (Morris, 2005), deregulation in sections of the global economy such as the airline industry has spurred the emergence of global markets, such as medical tourism. Reports claim that in 2005 the airline industry reached its peak driven by the growth of markets in the Middle East and Asia, which was spearheaded by the Chinese and Indian markets (Neelankantan, 2003).

Additionally, many Asian airlines offer frequent-flyer miles to ease the cost of returning for follow-up visits (Hutchinson, 2005). It is said that the airline businesses are stimulating the growth of medical tourism and at the same time the business gains the volume of passengers.

#### 2.2.2.3 Airport pick-up services

The medical care providers offer non-medical services such as logistic management for patient convenience. The airport pick-up service is one of the basic

services provided for patients who come from different countries. Most of the time, the medical care providers also have a driver to send and pick-up the patients between hospital and hotel during their treatment.

#### 2.2.2.4 Vacation prior to surgery/local tours/sight-seeing/ shopping

Medical tourism is often as much about tourism as medicine. For those undergoing major surgery, there is no better place to recover than a bungalow with a view of the beach while receiving physical therapy (or massage). Similarly, for family accompanying a patient, a week at the beach or a shopping spree can clear up a lot of stress following surgery. South Africa offers safari medical tourist packages, where a family visit for treatment is followed by a wildlife safari. Individual hospitals will often be associated with agents who will arrange all manner of getaways following an operation (www.business-in-asia.com).

Singapore's tourist attractions tend toward high-end shopping rather than white sand beaches (in fact Singapore has to import sand from Indonesia). Hotels and services are very expensive, but many tourists stay only for their medical care and arrange for the vacation portion of their trip to be spent in nearby Malaysia or Indonesia, where Java is a top destination. Most flights to these destinations will have a stopover in Singapore anyway, so it can be taken as a vacation to Java with a medical stop in Singapore, not the other way around (www.asiabiotech.com).

Many hospitals offer dental procedure and LASIK eye correction. The majority of the healing time for these procedures is spent on vacation (www.bumrungrad.com).

#### 2.2.2.5 Spa and retreats program

It is a truism that tourism is supposed to be about relaxation, pleasure and an increase in well being and even health. In the past decade, the attempt to achieve better health while on holiday, through relaxation, exercise or visit to spa, has been taken to a new level with the emergence of a new distinct niche in the tourist industry: medical tourism (Connell, 2006).

South Africa also draws many cosmetic surgery patients, especially from Europe, and many South African clinics offer packages that include personal assistants, visits with trained therapists, trips to top beauty salons, post-operative care in luxury hotels and safaris or other vacation incentives (Hutchinson, 2005).

Bangkok's Piyavate Hospital may even feature spa facilities that offer a holistic wellness experience (www.asiabiotech.com).

# 2.2.2.6 Availability of bedside immigration concierge service

Observations reveal that for the medical tourism market to grow, an efficient logistics system is necessary to facilitate this predominantly uni-directional flow. Targeted consumers must have easy access to the medical tourism destination. For example, if acquiring a visa for the medical tourism destination requires going through many channels, then would be medical tourists are better off on the waiting lists for surgery within their home countries (Caballero-Danell & Mugomba, 2006).

Burungrad hospital has International Travel and Visa Services including a unique relationship with Thailand's largest ground services, Travel Company, to arrange travel needs for patients and families while in Thailand. The Thai Home Ministry operates a

visa extension service at Bumrungrad, once a week, to process any visa extensions for patients and their families (www.bumrungrad.com).

#### 2.2.2.7 Centrally located luxury serviced apartment/ hotel and accessibility of Wifi

The temporary residences that patients and accompanying persons are placed in during the stay of their visit is of 4 to 5 star luxury quality, with hospitals more resembling luxury hotels than a general ward for post-op patients (Caballero-Danell & Mugomba, 2006). Hospitals that do not manage their own accommodations may offer link-ups with different hotels, hostels (www.asiabiotech.com).

If staying overnight in the hospital, the benefits of medical tourism are overwhelming. A deluxe suite at Bangkok's Bumrungrad or Bangkok International Hospital includes a large bedroom, living room, two complete bathrooms and a city view for \$200 a night, ultimately \$400 including nursing, equipment, flat panel TVs, Wifi and meals for three. This should be compared to a single room in the US, which will run upwards of \$800 for the room, not including services and other charges. When staying multiple nights with a family member, the value of having the extra room (and complimentary roll-in beds) cannot be understated. Rooms get cheaper, including single and even shared rooms, but also get even grander. For the price of basic single room in the United States, a medical tourist could rent an Imperial or Royal Suite at these Thai hospitals, including guest bedrooms, a living room and a dining room. These are especially popular with wealthy Arabs and are often booked weeks or months in advance (www. business-in -asia.com).

# 2.3 Medical Tourist Decision-making

"Price" is the main reason most people initially cite for their decision to go abroad for medical treatment. Beside price, the "type of procedures" can drive the patient's decision making. Those who need only very minor procedures or who cannot spend the time needed for a trans-Pacific flight are willing to pay twice as much for the convenience (<a href="www.business-in-asia.com">www.business-in-asia.com</a>). In some regions of the world, state-of-the-art medical facilities are hard to come by, if they exist at all; in other countries, the public medical system is so overburdened that it can take years to get needed care. In Britain and Canada, for instance, the waiting period for a hip replacement can be a year or more, while in Bangkok, a patient can be in the operating room after getting off a plane.

The previous research, "Health-Care Tourism", (Goodrich, 1987) revealed that none of the respondents (personal interviews of 206 travelers) used the criterion of "healthcare facilities at the destination" as the main reason to select that destination for a vacation. Instead, traditional reasons, such as cost and variety of attractions, were used.

#### SINCE 1969

# 2.4 Market Segmentation for medical travel

## Five discrete segments

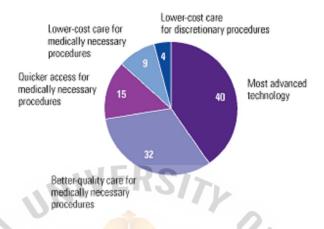
The largest segment, with 40 percent of all medical travelers, seeks the world's most advanced technologies. These men and women take their search for high-quality medical care global, giving little attention to the proximity of potential destinations or the cost of care. Most such patients—originating in Latin America (38 percent), the Middle East (35 percent), Europe (16 percent), and Canada (7 percent)—travel to the United

State. With 32 percent of all medical travelers, the second-largest segment comprises patients who seek better care than they could find in their home countries, which are often in the developing world. When selecting a destination, such patients generally trade off perceived quality against burdens such as costs, distance, and unfamiliar cultures. Some of these people disregard costs to some degree; others are looking for higher quality at the best available price. Patients in this segment seek care in several different specialties, particularly cardiology.

The third-largest segment comprises people who want quicker access to medically necessary procedures delayed by long wait times at home for orthopedics, general surgery, or cardiology. Its numbers depend on capacity in the home countries, so health investments there can reduce the need to seek care abroad. Recent and ongoing infrastructure investments in the United Kingdom, for example, have focused on cutting wait times. Those for knee and hip replacements, which used to be especially long, have fallen by about 40 percent in the past six years.

While only 9 percent of the travelers seek lower costs for medically necessary procedures, this segment has the greatest potential for growth. Since the price of treatment varies greatly around the world, patients can save significant amounts, depending on the procedure. An aortic valve replacement costs more than \$100,000 in the United States, for instance, but about \$38,000 at a provider in Latin America, and only \$12,000 at a provider in Asia. US patients make up 99 percent of the people in this group. In 30 percent of all cases, patients are traveling for orthopedic care, and in 16 percent, for general surgery (Ehrbeck, T., Guevara, C., & Mango, P., 2003).

Relative size of medical-traveler segments 100% = 49,980 patients<sup>1</sup>



Number of patients come from providers that participated in research; total market size assumes that participating providers represent 60-80% of market.

Source: Interviews with providers and patient-level data; McKinsey analysis

Patients seeking lower costs for discretionary procedures, such as breast augmentation and reduction, abdominoplasty/liposuction, or rhinoplasty, come mostly from developed markets, particularly the United States. This segment, whose expansion correlates with growth in GDP and discretionary incomes, is the most fragmented: patients travel to many smaller, specialized providers rather than to large, multispecialty hospitals (Ehrbeck, T., Guevara, C., & Mango, P., 2003).

# 2.5 Discussion of independent variable

#### 2.5.1 Age

Age is both an observable and a universal demographic descriptor. It is frequently a substitute or proxy variable for physical fitness, activity levels, interests and previous travel experiences. Kotler, Bowen & Makens (2006) states that the types of

goods and services people buy change during their lifetimes. Preference for leisure activities, travel destination, food and entertainment are often age related.

The age-based segment for medical tourism is also referred to as the 'baby boomers'. The term refers specifically to the cohort of people born between 1945 and 1966 (Muller & Cleaver, 2000). It is notable that the baby boomers have benefited from growing up in affluent and opportunity rich societies. Muller & Cleaver (2000) observe that baby boomers are now settled and mostly comfortable with their place in the world. They see themselves as competent, and as recognizing the complexities of life, but they do have clear ideas about what makes them happy. The expression, baby boomers, applies best to the countries of Canada, the United States of America, Australia and New Zealand where economic conditions after the Second World War were sound and families were encouraged (You & O' Leary, 1999).

According to the findings by an independent industry analysis specialist firm, Datamonitor, aging populations, in the United States and Western countries in general, are putting a strain on the medical care system; in the United States it is reported that an estimated 76 million baby boomers will turn 65 years old in the next 10 years. They are approaching retirement, causing an economic burden on the current system, as well as causing a growing pressure to improve the medical care sector. One of the implications of this has seen growth in outsourcing and off-shoring activities. "Any solutions that help lower administrative costs thereby freeing clinician time to concentrate on front-line patients care resonate well with healthcare industry professionals" (Datamonitor, 2005).

Some important trends guarantee that the market for medical tourism will continue to expand in the years ahead. By 2015, the health of the vast Baby Boom

generation will have begun its slow, final decline, and, with more than 220 million Boomers in the United States, Canada, Europe, Australia and New Zealand, this represents a significant market for inexpensive, high-quality medical care (Hutchinson, 2005).

This generation is also expected to live longer and be more active than generations before them. Longevity increases the necessity to treat chronic problems and injuries, including the pervasive rise of a larger ratio of the population suffering from diabetes, coronary heart disease, asthma, and of course, the deterioration that comes with the aging process. A significant percent of these baby boomers are currently uninsured. Many who belong to these age groups have lost their jobs due to aging, unemployment or downsizing and are no longer covered by affordable health insurance. Traveling beyond local borders offers this group, more than any other demographic, the opportunity to pursue and receive premium medical care, alternative treatments and travel, all at the same time. Boomers are leading the way to more affordable medical care. Boomers, more than any other age group, are seeking medical care overseas to address such needs as dental care, orthopedic procedures like knee and hip replacement surgeries, cardiac care, and alternative treatments for chronic conditions such as arthritis, diabetes, and cardiac. (www. Placidway.com).

#### 2.5.2 Nationality

Nationality is a widely used demographic descriptor; it is often used as an indicator of the cultural allegiance or roots of the tourist. It is sometimes an observable characteristic with physical appearance, clothing styles, and tour party characteristics

providing identifiable markers of nationality. Nationality is measured by establishing the tourists' countries of residence.

Since the medical tourism destinations have served tourists in multiple cultures and nationalities, the medical care provider or the agent who acts on behalf of the service principle understand any one individual nationality and its characteristics and behaviours.

Beside the nationality and cultural understanding, the medical tourists in different nationalities have specific reasons to seek medical treatment abroad. Many medical tourists from the United States are seeking treatment at a quarter or sometimes even a 10th of the cost at home. From Canada, it is often people who are frustrated by long waiting times. From Great Britain, the patient can't wait for treatment by the National Health Service but also can't afford to see a physician in private practice. For others, becoming a medical tourist is a chance to combine a tropical vacation with elective or plastic surgery. And more patients are coming from poorer countries such as Bangladesh where treatment may not be available (MacIntosh, 2004).

Thailand has deliberately sought a Japanese market, since many doctors have been trained in Japan, and nurses and other staff have been taught to speak Japanese (Connell, 2006). Japan has always been unwilling to accept immigration, hence has a medical system that is under considerable pressure, especially as its population ages, without access to migrant health workers as in most other developed countries. Consequently, Japan has taken particular advantage of the notion of medical tourism. Many Japanese companies send their employees to Thailand even for annual physical examinations, as the savings on medical fees and high quality medical care make the airfare inconsequential. Moreover, at least one Bangkok hospital has an exclusively

Japanese wing and there are many Japanese nursing homes (Connell, 2005). It is shown that medical providers need to understand the patient's nationality and design their services and medical facilities to serve that particular patient.

#### 2.5.3 Health Insurance Status

Each year in the United States, millions of Americans find themselves unable to pay for the medical care they want or need because they are uninsured, uninsurable or underinsured. Over 40 million Americans have no health insurance at all, and millions more are forced to forgo 'elective procedures' that do not qualify for coverage by insurers. An estimated 120 million Americans live without any form of dental insurance. The resultant system is one that has left many Americans painfully vulnerable to sudden, unexpected, and overwhelming medical and dental expenses (Hutchison, 2005).

American manufacturers and insurance companies are studying and pursuing offshore medical options in an effort to reduce medical costs. Currently, Blue Shield of California and Health New sell discounted health insurance policies that encourage patients to get most of their care in Mexico, and United Group Programs, a third-party administrator, is promoting elective surgical care in Thailand (Appleby & Schmidt, 2006).

It is inevitable that an increasing number of health insurance plans will extend their provider networks to include selected medical care institutions around the world and will provide incentive to encourage beneficiaries to use offshore facilities for expensive elective surgical procedures (Horowitz& Rosenweig, 2007).

#### 2.5.4 Religion

In this study, the researcher selected "Religion" as an independent variable because religion is considered as an important demographic descriptor in medical tourism study. Religion is now posing a great challenge to the medical care providers to create a service design in terms of facilities, staff training and practice, cultural perception to handle the flow of tourists who are coming from different religions

For example, Malaysia has primarily focused on the Middle East, stressing its Islamic credentials, including the presence of halal food and Islamic practices in hospitals (Connell, 2006). Malaysia's marketing campaign towards the Middle East is based on Islamic religious ties. This marketing campaign can draw a number of medical tourists to the destination.

For North American patients, Costa Rica is the chosen destination for inexpensive, high-quality medical care without a trans-Pacific flight, and it is the particular mecca for westerners seeking plastic surgery (Hutchinson, 2005).

# 2.6 Empirical studies

# Goodrich (1993): Socialist Cuba: A Study of Health Tourism

This study focuses on tourism in Cuba since the Revolution with special emphasis on the novel concept of health tourism. After a brief background on tourism in socialist Cuba, the article defined health tourism, provided a short historical background on the concept, and discussed the health/tourism interaction. This was followed by an examination of health tourism in Cuba, additional dimensions of the concept, and areas for future research. Health tourism, as originally defined, can be described as the

attempt on the part of a tourist facility or destination to attract tourists by deliberately promoting its health services/ facilities (as well as its other usual touristic amenities, e.g., hotel accommodations, water sports, golfing, and scenic tours). The health services could include medical check-ups, minor surgery, special diets, vitamin-complex treatments, herbal remedies, thermal swimming pools, and so on.

Tourism's health-care component is not new. It has existed for many centuries in many countries of the world, including Switzerland, Germany, Austria, Jamaica, Hungary, the United States and the United Kingdom. What is fairly new, however, is the concept of approaching health tourism with a deliberate marketing strategy. Health care tourism can be the basis of a positioning strategy for some hotels or resorts in a world that is becoming more health conscious. However, health tourism can become subject to quackery, so self-regulation and careful government scrutiny are imperative. More studies on health tourism are needed and perhaps this article will stimulate further studies on the subject of health tourism.

# Goodrich & Goodrich (1987): Health-Care Tourism: An Exploratory Study

This study has discussed the novel concept of health-care tourism. The article, based on a pilot study, is divided into five sections: 1) What is health-care tourism? 2) Data collection; 3) Data analysis and results; 4) Discussion; and 5) Conclusions.

Data collection consists of content analysis of 284 tourism brochures on 24 countries, short personal interview with 206 travellers – clients of a large, well-known organization in tourism and travel, telephone interviews with twenty-two travel agents; and personal interview with twelve medical doctors and two herbalists.

Like many pilot studies on novel concepts, this study has a few weaknesses. First, one of the objectives of the study – to profile users of health-care tourism services – was not fully achieved. This was due largely to the novelty of the concept and the general lack of information in the tourism literature, at travel agencies and other tourism organizations. But this was not sufficient reason to abort the study – it encouraged the researcher to explore the idea further. The second weakness of the study is that, given the small sample, the external validity of the finding is limited. More studies are needed. Finally, health-care tourism may be found in countries that do not appear in this study. Review of such countries would be useful and interesting. However, this exploratory study will stimulate further studies on the fascinating subject of health-care tourism.

## Connell (2006): Medical tourism: Sea, sun, sand and ... surgery

Medical tourism, where patients travel overseas for operations, has grown rapidly in the past decade, especially for cosmetic surgery. High costs and long waiting lists at home, new technology and skills in destination countries alongside reduced transport costs and Internet marketing have all played a role in medical tourism. Several Asian countries are dominant, but most countries have sought to enter the market. Conventional tourism has been a by-product of this growth, despite its tourist packaging, and overall benefits to the travel industry have been considerable. The rise of medical tourism has emphasised the privatisation of medical care, the growing dependence on technology, uneven access to health resources and the accelerated globalisation of both medical care and tourism.

# Horowitz& Rosenweig (2007): Medical Tourism – Health Care in the Global Economy

This article provides information on the growing trend of medical tourism. According to the authors, medical tourists go to other countries for healthcare because of affordable prices, procedures that are not available in their countries and patients who don't want others to know that they underwent plastic surgeries, sex change or drug rehabilitation. They also want the privacy and confidentiality of a faraway place. Furthermore, countries such as India, Singapore and Thailand are popular destinations for medical tourism in Asia. These countries have large, modern medical facilities that are staffed by well-trained physicians who perform complex procedures. It is important to recognize that modern well-equipped hospitals in some areas of the world concurrently serve the role of regional referral centers for patients from poor neighboring countries, while at the same time, function as low cost medical tourism destinations for patients from highly developed countries.

## The & Chu (2005): Supplementing Growth with Medical Tourism

Medical tourism presents an opportunity for hospitals to fuel growth by tapping the potential of the international patient market. To attract foreign patients, healthcare providers may consider leveraging both business and clinical considerations.

The advancement in medial technologies, increased patient mobility and demand for immediate quality healthcare is arousing interest among healthcare providers globally. This is spawning the new medical tourism industry and offering clinical services to foreign patients. The quality of treatment was, however, found to be a key price

determinant that medical care providers might work with. Medical quality is also supported by hardware and software investment. Hardware investments include the purchase of cutting-edge technology and software refers to the intellectual output of the hospitals as demonstrated by the latest medical research. Medical care providers are starting to offer non-medical services such as logistics arrangements and hospitality services, as discerning patients are increasingly demanding a total consumer experience even when seeking medical treatment. Medical care providers may now consider the medical quality of their services, how non-medical services are key to encouraging patient access, and the various marketing options available to them. In addition, the marketing reforms will enable patients to learn more about their own illnesses, and are most familiar with available treatment options. Patient marketing, such as an informative website, transparent pricing schemes, or advertising placements, such as within in-flight magazines, have thus become basic information and advertising platforms.

**Table 2.2: Summary of Empirical studies** 

Name of the researchers (year)	Research Topic	Objectives of the Research	Research Methodology	Research Findings
Goodrich (1993)	Socialist Cuba: A Study of Health Tourism	The purpose of this article is three-fold: (1) to provide a brief of tourism in Cuba today; (2) to discuss the concept of "health tourism" and examine its application in Cuba; and (3) to discuss and add other dimensions of the concept in general.	It is based primarily on secondary data.	The novel concept of health tourism with a focus on Cuba and short historical background on the concept and the health / tourism interaction, dimensions of the concept and areas for future research.

Name of the researchers (year)	Research Topic	Objectives of the Research	Research Methodology	Research Findings
Goodrich & Goodrich (1987)	Health-Care Tourism: An Exploratory Study	To explore the concept of health-care tourism	It is based on pilot study (personal interviews of 206 travelers)	There are other facets of the concept of health-care tourism which were not empirically studied here because of the lack of data, and which include market segmentation, competition and medical facilities at destinations.
Connell (2006)	Medical tourism: Sea, sun, sand and surgery	To examine a contemporary elaboration of the rise of 'Medical tourism'.	Conceptual Approach	Medical tourism is likely to increase even faster in the future as cost differentials remain in place. The trade in health care services is expanding, becoming more competitive, and creating new dimensions of globalisation, all elegantly packaged, and actually functioning, as the new niche of medical tourism.
Horowitz & Rosenweig (2007)	Medical Tourism: Health Care in the Global Economy	To explore the growing trend of medical tourism where citizens of highly developed countries travel to less developed areas of the world to receive medical care, bypassing services offered in their own communities.	Conceptual Approach	India, Singapore and Thailand are destinations of medical tourism in Asia. The affordable prices, availability of procedures, privacy and confidentiality draw foreign patients to obtain treatment in developing country.
The & Chu (2005)	Supplementing Growth with Medical Tourism	To examine the actual potential that foreign patients represent based on volume and cost and to investigate the role of the government in several markets and proposes three broad areas of healthcare.	Conceptual Approach	The private sectors have led industry. Beside, the medical service healthcare providers are starting to offer non-medical services to experience the patients and marketing reforms will enable patients to learn more about illnesses and available treatment option.

#### **Summary of Literature Reviewed**

The researchers have focused on the different areas of medical tourism. The literature reveals that a country's government has an important role to promote medical tourism at the destination since it is led by the private sectors. It is believed that the high cost of treatment and long waiting lists in developed countries are main factors to drive medical tourism to developing countries. Moreover the advancement in medical technology and skills at medical tourism destinations increase patient mobility and the demand for immediate quality medical care. Privacy and the confidentiality of patients undergoing plastic surgery or sex change procedures are also driving patients to such destinations. Medical care providers are now starting to offer non-medical services such as logistics arrangements and hospitality services, such as airport pick-up services and on-site accommodation for patient convenience.

Patients can learn about illnesses and available treatment options through basic information and advertising platforms such as an informative website, in-flight magazines and the intermediary who acts on behalf of a service principal.

The literature shows the results of a pilot study on the novel concept of medical care. It also identifies a few weaknesses. First, the profile users of medical tourism services were not fully achieved regarding the novelty of the concept and lack of information in the medical tourism literature at travel agencies and other tourism organizations. The second weakness is that given the small sample, the external validity of finding is limited. Finally, medical tourism may be found in countries that do not appear in the study, so the researcher thinks that it is an opportunity for further research.

## **CHAPTER III**

#### RESEARCH FRAMEWORK

This chapter discusses the research framework. It continues on from the relevant literature reviewed in Chapter II, providing the basic theoretical background leading to the drawing of the conceptual framework for this study. Other sections include the research hypotheses and operationalization of the independent and dependent variables.

## 3.1 Theoretical Framework

A theoretical framework is a conceptual model of how one theorized the relationship among the several factors that have been identified as important to the problems. It clarifies the questions and summarises the overall concepts being investigated (McDaniel & Gates, 1998).

The theoretical framework of this research is based on a framework for the motivation of medical tourists and was developed by analyzing data from multiple sources. Three push factors, six pull factors and two facilitating factors were found. Also, other considerations and barriers for the realization of medical tourism are revealed. The results are categorized into four main themes, namely push factors, pull factors, facilitating factors, and other considerations for medical tourism.

Push factors include improving appearance, enhancing confidence and privacy.

Pull factors include six sub-themes, namely attractive price of cosmetic procedures, reputation, hardware of the hospital, and word of mouth from friends or relatives,

advertisements and doctors' experiences. Two facilitating factors were found based on the analysis, namely companionship and family/lover support. There are other considerations for medical tourism, namely destination attributes, time, service attitude and quality. The current study also investigates barriers for realization of medical tourism. They include difficulty of follow-up care, difficulty for resolving potential arguments, objections from the family/lover, language barrier, tight schedule and lack of money.

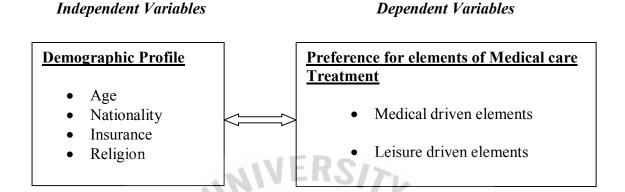
Medical tourists' motivations are found to be different from that of mass tourists. Medical tourists are more concerned about factors pertaining to medical aspects rather than the destination attributes, although destination attributes were still important for their decision making (Ye, H., Yuen, P., Qiu, H., Zhang, V., 2008).

# 3.2 Conceptual Framework

From the research (Caballero-Danell & Mugomba, 2006) not all consumers value both components (medical component and leisure component) of the medical tourism product equally, some may value the leisure component over the medical procedure during the decision making process. Therefore the results of study indicate that there are two basic types of substitutes, those within the medical service and those within the leisure component.

In this research, the demographic information (age, nationality, religion and insurance) represents the independent variables while the leisure driven element and medical driven elements represent the dependent variables as illustrated in figure 3.1

Figure 3.1: Conceptual Framework of the research study



Source: Adopted from Caballero-Danell & Mugomba, 2006.

#### 3.2.1 Independent and Dependent Variables

## Independent Variables

The independent variables are those that are deliberately manipulated to invoke a change in the dependent variables. Independent variables are also known as predictor variables, regressors, controlled variables, manipulated variables, explanatory variables, or input variables. (<a href="http://en.wikipedia.org/wiki/Independent\_variable">http://en.wikipedia.org/wiki/Independent\_variable</a>).

Independent variables in this research are demographic information such as age, insurance status, nationality and religion. The researcher has focused on these demographic information because the demographic information reflects the medical tourists' characteristic and significant to the popularity of medical tourism in foreign countries.

## Dependent Variables

The dependent variables are those that are observed to change in response to the independent variables. The dependent variable is known as the response variable, the regressand, the measured variable, the responding variable, the explained variable, the outcome variable, the output variable. (<a href="http://en.wikipedia.org/wiki/Dependent variable">http://en.wikipedia.org/wiki/Dependent variable</a>).

Dependent Variables in this research are leisure driven elements and medical driven elements of medical care treatment. They are considered as important elements that make medical tourists go beyond borders for medical care and at the same time join the tourism activities either before or after their treatment.

# 3.3 Research Hypothesis

Zikmund (2003) defines hypotheses as an unproven proposition or supposition that tentatively explains certain facts or phenomena; a proposition that is empirically testable.

The research hypotheses have been formulated as follow:

H10 : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age is not significant.

H1a : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age is significant.

H2o : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of health insurance status is not significant.

H2a : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of health insurance status is significant.

H3o : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is not significant.

H3a : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is significant.

H4o : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of religion is not significant.

H4a : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of religion is significant.

H50 :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age is not significant.

H5a :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age is significant.

H6o :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of health insurance status is not significant.

H6a :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of health insurance status is significant.

H7o :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is not significant.

- H7a :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is significant.
- H8o :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is not significant.
- H8a :The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is significant.

# 3.4 Operationalization of Variables

Table 3.1: Operationalization of Dependent Variables

Dependent Variables	Conceptual Definition	* **	Operational Components	Level of Measurement	Question No.
Leisure Driven Elements	Service provider's assistance in terms of airport transfers, help to arrange local tours and accommodation, car hire, or other vacation services as part of health care (Connell, 2006).	INC	Exchange rate Ease and affordability of international air travel Airport pick-up services Vacation prior to surgery/ local tours/ sight-seeing/shopping Wellness and Retreat program Availability of bedside immigration concierge service Centrally located luxury serviced apartment/ hotel and accessibility of Wifi	Interval Scale	Part I Q. 1-7

Dependent	Conceptual	Operational	Level of	Question
Variables	Definition	Components	Measurement	No.
Medical Driven Elements	The medical traveller's motives such as lower-cost procedures, discretionary cosmetic operations, the world's most advanced technology, better quality or quicker access to medical care (The McKinsey Quarterly, 2008).	<ul> <li>Cost of treatment</li> <li>Timely treatment</li> <li>Availability of medical treatment</li> <li>Safety and quality of care</li> <li>Skill of medical care doctor/staff and overseas training</li> <li>Technology standard of treatment is comparable back home</li> <li>Medical care providers pay attention to religion, dietary and cultural needs</li> <li>Privacy and confidentiality</li> </ul>	Interval Scale	Part I Q. 8-15

Table 3.2: Operationalization of Independent Variables

Independent Variables	Conceptual Definition	Operational Components	Level of Measurement	Question No.
Age	The length of time that one has existed; duration of life	<ul> <li>21 – 30 years old</li> <li>31 – 40 years old</li> <li>41 – 50 years old</li> <li>More than 50 years old</li> </ul>	Ordinal Scale	Part II, Q16
Nationality	A relationship between a person and their state of origin, culture, association, affiliation and/or loyalty.	<ul> <li>Asian</li> <li>European</li> <li>American</li> <li>Middle East</li> <li>Other, please specify</li> </ul>	Nominal Scale	Part II Q. 17

Independent Variables	Conceptual Definition	Operational Components	Level of Measurement	Question No.
Health Insurance Status	Any programs that help pay for medical expenses.	<ul><li>Insured</li><li>Not Insured</li></ul>	Nominal Scale	Part II Q.18
Religion	a set of tenets and practices, often centered upon specific supernatural and moral claims about reality, the cosmos, and human nature, and often codified as prayer, ritual, or religious law.	<ul> <li>Christian</li> <li>Buddhist</li> <li>Hindu</li> <li>Muslim</li> <li>Other, please specify</li> </ul>	Nominal Scale	Part II Q.19

#### **CHAPTER IV**

#### RESEARCH METHODOLOGY

This chapter describes the research methodology employed and includes six sections, namely: research method, respondents and sampling procedures, research instruments and questionnaire, data collection/gathering procedures, research pre-test, and statistical treatment of data.

# 4.1 Methods of Research Used

## 4.1.1 Descriptive Research

Descriptive Research describes characteristics of a population or phenomenon. It seeks to determine the answers to who, what, when, where, and how questions. It often helps segment and target markets. It will attempt to determine the extent of differences in the needs, perceptions, attitudes, and characteristics of subgroups (Zikmund, 2003). Descriptive Research is used as the method of research in this study.

# 4.2 Respondents and Sampling Procedures

#### 4.2.1 Respondents/Target Population of the Study

The target population, that is, the complete group of specific population elements relevant to the research project (Zikmund, 2003).

The target population of this study is foreign patients who go across borders to obtain medical treatment and, at the same time, join some tourism activities or vacation

(before or after their medical treatment) and have selected Thailand as a medical destination, aged ranging from 21 to over 50 years old, irrespective of gender.

#### 4.2.2 Sample Size

A Sample is a subset, or some part, of a larger population. Zikmund (2003) suggested that large samples are more precise than small samples, but if proper probability sampling is implemented, a small proportion of the total population will give a reliable measure of the whole. This is niche marketing; it would not be possible to achieve a large number of respondents in the top two private hospitals in Bangkok since there were difficulties to access a sample, identified as a limitation of this research so the Purposive Sampling was used in this study.

#### 4.2.3 Sampling Procedures

Purposive Sampling involves collecting information from specific targets. That is, specific types of people who will be able to provide the desired information, either because they are the only ones who can give the needed information, or because they conform to some criteria set by the researcher (Sekaran, 1992). Purposive sampling tends to be used when the population under study tends to be unusual. The researcher tried to pick research participants who are typical of persons in the population that is being investigated.

This research studied the specific preferences of foreign patients who obtained medical care in Bangkok, Thailand. A set of 200 questionnaires was distributed to the target respondents of two selected private hospitals in Bangkok; the hospital A and B.

Screening questions were asked to include people as respondents of this study: "You have obtained medical treatment and at the same time intend to do some tourism activities (before or after the medical treatment); otherwise stop here!"

# 4.3 Research Instruments/Questionnaire

In this research, the researcher used a self-administered questionnaire to investigate the preference of foreign patients on leisure and medical driven elements of medical tourism.

The questionnaires were developed from the studies of Caballero-Danell & Mugomba (2006) of specific preferences and identify key driven elements that attract foreign patients to the destination. Furthermore, demographic variables such as age, nationality, insurance status and religion were examined. A closed-ended questionnaire has two parts:

# Part I: Elements of healthcare treatment.

The first part (question 1-15) contains specific questions in the form of a 5-point Importance scale, which measure the degree of important of medical driven elements and leisure driven elements. The 5-point importance scale is as follows; 1 - not at all important, 2 - not so important, 3 - neither important or nor unimportant, 4 - fairly important, and 5 - very important.

#### Part II: Demographic information.

The second part (question16-19) contains demographic characteristics asking about age, gender, nationality and religion in the form of closed-end, multiple-choice questions.

# 4.4 Collection of Data/Gathering Procedures

#### 4.4.1 Primary Data

Primary data are data gathered for the specific purpose of the current research (Zikmund, 2003).

In this study, a method of collecting and gathering data from a part of the population is used by the questionnaire structure. The self-administered questionnaires were distributed to selected samples in private hospital "A" and "B", in Bangkok. The researcher selected hospital "A" and "B" because they are top two hospitals in Bangkok to serve the medical tourists who are the research's respondents and involve in medical tourism and spent almost 4 months (December 2008 to March 2009) collecting questionnaires. From December 2008 to January 2009, the researcher collected 20 questionnaires from hospitals "A" and 132 questionnaires from hospital "B" because of political crisis in Thailand leading to closure of Suvarnabhumi International airport and foreign patients could not fly in for medical treatment and tourism activities. As per the situation, Thailand's tourism and medical tourism activities were almost stopped. However, the data collection could not be completed without the assistance from the researcher's colleagues who allowed researcher to distribute the questionnaires in the inpatient ward of the hospital "A" and at a check-in counter at Suvarnabhumi International airport of the hospital "B". In the hospital "A", the researcher got approximately one questionnaire per day and completed 20 questionnaires in one month (February 2009). For the hospital "B", the researcher got approximately 3 questionnaires per day and completed 132 questionnaires in one and a half month (February to March 2009). From February to March 2009, the airport was re-opened, but the numbers of arriving foreign patients were quite less compared with the figures of the year 2008. The researcher could collect up to 152 questionnaires by the middle of March 2009.

The respondents were asked to complete the questionnaire in the patient's room in the hospital "A" and at a check-in counter at Suvarnabhumi International airport of the hospital "B". At the hospital "A", the respondents were informed the objective of research and questions of the questionnaires by a nurse before filling up the questionnaire, at the counter of the hospital "B", the respondents were informed and explained by the researchers. Most of the respondents were helpful and devote their valuable time to fill up the questionnaire. Some respondents who had experiences in medical tourism wanted to express their feeling toward the services of the hospital throughout this questionnaire.

The research faced some obstacles while distributing the questionnaires at the Suvarnabhumi International airport. The medical tourists were tired from their journey and got in hurry to refer to another place such as hospital or hotel and some of them refused to fill up the questionnaire. The communication and language was another obstacle. Some respondents who came from the countries that do not use English language as the main language such as United Arab Emirates, they were not understand the meaning of questionnaire and refused to fill up the questionnaires.

#### 4.4.2 Secondary Data

Secondary Data are data gathered and recorded by someone else prior to (and for purposes other than) the current needs of the researcher (Zikmund, 2003). It is almost less expensive than acquiring primary data and can be obtained rapidly.

In this research, the researcher obtained secondary data from many sources such as online research journal databases, textbooks, academic tourism research journals, websites, e-news, hospitals' news clipping, special reports of business consulting firm.

# 4.5 Reliability Test and Pre-Test

Pretests are trial runs with a group of respondents for the purpose of detecting problems in a questionnaire's instruction or design (Zikmund,2003).

At this stage, a researcher conducted a pilot study by distributing 30 questionnaire samples to the foreign patients of two private hospitals, "A" and "B" in Bangkok.

Raw data obtained from the pre-test study was decoded and processed by the Statistical Package of Social Science (SPSS) programme, to find the validity and reliability level. Sekaran (1992) stated that if the reliability value exceeded 0.60, it is considered to be reliable. As a result of the reliability analysis from this study, the coefficient alpha scores should be higher than 0.60 in all parts of the questionnaire, so it will be considered to be reliable. The reliability analysis resulting from the pretest indicates that this questionnaire could be used for examining this study's hypotheses. The outcome of reliability analysis-scale or alpha of 15 items were .733 which is greater than 0.6. Hence, it could be accepted that the questionnaire was reliable.

Table 4.1: Reliability analysis-scale (alpha) of Pre-test Result

Reliability Statistics

Cronbach's Alpha	No. of Items
.733	15

#### 4.6 Statistical Treatment of Data

#### 4.6.1 Descriptive Statistics

Descriptive statistics are used to present quantitative descriptions in a manageable form. A research study may have lots of measures. Or it may measure a large number of people on any measure. Descriptive statistics help to simplify large amounts of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary.

Descriptive Statistics were used to describe the percentage, frequency mean, and standard deviation.

#### 4.6.2 Independent Sample T-test and ANOVA

Inferential Statistics are used for Confirmatory Data Analysis to investigate questions, models and hypotheses measuring Independent Sample t-test, ANOVA, Chisquare Test of Independent. In this research, the researcher applied three statistical treatments of data as below:

#### Independent Sample t-test

T-test is a technique used to test a hypothesis stating that the mean scores on some variables will be significantly different for two independent samples or groups. It is used when the number of observations (sample size) is small and the population standard deviation is unknown. T-value is a ratio with the information about the difference between the means (provided by the sample) in the numerator and the random error in the denominator (Zikmund, 2003).

ANOVA (Analysis of Variance) is a technique to determine if statistically significant differences in the means occur between two or more groups.

One-way ANOVA performs a comparison of the means of more than two groups or populations to determine if their differences are statistically significant. The technique is one-way because it deals with only one independent variable although several levels of that variable may be used. The F-distribution is a measure used to determine whether the variability of two samples differs significantly. It is the ratio of the two sources of variances. If the observed statistic is greater than the test value for some level of significance, the hypothesis that there is no significant difference in the means of the sample groups may be rejected (Zikmund, 2003).

# 4.7 Statistical Tests Used

Table 4.2: Summary of statistical tests used

Hypothesis	Statement	Statistical Test
Hypothesis 1	The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age is significant.	One-way ANOVA
Hypothesis 2	The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of health insurance status is significant.	Independent Sample t-test
Hypothesis 3	The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is significant.	One-way ANOVA

Hypothesis	Statement	<b>Statistical Test</b>
Hypothesis 4	The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of religion is significant.	One-way ANOVA
Hypothesis 5	The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age is significant.	One-way ANOVA
Hypothesis 6	The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of health insurance status is significant.	Independent Sample t-test
Hypothesis 7	The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is significant.	One-way ANOVA
Hypothesis 8	The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is significant.	One-way ANOVA



#### **CHAPTER V**

#### DATA ANALYSIS AND FINDINGS

This chapter focuses on the data analysis and findings of this research study. The first section presents the data analysis, which summarizes the findings from the data collection. The second section illustrates the hypothesis testing results by use of independent and dependent variables.

#### 5.1 Data Processing and Analysis

The Statistical Package for Social Science (SPSS) version 14 was utilized to summarize the data in a readable and easily interpretable form.

Descriptive analysis was acted upon to derive the frequency tables and percentage in order to observe the distribution of variables within the populations classified by age, nationality, health insurance status and religion.

# **5.1.1 Frequency Distribution of Independent Variables: Respondents' Demographic** characteristics

#### 5.1.1.1 Age

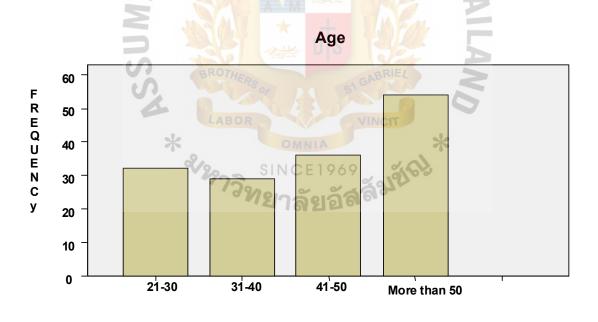
Table 5.1 and Figure 5.1 demonstrate that out of 152 respondents, the majority of the respondents' ages is in the range of "more than 50 years" old group (54 respondents - 35.5%), followed by "41-50 years" old group (36 respondents - 23.7%), "21-30 years" old group (32 respondents - 21.1%) and "31-40 years" old group (29 respondents - 19.1%) respectively.

 Table 5.1 Age distributions of the respondents

Age (Years Old)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	32	21.1	21.1	21.1
	31-40	29	19.1	19.1	40.1
	41-50	36	23.7	23.7	63.8
	More than 50	54	35.5	35.5	99.3
	Total	152	100.0	100.0	

Figure 5.1 Frequency of respondents' characteristics distributed by Age



#### **5.1.1.2** Nationality

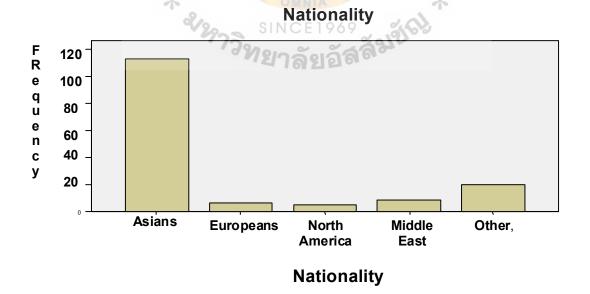
Table 5.2 and Figure 5.2 demonstrates that out of 152 respondents, the largest proportion of the respondents was "Asians" (113 respondents - 74.3%), followed by "Other nationality" (20 respondents – 13.2%), "Middle East" (8 respondents – 5.3%), "Europeans" (6 respondents – 3.9%) and "North America" (5 respondents – 3.3%) respectively.

**Table 5.2 Nationality distributions of the respondents** 

#### Cumulative Valid Percent Frequency Percent Percent Valid Asians 113 74.3 74.3 74.3 Europeans 6 3.9 78.3 3.9 Middle East 8 5.3 86.8 5.3 North America 5 3.3 3.3 81.6 Others 13.2 20 13.2 100.0 Total 152 100.0 100.0

Nationality

Figure 5.2 Frequency of respondents' characteristics distributed by Nationality



#### **5.1.1.3** Health Insurance Status

Table 5.3 and Figure 5.3 demonstrate that out of 152 respondents, 122 respondents (80.3%) are "not insured" and 29 respondents (19.1%) are "insured".

Table 5.3 Health Insurance Status distributions of the respondents

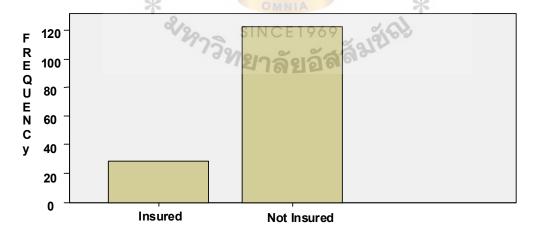
Insurance Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Insured	29	19.1	19.1	19.1
	Not Insured	122	80.3	80.3	99.3
	Total	152	100.0	100.0	

Figure 5.3 Frequency of respondents' characteristics distributed by

**Health Insurance Status** 

#### **Insurance Status**



**Insurance Status** 

# **5.1.1.4** Religion

Table 5.4 and Figure 5.4 demonstrate that out of 152 respondents, 79 respondents (52%) are "Buddhist", 41 respondents (27%) are "Muslim", 22 respondents (14.5%) are "Christian", 7 respondents (4.6%) are "other" religion and 3 respondents (2%) are "Hindu" respectively.

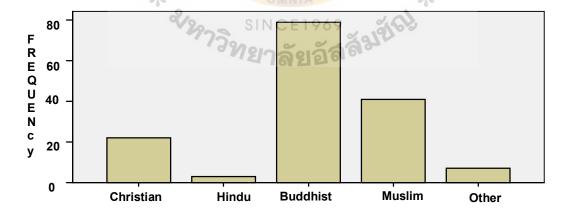
Table 5.4 Religion distributions of the respondents

#### Religion

nu	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Buddhist Christian Hindu Muslim Others	79 22 3 41 7 152	52.0 14.5 2.0 27.0 4.6 100.0	52.0 14.5 2.0 27.0 4.6 100.0	68.4 14.5 16.4 95.4 100.0

Figure 5.4 Frequency of respondents' characteristics distributed by religion

# Religion



Religion

#### 5.1.1.5 Sources of Information of Medical Tourism in Thailand

The highest number of answer shown in Table 5.5 was "Broker between International patients and hospital network", followed by "Medical Travel Agent", "Hotel", "Internet", "Friend", "Standard government publications", "Tourism Authority of Thailand", "Company encouraged to come here", "Family", "Doctor Referral" and "In-Flight magazine".

It can be explained that the majority group of medical tourists received information about medical tourism from the broker between International patients and hospital network. The brokers played an important role in this industry; they got fully authorization from the hospitals to provide necessary information to medical tourists in different countries.

The Medical Travel Agent, Hotel and Internet are also good sources of information and easily to access, the number of answers were 24, 23, 22, respectively. There were 12 answers receiving sources of information from friends and 5 answers from Tourism Authority of Thailand.

The Standard government publications and Company encouragement for treatment, there were 5 and 3 answers, respectively. These can be considered as the staff incentive, for example, the United Arab Emirates' Arm Forces or company's staffs were referred to the hospital that has an agreement of treatment between government or company and the hospitals. The treatment expenses will response by the government or company.

The Family and Doctor Referral were as the result of word of mouth; there were 2 answers of each source. The medical tourists asked for information from the doctors or family members when they were searching for suitable medical tourism destination.

**Table 5.5 Sources of Information of Medical Tourism in Thailand** 

Sources of Information	Number of answers related to this issue
Broker between International patients and hospital network	42
Medical Travel Agent	24
Hotel	23
Internet	22
Friend	12
Standard government publications	5
Tourism Authority of Thailand	5
Company encouraged us to come here	3
Doctor Referral	2
Family LABOR VINCIT	2
In-Flight magazine	1
<sup>ชาวจิ</sup> ทยาลัยอัสลั้ <sup>มชิง</sup> ง	
Total answers	141

# 5.1.1.6 Appealing factor under leisure driven to select Thailand for medical tourism

The highest number of comments shown in Table 5.6 was "Quality of accommodation", followed by "Shopper's paradise", "Sight seeing/ spa/massage", "Courteous/ hospitable people", "The weather is too fantastic", and "Join holidays".

It can be explained that the majority group of medical tourists give importance to "The quality of accommodation" as the appealing factors under leisure driven to select Thailand as medical tourism. The respondents mentioned while filling up the questionnaire that the accommodation in Thailand is good in term of quality, convenience and negotiable price.

There were 3 comments that valued Thailand as "The shopper's paradise". The medical tourists preferred to shop before or after medical treatment. There are 2 comments of "Courteous/hospitable people", 2 comments of "Sight seeing/spa/massage" and 2 comments of "The weather is too fantastic" and 1 comment of "Join holidays". The medical tourists also valued Thailand as the medical-vacation destination because all leisure driven factors are provided in the destination.

Table 5.6 Appealing factor under leisure driven to select Thailand for Medical Tourism.

Medical tourists' comments	No. Of comments related to this issue
Quality of accommodation	4
Shopper's paradise	3
Sight seeing/spa/massage	2
Courteous/ hospitable people	2
The weather is too fantastic	2
Join holidays	1
Total comments	14

# 5.1.1.7 Appealing factor under medical driven to select Thailand for Medical Tourism

There were totally 49 comments, and the highest number was "Reasonable Expenses and Professionalism of medical personnel", followed by "Hospitality and good services", "Excellent of quality treatment/services", "International recognized medical service", "Easy to access to Thailand", "Proximity and Ethical manner", "Reliability and Effectiveness", "Availability of advance technology", "Clean environment in hospital", and "Least price of air ticket".

It can be explained that the majority group of medical tourists gave importance to "Reasonable Expense and Professionalism of medical personnel" They were royalty to the hospital and doctors. They could be a good sources of information for others medical tourists. There were 7 and 6 comments of "Hospitality and good services" and "Excellent of quality treatment/services". The medical tourists admired on Thai touch by the service-people concerned in the hospitals, especially for Thai nurses who are known to be quite gentle and unique in touch and treatment. There were 4 comments realized on the International recognized medical services and easy access to Thailand. The medical tourists believed that the International recognized hospitals always commit with the professional of care and acceptable technology, therefore, they considered this factor than other factors. There were 3 comments of "Proximity and Ethical manner", 3 comments of "Reliability and Effectiveness", 3 comments of "Availability of advance technology", 2 comments of "Clean environment in hospital" and 1 comments of "Least price of air ticket".

Table 5.7 Appealing factor under medical driven to select Thailand for Medical Tourism.

Medical tourists' comment	No. Of comments related to this issue
Reasonable Expenses	8
Professionalism of medical personnel	8
Hospitality and good services	7
Excellent of quality treatment/services	6
International recognized medical service	4
Easy access to Thailand	4
Proximity and Ethical manner	3
Reliability and Effectiveness	3
Availability of advance technology	3
Clean environment in hospital	2
Least price of air ticket	1
ราการาการาการาการาการาการาการาการาการาก	
Total comments	49

# 5.1.1.8 Characteristics that come to mind when you think of Thailand as a Medical-

#### Vacation destination

A researcher got 61 comments from the respondents and the highest number of comments were "Hospitality and best services" and "Doctor and staff are excellent", followed by "Quality and Price", "Better Treatment and Technology", "Hospital has well

reputation", "Excellent place to have vacation in it", "Safety and Secured", "Immigration situation is a lot reasonable", "Better facilities on healthcare system", and "Easy to communicate". It can be explained that the majority group of medical tourists valued medical tourism of Thailand as the best hospitality and services with an excellent doctors and staff. This represents the over all characteristics that come to mind when the medical tourists think of Thailand as a medical-vacation destination.

Table 5.8 Characteristics that come to mind when you think of Thailand as a medical-vacation destination

Medical tourists' comment	No. Of comments related to this issue
Hospitality and best services	12
Doctors and staff are excellent	12
Quality and Price	8
Better treatment and technology	7
Hospital has well reputation	6
Excellent place to have vacation in it	5
Safety and secured	5
Immigration situation is a lot reasonable	2
Better facilities on healthcare system	2
Easy to communication	2
Total comments	61

#### **5.1.2 Dependent Variable Frequency**

#### 5.1.2.1 Leisure Driven (Elements of medical tourism at some hotel/resort/airport)

According to the outcome shown in Table 5.5, the "Airport pick-up services" presented the highest importance with a mean score of 4.2, followed by fairly important for the "Ease and affordability of international air travel" (4.18), "Availability of bedside immigration concierge services" (3.7), "Centrally located luxury serviced apartment/hotel and accessibility of wifi" (3.64), "Wellness and Retreat program" (3.47), and "Exchange rate" (3.46) while "Vacation prior to surgery/local tours/sight-seeing/shopping" was considered as neither important or nor unimportant (3.36).

Table 5.9 Respondents' preferences towards leisure driven (elements of medical treatment at some hotel/resort/airport)

#### Descriptive Statistics

*	NMNU	Minimum	Maximum	Mean	Std. Deviation
Exchange rate	152	969 1.00	5.00	3.46	1.27576
Ease and affordability of international air travel	152	1.00	5.00	4.18	.91652
Airport pick-up services	152	1.00	5.00	4.20	1.03604
Vacation prior to surgery/local tours/sight-seeing/shopping	152	1.00	5.00	3.36	1.21551
Wellness and Retreat program	152	1.00	5.00	3.47	1.36133
Availability of bedside immigration concierge services	152	1.00	6.00	3.70	1.21273
Centrally located luxury serviced apartment/hotel and accessibility of Wifi	152	1.00	5.00	3.64	1.20457
Valid N (listwise)	152				

#### 5.1.2.2 Medical Driven (Elements of medical tourism at hospital)

According to the outcome shown in Table 5.6, Medical driven (elements of medical tourism at hospital) also has an effect on foreigner tourists' preferences of choosing Thailand as a medical-vacation destination.

"Safety and quality of care" presented as the highest importance with a mean score of 4.74, followed by a preference of the "Skill of medical doctor/staff and overseas training" (4.72), "Technology standard of treatment is comparable to back home" (4.62), "Availability of medical treatment" (4.55), "Timely treatment" (4.41), "privacy and confidentiality" (4.34), "Cost of treatment" (4.20), "Medical care providers pay attention to my religious, dietary and cultural needs" fairly important (3.96).

Table 5.10 Respondents' preferences towards medical driven (elements of medical tourism at hospital)

#### **Descriptive Statistics**

*	NOMNI	Minimum	Maximum	Mean	Std. Deviation
Cost of treatment	S   N 152	19691.00	5.00	4.20	1.03155
Timely treatment	152	1.00	5.00	4.41	.93103
Availability of medical treatment	152	1.00	5.00	4.55	.77877
Safety and Quality of Care	152	1.00	5.00	4.74	.63555
Skill of healthcare doctor/staff and overseas training	152	2.00	5.00	4.72	.63243
Technology standard of treatment are comparable back home	152	1.00	5.00	4.62	.69942
Healthcare providers pay attention to my religions, dietary and cultural needs	152	1.00	5.00	3.96	1.17299
Privacy and confidentiality	152	1.00	5.00	4.34	.99738
Valid N (listwise)	152				

#### 5.2 Hypothesis Testing

**Hypothesis** is a statement about a population parameter developed for the purpose of testing (Lind, Marchal & Wathen, 2005).

**Hypothesis testing** is a procedure based on sample evidence and probability theory to determine whether the hypothesis is a reasonable statement. The hypothesis, which is developed for the purpose of testing, is called the *null hypothesis*, designated H<sub>0</sub>. The *alternate hypothesis* is the statement that is accepted if the sample data provide sufficient evidence that the null hypothesis is false. It is designated H<sub>1</sub> (Lind, Marchal & Wathen, 2005).

Level of Significance or sometimes called the level of risk is the probability of rejecting the null hypothesis when it is true. It is designated a (Lind, Marchal & Wathen, 2005). The significance level determines the probability level 0.05 or 0.01 – that is to be considered too low to warrant support of the null hypothesis. If the probability of occurrence of the observed data is *smaller than* the level of significance, then the data suggest the null hypothesis should be rejected (Zikmund, 2003).

This research study consists of eight (8) tested hypotheses. One-way ANOVA and Independent sample t-test were used to test the hypotheses. The significance level used in this research study is 0.05 or 95% level of confidence.

#### 5.2.1 Hypothesis 1

H<sub>0</sub>1: The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age is not significant.

H<sub>a</sub>1: The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age is significant.

The One-Way ANOVA analysis in Table 5.7 reveals the all seven items have a significance value of more than 0.05. They are "Exchange rate" (p = 0.86), "Easy and affordability of international air travel" (p = 0.986), "Airport pick-up services" (p = 0.216), "Vacation prior to surgery/local tours/sight-seeing/shipping" (p = 0.06), "Wellness and Retreat program" (p = 0.151), "Availability of bedside immigration concierge services" (p = 0.904), "Centrally located luxury serviced apartment/hotel and accessibility Wifi" (p = 0.616).

Therefore, the null hypothesis fails to reject all items. This means that the difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age is not significant.

Table 5.11 One-way ANOVA Test for Hypothesis 1

# ANOVA

				Mean		
		Sum of		Squar		
		Squares	df	е	F	Sig.
Exchange rate	Between Groups	2.161	4	.540	.326	.860
	Within Groups	243.603	147	1.657		
	Total	245.763	151			
Ease and affordability of international air travel	Between Groups	.300	4	.075	.087	.986
	Within Groups	126.542	147	.861		
10.	Total	126.842	151			
Airport pick-up services	Between Groups	6.216	4	1.554	1.466	.216
	Within Groups	155.863	147	1.060		
	Total	162.079	151			
Vacation prior to sergery/l <mark>ocal tours/sight-seeing/shopping</mark>	Between Groups	13.238	4	3.309	2.318	.060
	Within Groups	209.861	147	1.428		
4	Total	223.099	151			
Wellness and Retreat program	Between Groups	12.429	4	3.107	1.708	.151
	Within Groups	267.406	147	1.819		
all the	Total	279.836	151			
Availability of bedside immigration concierge services	Between Groups	1.552	4	.388	.259	.904
LABOR	Within Groups	220.527	147	1.500		
No.	Total	222.079	151			
Centrally located luxury serviced apartment/hotel and accessibility of Wifi	Between Groups	3.903	4	.976	.667	.616
accessibility of will	Within Groups	215.196	147	1.464		
	Total	219.099	151			

#### 5.2.2 Hypothesis 2

- H<sub>0</sub>2: The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of insurance status is not significant.
- H<sub>a</sub>2: The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of insurance status is significant.

The Independent Sample t-test Analysis in Table 5.8 reveals that all seven items have a significance value of more than 0.05. They are "Exchange rate" (p = 0.704), "Ease and affordability of international air travel" (p = 0.883), "Airport pick-up services" (p = 0.956), "Vacation prior to surgery /local tours/sight-seeing/shopping" (p = 0.553), "Wellness and Retreat program" (p = 0.945), "Availability of bedside immigration concierge services" (p = 0.162), "Centrally located luxury serviced apartment/hotel and accessibility of Wifi" (p = 0.266).

Therefore, the null hypothesis fails to reject these seven items. This means that the difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of insurance status is not significant.

 Table 5.12
 Independent Sample t-test for Hypothesis 2

# **Independent Samples Test**

			s's Test ality of nces			t-tes	t for Equalit	y of Means		
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differen ce	Std. Error Differen ce	Interva	nfidence I of the rence
									Lower	Upper
Exchange rate	Equal variances assumed	3.046	.083	.380	150	.704	.10036	.26410	42148	.62221
	Equal variances not assumed		A F	.421	48.14 9	.676	.10036	.23860	37934	.58007
Ease and affordability of international air travel	Equal variances assumed	.109	.742	148	150	.883	02803	.18981	40309	.34702
A	Equal variances not assumed			145	41.41	.885	02803	.19311	41792	.36185
Airport pick-up services	Equal variances assumed	.309	.579	055	150	.956	01177	.21458	43576	.41221
2	Equal variances not assumed	V	*	056	43.18 6	.956	01177	.21048	43619	.41264
Vacation prior to surgery/local tours/sight- seeing/shopping	Equal variances assumed	.049	.826	594	150	.553	14943	.25146	64628	.34743
Coomig.onoppmig	Equal variances not assumed	,00		575	40.71	.568	14943	.25987	67436	.37551
Wellness and Retreat program	Equal variances assumed	3.879	.051	069	150	.945	01934	.28195	57645	.53776
	Equal variances not assumed	90	SINC	075	47.21 2	.941	01934	.25824	53880	.50011
Availability of bedside immigration concierge services	Equal variances assumed	.016	.898	1.404	150	.162	.35043	.24954	14263	.84350
Condenge Services	Equal variances not assumed			1.353	40.53 8	.184	.35043	.25897	17275	.87362
Centrally located luxury serviced apartment/hotel and accessibility	Equal variances assumed	.398	.529	1.116	150	.266	.27726	.24846	21366	.76819
of Wifi	Equal variances not assumed			1.155	43.99 1	.254	.27726	.24004	20652	.76105

#### 5.2.3 Hypothesis 3

 $H_03$ : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is not significant.

H<sub>a</sub>3: The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is significant.

The One-way ANOVA analysis in Table 5.9 reveals that three out of seven items have a significance value of less than 0.05. They are "Airport pick-up services", "Vacation prior to surgery/local tours/sight-seeing/shipping" and "Availability of bedside immigration concierge services" with significance values 0.008, 0.023 and 0.041 respectively. Therefore, the null hypothesis is rejected for these three items. This means that the significant difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is significant.

There are four items "Exchange rate", "Ease and affordability of international air travel", "Wellness and retreat program" and "Centrally located luxury serviced apartment/hotel and accessibility of Wifi" with a significance value of 0.159, 0.252, 0.106 and 0.538 respectively, which are more than 0.05. Therefore, the null hypothesis fails to reject these items. This means that the difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of nationality is not significant for four items.

Table 5.13 One-way ANOVA Test for Hypothesis 3

#### **ANOVA**

		1	1	1		1
		Sum of Squares	df	Mean Square	F	Sig.
Exchange rate	Between Groups	10.706	4	2.676	1.674	.159
	Within Groups	235.057	147	1.599		
	Total	245.763	151			
Ease and affordability of international air travel	Between Groups	4.516	4	1.129	1.357	.252
	Within Groups	122.326	147	.832		
	Total	126.842	151			
Airport pick-up services	Between Groups	14.410	4	3.603	3.586	.008*
	Within Groups	147.669	147	1.005		
	Total	162.079	151	1		
Vacation prior to surgery/local tours/sight-seeing/shopping	Between Groups	<mark>16.421</mark>	4	4.105	2.920	.023*
seeing/shopping	Within Groups	206.677	147	1.406		
Z III	Total	223.099	151			
Wellness and Retreat program	Between Groups	14.068	4	3.517	1.945	.106
BROT	Within Groups	265.767	147	1.808		
	Total	279.836	151			
Availability of bedside immigration concierge services	Between Groups	14.473	4	3.618	2.562	.041*
SCIVICCS	Within Groups	207.606	147	1.412		
2/0	Total	4 222.079	151			
Centrally located luxury serviced apartment/hotel and accessibility of Wifi	Between Groups	4.569	4	1.142	.783	.538
<b>_</b>	Within Groups	214.530	147	1.459		
	Total	219.099	151			

P < 0.001

#### 5.2.4 Hypothesis 4

H<sub>0</sub>4: The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of religion is not significant.

 $H_a4$ : The difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of religion is significant.

The One-way ANOVA analysis in Table 5.10 reveals that only one item has a significance value less than 0.05. This is "Availability of bedside immigration concierge services" (p = 0.030). The null hypothesis is rejected. It is concluded that the difference among foreign tourists' importance for "leisure driven elements" of medical tourism for this item, in terms of religion, is significant. There are six items that have a significance value of more than 0.05. They are "Exchange rate", " Ease and affordability of international air travel", "Airport pick-up services", "Vacation prior to surgery/local tours/sight-seeing/shopping", "Wellness and retreat program" and "Centrally located luxury serviced apartment/hotel and accessibility of Wifi" with significance values of 0.941, 0.448, 0.524, 0.066, 0.823 and 0.272 respectively.

Therefore, the null hypothesis fails to reject these six items. This means that the difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of religion is not significant for one item.

Table 5.14One-way ANOVA Test for Hypothesis 4

#### **ANOVA**

		1		1		
		Sum of		Mean		
		Squares	df	Square	F	Sig.
Exchange rate	Between Groups	1.297	4	.324	.195	.941
	Within Groups	244.466	147	1.663		
	Total	245.763	151			
Ease and affordability of international air travel	Between Groups	3.133	4	.783	.931	.448
	Within Groups	123.709	147	.842		
-11	Total	126.842	151			
Airport pick-up services	Between Groups	3.472	4	.868	.805	.524
	Within Groups	158.607	147	1.079		
	Total	162.079	151			
Vacation prior to sergery/local tours/sight-	Between Groups	12.880	4	3.220	2.252	.066
seeing/shopping		12.000		0.220	2.202	.000
	Within Groups	210.219	147	1.430		
33/2/6	Total	223.099	151	l.		
Wellness and Retreat program	Between Groups	2.856	4	.714	.379	.823
	Within Groups	276.979	147	1.884		
CA QROTUS	Total	279.836	151			
Availability of bedside	Between Groups	Billing				
immigration concierge		1 <u>5</u> .518	4	3.880	2.761	.030*
LABOR	Within Groups	206.560	147	1.405		
*	Total	222.079	151			
Centrally located luxury serviced apartment/hotel	Between Groups	7.501	4	1.875	1.303	.272
and accessibility of Wifi	200	317.501	4	1.073	1.303	.212
and doodoonomey or will	Within Groups	211.598	147	1.439		
	Total	219.099	151			

P < 0.05

#### 5.2.5 Hypothesis 5

H<sub>0</sub>5: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age is not significant.

H<sub>a</sub>5: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age is significant.

The One-Way ANOVA analysis in Table 5.11 reveals that all eight items have a significance value of more than 0.05. They are "Cost of treatment" (p = 0.824), "Timely treatment" (p = 0.902), "Availability of medical treatment" (p = 0.508), "Safety and quality of care" (p = 0.913), "Skill of medical doctor/staff and overseas training" (p = 0.375), "Technology standard of treatment is comparable back home" (p = 0.572), "Medical care providers pay attention to my religious, dietary and cultural needs" (p = 0.887) and "Privacy and confidentiality" (p = 0.313).

Therefore, the null hypothesis fails to reject all items. This means that the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age is not significant.

Table 5.15One-way ANOVA Test for Hypothesis 5

#### **ANOVA**

				Mean		
		Sum of		Squar		
		Squares	df	е	F	Sig.
Cost of treatment	Between Groups	1.639	4	.410	.379	.824
	Within Groups	159.038	147	1.082		
	Total	160.678	151			
Timely treatment	Between Groups	.925	4	.231	.262	.902
	Within Groups	129.963	147	.884		
- 11	Total	130.888	151			
Availability of medical treatment	Between Groups	2.023	4	.506	.830	.508
	Within Groups	89.556	147	.609		
.0	Total	91.579	151			
Safety and Quality of Care	Between Groups	.402	4	.101	.244	.913
	Within Groups	60.591	147	.412		
	Total	60.993	151			
Skill of medical doctor/staff and overseas training	Between Groups	1.703	4	.426	1.066	.375
	Within Groups	58.692	147	.399		
(A)	Total	60.395	151			
Technology standard of treatment is comparable back home	Between Groups	1.440	4	.360	.731	.572
LABOR	Within Groups	VCIT 72.428	147	.493		
*	Total	73.868	151			
Medical care providers pay attention to my religions,	Between Groups	1.599	4	.400	.285	.887
dietary and cultural needs	Within Groups	206.164	147	1.402		
	Total	207.763	151	1.702		
Privacy and confidentiality	Between Groups	4.751	4	1.188	1.200	.313
,	Within Groups	145.459	147	.990	00	.5.0
	Total	150.211	151	.000		

#### 5.2.6 Hypothesis 6

H<sub>0</sub>6: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of insurance status is not significant.

H<sub>a</sub>6: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of insurance status is significant.

The Independent Sample t-test analysis in Table 5.12 indicates that all eight items have a significance value of more than 0.05. They are "Cost of treatment" (p = 0.327), "Timely treatment" (p = 0.120), "Availability of medical treatment" (p = 0.432), "Safety and quality of care" (p = 0.249), "Skill of medical doctor/staff and overseas training" (p = 0.724), "Technology standard of treatment is comparable back home" (p = 0.570), "Medical care providers pay attention to my religious, dietary and cultural needs" (p = 0.395), and "Privacy and confidentiality" (p = 0.692).

Therefore, the null hypothesis fails to reject. This means that the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of insurance status is not significant.

Table 5.16 Independent Sample t-test for Hypothesis 6

# **Independent Samples Test**

			e's Test uality of			t tost f	or Equality	of Moans		
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differen ce	Std. Error Differen ce	95% Co Interva Differ	l of the
									Lower	Upper
Cost of treatment	Equal variances assumed Equal variances	1.385	.241	.983	150	.327	.20942	.21296	21138	.63022
Timely treatment	not assumed  Equal variances		ofe	.969	41.527	.338	.20942	.21613	22689	.64573
C	assumed	.058	.810	1.564	150	.120	.29913	.19128	07881	.67708
	Equal variances not assumed	16.		1.514	40.743	.138	.29913	.19756	09993	.69819
Availability of medical treatment	Equal variances assumed	2.971	.087	787	150	.432	12672	.16096	44477	.19133
2	Equal variances not assumed	*	-	1.001	61.109	.321	12672	.12665	37995	.12652
Safety and Quality of Care	Equal variances assumed	.671	.414	1.157	150	.249	.15167	.13105	10727	.41061
S	Equal variances not assumed	Sof	11	1.386	54.595	.172	.15167	.10946	06774	.37107
Skill of healthcare doctor/staff and overseas training	Equal variances assumed	1.087	.299	330	INCIT 150	.742	04317	.13094	30190	.21555
	Equal variances not assumed	SIN	CE1	427	63.622	.671	04317	.10103	24503	.15869
Technology standard of treatment is comparable back home	Equal variances assumed	.335	.564	.570	150	.570	.08242	.14471	20350	.36835
nome	Equal variances not assumed			.548	40.506	.586	.08242	.15029	22120	.38604
Healthcare providers pay attention to my religions, dietary	Equal variances assumed	.013	.909	.854	150	.395	.20690	.24236	27198	.68577
and cultural needs	Equal variances not assumed			.820	40.429	.417	.20690	.25217	30258	.71637
Privacy and confidentiality	Equal variances assumed	1.069	.303	.396	150	.692	.08186	.20647	32609	.48982
	Equal variances not assumed			.422	45.527	.675	.08186	.19421	30916	.47289

#### 5.2.7 Hypothesis 7

- H<sub>0</sub>7: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is not significant.
- H<sub>a</sub>7: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is significant.

The One-way ANOVA analysis in Table 5.13 reveals that only one item has a significance value of less than 0.05. The item is "Medical care providers pay attention to my religious, dietary and cultural needs" (p = 0.003). Therefore, the null hypothesis is rejected. It is concluded that the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is significant for this item.

There are seven items that have a significance value of more than 0.05. They are "Cost of treatment", "Timely treatment", "Availability of medical treatment", "Safety and quality of care", "Skill of medical doctor/staff and oversea training", "Technology standard of treatment is comparable back home and Privacy and confidentiality" with significance values of 0.949, 0.741, 0.581, 0.359, 0.585,0.215 and 0.262 respectively. Therefore, the null hypothesis fails to reject for these seven items. This means that the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of nationality is not significant, for seven items.

Table 5.17 One-way ANOVA Test for Hypothesis 7

#### **ANOVA**

Sum of Squares   Mean Square   F	Sig949 .741 .581
Cost of treatment         Between Groups Within Groups Total         .779         4         .195         .179           Timely treatment         Between Groups Within Groups Total         160.678         151         4         .433         .493           Availability of medical treatment         Between Groups Within Groups         130.888         151         879         .718           Within Groups         89.825         147         .611         .611	.741
Within Groups 159.899 147 1.088 Total 160.678 151  Timely treatment Between Groups Within Groups 1.734 4 .433 .493  Within Groups 129.155 147 .879  Total 130.888 151  Availability of medical treatment Within Groups 89.825 147 .611	.741
Total 160.678 151 Timely treatment Between Groups 1.734 4 .433 .493 Within Groups 129.155 147 .879 Total 130.888 151  Availability of medical treatment Within Groups 89.825 147 .611	
Timely treatment Between Groups Within Groups Total Between Groups Total Between Groups Teatment Within Groups 89.825 147 .611	
Within Groups 129.155 147 .879 Total 130.888 151  Availability of medical treatment Within Groups 89.825 147 .611	
Total 130.888 151  Availability of medical treatment Within Groups 89.825 147 .611	.581
Availability of medical Between Groups treatment Within Groups 89.825 147 .611	.581
treatment Within Groups 89.825 147 .611	.581
Total 91.579 151	
Safety and Quality of Between Groups Care  1.772 4 .443 1.10 0	.359
Within Groups 59.221 147 .403	
Total 60.993 151	
Skill of medical doctor/staff and overseas training 4 .287 .712	.585
Within Groups 59,246 147 .403	
Total 60.395 151	
Technology standard of Between Groups treatment is comparable 2.836 4 .709 1.46	.215
back home Within Groups 71.033 147 .483	
Total 73.868 151	
Medical care providers Between Groups	
pay attention to my religions, dietary and 20.955 4 5.239 4.12 cultural needs	.003*
Within Groups 186.809 147 1.271	
Total 207.763 151	
Privacy and Between Groups 5.246 4 1.312 1.33 confidentiality	.262
Within Groups 144.964 147 .986	
Total 150.211 151	

P < 0.001

#### 5.2.8 Hypothesis 8

 $H_08$ : The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is not significant.

H<sub>a</sub>8: The difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is significant.

The One-way ANOVA analysis in Table 5.14 reveals that only one item has a significance value of less than 0.05. It is "Medical care providers pay attention to my religious, dietary and cultural needs" (p = 0.002). Therefore, the null hypothesis is rejected. It is concluded that the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is significant.

There are seven items that have a significance value of more than 0.05. They are "Cost of treatment", "Timely treatment", "Availability of medical treatment", "Safety and quality of care", "Skill of medical doctor/staff and oversea training", "Technology standard of treatment is comparable back home and Privacy and confidentiality" for which their significance values are 0.307, 0.381, 0.765, 0.654, 0.655, 0.670 and 0.273 respectively. Therefore, the null hypothesis fails to reject for these seven items. This means that the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of religion is not significant.

Table 5.18 One-way ANOVA Test for Hypothesis 8

#### **ANOVA**

		Sum of		Mean	_	
		Squares	df	Square	F	Sig.
Cost of treatment	Between Groups	5.140	4	1.285	1.215	.307
	Within Groups	155.537	147	1.058		
	Total	160.678	151			
Timely treatment	Between Groups	3.650	4	.912	1.054	.381
	Within Groups	127.238	147	.866		
	Total	130.888	151			
Availability of medical treatment	Between Groups	1.131	4	.283	.460	.765
	Within Groups	90.448	147	.615		
OF C	Total	91.579	151			
Safety and Quality of Care	Between Groups	1.021	4	.255	.626	.645
	Within Groups	59.973	147	.408		
	Total	60.993	151			
Skill of healthcare doctor/staff and overseas training	Between Groups	.987	4	.247	.611	.655
	Within Groups	59.407	147	.404		
OKOTHE!	Total	60,395	151			
Technology standard of treatment is comparable back home	Between Groups	1.168	4	.292	.591	.670
Dack Home	Within Groups	72.700	×147	.495		
09.4	Total	73.868	151	. 100		
Medical care providers	Between Groups	70.000	101			
pay attention to my religions, dietary and cultural needs	ทยาลัยอัส	21.948	4	5.487	4.341	.002*
Cartar ai 1100a0	Within Groups	185.815	147	1.264		
	Total	207.763	151			
Privacy and confidentiality	Between Groups	5.125	4	1.281	1.298	.273
,	Within Groups	145.086	147	.987	55	0
	Total	150.211	151	.007		
D + 0 001		100.211				

P < 0.001

#### **CHAPTER VI**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter contains a summary of the study, conclusion of the research outcomes along with recommendations and suggestions for further research.

#### 6.1 Summary of findings

### 6.1.1 Sample profile

Out of 152 respondents of this research study, the age of the majority of the respondents without health insurance was more than 50 years. The majority groups of respondents were Asian and they were Buddhist.

Table 6.1 Summary of Respondents' demographic characteristic

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#### **6.1.2** Hypothesis testing results

The research study of the topic of "Medical tourism: specific preference of foreign tourists in Thailand" obtained the primary data from 152 questionnaires from the target respondents by applying One-way ANOVA and Independent Sample t-testing to test the hypothesis. The outcomes are as indicated in Table 6.2.

Table 6.2 Summary of Hypothesis testing results

Description	Statistic Technique	Hypothesis testing result
Hypothesis 1	Teeminque	testing result
The difference among foreign tourists'	One-way	Fail to reject
importance for "leisure driven elements" of	ANOVA	$H_01$
medical tourism in terms of age is not		
significant.		
Hypothesis 2		
The difference among foreign tourists'	Independent	Fail to reject
importance for "leisure driven elements" of	Sample t-test	$H_02$
medical tourism in terms of health insurance		
status is not significant.		
Hypothesis 3	P	
The difference among foreign tourists'	One-way	Reject H <sub>0</sub> 3
importance for "leisure driven elements" of	ANOVA	in three items
medical tourism in terms of nationality is not	7 3	
significant.		
Hypothesis 4	*	
The difference among foreign tourists'	One-way	Reject H <sub>0</sub> 4
importance for "leisure driven elements" of	ANOVA	in 1 item
medical tourism in terms of religion is not		
significant.		
Hypothesis 5		
The difference among foreign tourists'	One-way	Fail to reject
importance for "medical driven elements" of	ANOVA	$H_05$
medical tourism in terms of age is not		
significant.		

Hypothesis 6		
The difference among foreign tourists'	Independent	Fail to reject
importance for "medical driven elements" of	Sample t-test	$H_06$
medical tourism in terms of health insurance		
status is not significant.		
Hypothesis 7		
The difference among foreign tourists'	One-way	Reject H <sub>0</sub> 7 in
importance for "medical driven elements" of	ANOVA	one item
medical tourism in terms of nationality is not	0.	
significant.		
Hypothesis 8	4 =	
The difference among foreign tourists'	One-way	Reject H <sub>0</sub> 8 in
importance for "medical driven elements"	ANOVA	one item
of medical tourism in terms of religion is		
not significant.		
LABOR VINCI		

# 6.2 Conclusion of the research study based on the objectives

In this section, the researcher wraps up the research findings to achieve the two objectives mentioned in Chapter 1.

**Objective 1:** To investigate the profile of medical tourists and specific preferences of medical tourists in Thailand.

**Objective 2:** To analyze the relationship between foreign tourists' demographic characteristics and the element of medical tourism.

**Hypothesis 1 – 4** tested the difference among foreign tourists' importance for "leisure driven elements" of medical tourism in terms of age, insurance status, nationality and religion.

#### Age

The outcome demonstrated that all seven items fails to reject, which confirmed that the foreign tourists' importance for "leisure driven elements" of medical tourism do not change with the age of medical tourists.

#### **Health Insurance status**

The outcome demonstrated that all seven items fails to reject, which confirmed that the foreign tourists' importance for "leisure driven elements" of medical tourism do not change with the insurance status of medical tourists. This surprising research due to the fact that majority of the respondents of this study were Asian, who do not have any insurance policy.

#### Nationality

The outcome demonstrated that four out of seven items fails to reject.

Three items of rejected items confirmed that the foreign tourists' importance for "leisure driven elements" of medical tourism change with the nationality of the medical tourists.

#### Airport pick-up services

Appendix C – Post Hoc Tests demonstrated I (Asians) – J (North America) = 1.17699\*, I (Middle East) – J (Europeans) = 1.20833\*, I (Middle East) – J (North America) = 1.875008 and I (Others) – J (North America) = 1.50000\*. This implies that medical tourists from Asia, Middle Eastern and Others give more importance to "Airport pick-up services" than North American.

Middle Eastern tourists also give more importance to this fact than Europeans tourists who visit Thailand for medical treatment.

The medical tourists from North America are usually familiar with public transportation; they like to take a taxi from the airport to their hotel more than using private care from the hotel or hospital. These tourists often travel alone or with their spouses so they need only a simple public transportation.

The research study also revealed that the medical tourists from Asia, the Middle East and Others have a strong need to use airport pick-up services. They come along with their family members to the destination. Some of the family members go for medical treatment, while others go for leisure activities. Hence, they have many itinerary goals amongst them that made them request airport pick-up services.

### Vacation prior to surgery/local tours/sight-seeing/shopping

Appendix C – Post Hoc Tests demonstrated I (Middle East) – J (Asians) = 1.15376\*, I (Middle East) – J (North America) = 1.57500\* and I (Others) – J (Asians). This implies that medical tourists from Middle East and Others give more importance to "Vacation prior to surgery/local tours/sight-seeing/shopping" than Asians. And tourists from Middle East also give more importance to this issue than North America.

The Middle East medical tourists like to join vacation and go shopping prior to medical treatment. They come from a rich country and they spend a lot of money on shopping. Importantly they come to the destination with all family members so this kind of medical tourist can drive the country's economy as well.

#### Availability of bedside immigration concierge services

Appendix C – Post Hoc Tests demonstrated I (Asian) – J (North America) = 1.08142\*, I (Middle East) – J (Europeans) = 1.37500\*, I (Middle East) – J (North America) = 1.77500\* and I (Others) – J (North America) = 1.40000\*. This implies that medical tourists from Asia, Middle East and Others give more importance to "Availability of bedside immigration concierge services" than North America and Europeans.

The Middle East and Others medical tourists request additional service options because the medical tourists and there families need to plan to spend time and fix schedule to go back home after seeing and consultation with their doctor. They may need to expand the treatment duration or want to spend more time on vacation. Hence, they may need to extend their visa for staying longer at the destination or book a rental car to go somewhere for city tours or shopping; the concierge services can arrange such things.

Amongst the North Americans and Europeans medical tourists prefer simple things, they may go shopping by walking or taking the sky train or subway. Usually, they visit a destination for medical treatment before leaving for some peaceful destination. They may need immigration concierge services for some emergency reasons.

#### Religion

The outcome demonstrated that six out of seven items fails to reject. One of the rejected items confirmed that the foreign tourists' importance for "leisure driven elements" of medical tourism changes with the religion of the medical tourists.

#### Availability of bedside immigration concierge services

Appendix C – Post Hoc Tests demonstrated I (Christian) – J (Others) = 1.20779\*, I (Buddhist) – J (Others) = 1.25497\*, and I (Muslim) – J (Others) = 1.57143\*. This implies that Christian, Buddhist and Muslim medical tourists give more importance to the "Availability of bedside immigration concierge services" than others. The results of these Post Hoc tests confirmed the Christian, Buddhist and Muslim medical tourists' requests for bedside immigration concierge services more than those of other religions. Catholic medical tourists have a conservative behaviour and well prepared for necessary issues, they will rely on this service in case of emergency.

**Hypothesis** 5 - 8 tested the difference among foreign tourists' importance for "medical driven elements" of medical tourism in terms of age, health insurance status, nationality and religions.

#### Age

The outcome demonstrated that all eight items failed to reject, which confirmed that the foreign tourists' importance for "medical driven elements" of medical tourism do not change with the age of the medical tourists.

#### **Health Insurance status**

The outcome demonstrated that all eight items failed to reject, which confirmed that the foreign tourists importance for "medical driven elements" of medical tourism do not change with the health insurance status of medical tourists.

#### **Nationality**

The outcome demonstrated that seven out of eight items failed to reject.

One of the rejected items confirmed that the foreign tourists' importance for "medical driven elements" of medical tourism changes with the nationality of the medical tourists.

 Medical care providers pay attention to my religious, dietary and cultural needs

Appendix C – Post Hoc Tests demonstrated I (Asians) – J (Europeans) = 1.42920\*, I (Middle East) – J (Europeans) = 2.12500\*, and I (Others) – J (Europeans) = 1.90000\*. This implies that medical tourists from Asia, Middle East and Others give more importance to "Medical care providers pay attention to religious, dietary and cultural needs" than Europeans.

Middle Eastern, Asian and Others medical tourists have a higher cultural concern than European medical tourists. They are more aware of religious practices and dietary needs. For Middle East tourists, especially, they are look for a medical care centre that can provide them with a place to conduct religious practices and prepare appropriate food. They are seriously looking for a hospital that pays attention to their cultural needs. The European medical tourists pay less attention to this matter. They are more individualistic and live their lifes simply and would like to challenge themselves by learning about new cultures and foods.

#### Religion

The outcome demonstrated that seven out of eight items failed to reject.

One of rejected items confirmed that the foreign tourists' importance for "medical driven elements" of medical tourism changes with the religion of the medical tourists.

# Medical care providers pay attention to my religious, dietary and cultural needs

Appendix C – Post Hoc Tests demonstrated I (Christian) – J (Others) = 1.14286\*, I (Buddhist) – J (Others) = 0.97830\*, and I (Muslim) – J (Hindu) = 1.43902\*, I (Muslim) – J (Buddhist) = 0.6358\*, (Muslim) – J (Others) = 1.58188\*. This implies that Christian, Buddhist and Muslim medical tourists give more importance to "Medical care providers pay attention to my religious, dietary and cultural needs" than others. And the Muslim (do not eat pork and look for a prayer room) gives more importance than a Buddhist or a Hindu (do not eat pork and beef).

According to the results, The Christian, Buddhist and Muslim have higher cultural and dietary concerns than other nationalities, which mean that medical care providers cannot take these issues lightly. In the case of lack of attention to these matters, the satisfaction of services may decline or be unacceptable. Medical care providers should focus on how to provide the appropriate foods, manner or other practices when giving services to these groups.

#### 6.3 Recommendations

According to the research finding, the medical tourists who have different of age and health insurance status give the similar importance for all leisure driven elements and medical driven elements of medical tourism. The medical tourists who have different nationality and religion give the different importance for some leisure driven elements and medical driven elements of medical tourism. For example, the leisure driven

elements of medical tourism "Airport pick-up services", Vacation prior to surgery/ local tours/ sight-seeing/ shopping", and "Availability of bedside immigration concierge services" revealed the results in different importance from medical tourists who have different nationality and religion. The medical driven elements of medical tourism "Medical care providers pay attention to my religious, dietary and cultural needs" also revealed the different importance from medical tourists who have different nationality and religion.

The different in nationality and religion has also revealed the different medical tourists' characteristics and preferences toward the particular elements. The Muslim medical tourists focus seriously about their behaviour and belief. Hence, they do not eat pork and always look for prayer room. They are more concerning about dietary and religious practices than others religion. The Middle East medical tourists prefer to take a vacation and shopping prior to medial treatment because they come from rich country so they spend money on shopping and vacation than others nationalities such as Australian, Ethiopian and African.

The medical tourist who are going beyond border to medical-vacation destination, usually keep searching for sources of information to meet their characteristics and preferences from related sources such as the broker between international patients and hospital network, medical travel agent, hotel or even their family members who had experiences in medical tourism destination.

The medical tourists' characteristics and preferences are considered as important information for the marketers who wish to attract the medical tourists to the destination.

#### **6.3.1** Recommendation for the hospitals

In the research study has found that there is one leisure driven element and two medical driven elements that are significant to the importance of foreign tourists in term of nationality and religion. Firstly, the "Airport pick up services", the foreign tourists who have nationality of Asian, Middle East and others (Ethiopian, African and Australian) have more importance of this element than North America and European who are normally familiar of using the public transportation then they may not want airport pick up services, hence, the hospital should enhance the service by providing them transportation from the airport to the hospital or hotel before starting the treatment. The researcher suggests that this kind of service should be free of charge if the foreign tourists have intention to go for medication at the hospital. The result of this service will create the first impression with warm welcome when they arrive the destination.

Secondly, the "Availability of bedside immigration concierge services". The hospitals that are involving in medical tourism should be aware that foreign tourists from North America and European have less importance of these elements than Middle East and Others nationality and the foreign tourists who have Other religions have less importance than Christian, Buddhist and Muslim. Hence, the hospital may introduce intensively these services in hospital's media to differentiate the bedside immigration concierge services from another hospitals and to emphasis on service advantages to the foreign tourists.

Thirdly, the "Medical care providers pay attention to my religions, dietary and cultural needs", the result of the research have shown that the European foreign tourists have less importance of this element than Asian, Middle East and others and foreign

tourists who have others religion have less importance of this element than Christian, Buddhist and Muslim, and at the same time the Buddhist and Hindu have less importance of this element than Muslim. Since this element is sensitive to the foreign tourists' feeling and respect, the hospital should make an effort to provide the services to capture the sense of care throughout the dietary, cultural and religion. The hospital should be aware of this element because the levels of importance are different such as the Buddhist has more importance than others religion but has less importance than Muslim so the level of importance reflects the religion, dietary and cultural needs of foreign tourists.

#### 6.3 Suggestion for further research

As this research was conducted only of two private hospitals in Bangkok and the duration of questionnaire distribution was conducted during and after Thailand's political crisis which made the number of respondents of different nationality who are popular of medical tourism were less than normal situation.

The researcher would like to recommend for future research by conducting the questionnaire distribution to more than two hospitals and during the normal situation so that the results getting from data analysis will be enlarging the foreigner 's preferences toward elements of medical tourism.

However, the medical tourism industry will be more popular or decline depending on the situation in particular destination, Thailand is good example. The research study informed the foreigner's preference toward medical tourism in Thailand only; the situation in medical tourism country is another consideration.

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No.					

#### **Questionnaire**



#### Dear Respondents:

This questionnaire is part of a Master of Business Administration (MBA)'s thesis in Tourism Management, Graduate School of Business, Assumption University, Thailand. The purpose of this survey is to seek first-hand information for analysis purposes in a thesis entitled

"Medical Tourism: Specific preferences of foreign tourists in Bangkok, Thailand".

Your answers are very valuable and your information will be strictly used for educational purpose and kept confidential. Your cooperation and precious time spent in answering this questionnaire is highly appreciated.

#### Screening question: Please continue if:

a) You have obtained medical treatment and at the same time intend to do some tourism activities (before or after the medical treatment); otherwise stop here!

#### 1. Sources of Information of Medical Tourism in Thailand

- □ Hotel
   □ Internet
   □ Tourism Authority
   □ In-Flight magazine
   □ Medical Travel Agent
   □ Standard government publications
- 7. □ Broker between International patients and hospital network

#### Part I

Please indicate your degree of importance, by marking  $(\sqrt{})$  in one box, that matches best with your opinion, where 1- not at all important, 2 - not so important, 3 - neither or nor important, 4 - fairly important, 5 - Very important

Leisure driven elements of					
medical treatment	5	4	3	2	1
Exchange rate					
2. Ease and affordability of					
international air travel					
3. Airport pick-up services					
4. Vacation prior to surgery/	VIED	0 -			
local tours/ sight-	AFK	5/7			
seeing/shopping			0		
5. Wellness and Retreat			4		
program					
6. Availability of bedside	VIP A		AL =		
immigration concierge	AM				
services	* -	-			
7. Centrally located luxury		9/2			
serviced apartment/ hotel	OF P	SI GABRIE			
and accessibility of Wifi		VINCIT		7	
*	OMNIA		*		
List (1, 2, 3) appealing factors	SINCET	969	(6)		
under leisure driven to select	1	วัสลัง			
Thailand for medical treatment.	2	510-			
	3				
Dar.	4. <u> </u>				

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N 4		B	5	
A		OF ANAL		
ا عبيد	S			
	GABRIE	6		
of 12	51			
	VINCIT			
OMNIA	260 %	*		
BOL- S	~~~3319	100		
เยาลย	590			
1				_
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	2 3	NERS//)  DS  NINCE1969  PLINE SINCE 1969  PLINE SINCE 1969  1. 2. 3.	NERS/// DS DS DS VINCIT  OMNIA SINCE 1969 PLANCE 1969	NERS//)  SINCE1969 Paragaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

# <u>Part II</u>

### **Demographic Information**

17.	Age (Years Old)			
	1. □ 21-30	2. 🗆 31-40	3. □ 41-50	4. ☐ More than 50
18.	Nationality			
	1. ☐ Asians	2. □ Europeans	3. □ North America	4. ☐ Middle East
	5. □ Other, please	specify		
19.	Health Insurance	Status VE	RSITY	
	1. ☐ Insured	2. □ Not Insured	0,	
20.	Religion			_
	1. □ Christian	2. Hindu	3.   Buddhist	4. □ Muslim
	5. □ Other, pleas	e specify	THE PARTY	2
Ge	neral S			AN
	1. What characte	eristics come to mind w	v <mark>hen you think o</mark> f Thai	iland as a Medical -
	vacation desti	nation?	IA *	
		Negative SINCE	1969	
		้ <sup>งท</sup> ยาลั	ยอัสสร	



#### **ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Airport pick-up services	Between Groups	14.410	4	3.603	3.586	.008
	Within Groups	147.669	147	1.005		
	Total	162.079	151			
Vacation prior to sergery/local tours/sight-seeing/shopping	Between Groups	16.421	4	4.105	2.920	.023
ocomgronopping	Within Groups	206.677	147	1.406		
	Total	223.099	151			
Availability of bedside immigration concierge services	Between Groups	14.473	4	3.618	2.562	.041
	Within Groups	207.606	147	1.412		
OF TO	Total	222.079	151			

# Post Hoc Tests

# Multiple Comparisons

LSD

Dependent Variable	(I) Nationality	(J) Nationality	Mean Difference (I-J)	Std. Error	Sig.		nfidence rval
	*	OMNIA	*	<		Lower Bound	Upper Bound
Airport pick-up services	Asians	Europeans E 196	.51032	.41990	.226	3195	1.3401
SCIVICCS		North America	1.17699(*)	.45804	.011	.2718	2.0822
		Middle East	69801	.36669	.059	-1.4227	.0266
		Other, please specify	32301	.24314	.186	8035	.1575
	Europeans	Asians	51032	.41990	.226	-1.3401	.3195
		North America	.66667	.60691	.274	5327	1.8661
		Middle East	-1.20833(*)	.54129	.027	-2.2780	1386
		Other, please specify	83333	.46653	.076	-1.7553	.0886
	North America	Asians	-1.17699(*)	.45804	.011	-2.0822	2718
		Europeans	66667	.60691	.274	-1.8661	.5327
		Middle East	-1.87500(*)	.57138	.001	-3.0042	7458
		Other, please specify	-1.50000(*)	.50114	.003	-2.4904	5096

			-			i	
	Middle East	Asians	.69801	.36669	.059	0266	1.4227
		Europeans	1.20833(*)	.54129	.027	.1386	2.2780
		North America	1.87500(*)	.57138	.001	.7458	3.0042
		Other, please	` ,				
		specify	.37500	.41928	.373	4536	1.2036
	Other,	Asians	22224	0.404.4	400	4575	0005
	please specify		.32301	.24314	.186	1575	.8035
	specify	Europeans	.83333	.46653	.076	0886	1.7553
		North America	1.50000(*)	.50114	.003	.5096	2.4904
		Middle East	37500	.41928	.373	-1.2036	.4536
Vacation prior to	Asians	Europeans					
sergery/local			44543	.49676	.371	-1.4271	.5363
tours/sight- seeing/shopping		MEDO					
3ccing/snopping	1	North America	.42124	.54188	.438	6496	1.4921
		Middle East	-1.15376(*)	.43381	.009	-2.0111	2965
	1	Other, please					
		specify	57876(*)	.28765	.046	-1.1472	0103
	Europeans	Asians	.44543	.49676	.371	5363	1.4271
	Add .	North America Middle East	.86667 70833	.71800	.229 .270	5523 -1.9739	2.2856 .5572
		Other, please	37.24	.64037			
		specify	13333	.55193	.809	-1.2241	.9574
	North	Asians	42124	.54188	.438	-1.4921	.6496
	America	Europeans					5500
		Middle East	86667	.71800	.229	-2.2856	.5523
(7)		I .	-1.57500(*)	.67597	.021	-2.9109	2391
UN,	400	Other, please specify	-1.00000	.59287	.094	-2.1716	.1716
	Middle	Asians	1.15376(*)	.43381	.009	.2965	2.0111
	East AB	OR	VIIVCII				
	*	Europeans	.70833	.64037	.270	5572	1.9739
	2/0	North America	1.57500(*)	.67597	.021	.2391	2.9109
	197	Other, please specify	.57500	.49603	.248	4053	1.5553
	Other,	Asians	ลละ				
	please	7 10122	.57876(*)	.28765	.046	.0103	1.1472
	specify	Г	42222	EE402	000	0574	1 0044
		Europeans North America	.13333 1.00000	.55193 .59287	.809 .094	9574 1716	1.2241 2.1716
		Middle East	57500				.4053
Availability of bedside	Asians	Europeans	57500	.49603	.248	-1.5553	.4053
immigration concierge services	Asialis	Luiopeans	.68142	.49787	.173	3025	1.6653
		North America	1.08142(*)	.54310	.048	.0081	2.1547
		Middle East	69358	.43478	.113	-1.5528	.1656
		Other, please					.2511
	_	specify	31858	.28829	.271	8883	
	Europeans	Asians	68142	.49787	.173	-1.6653	.3025
		North America	.40000	.71961	.579	-1.0221	1.8221
		Middle East	-1.37500(*)	.64181	.034	-2.6434	1066

Other, please specify	e -1.00000	.55317	.073	-2.0932	.0932
North Asians America	-1.08142(*)	.54310	.048	-2.1547	0081
Europeans Middle East	40000 -1.77500(*)	.71961 .67749	.579 .010	-1.8221 -3.1139	1.0221 4361
Other, please specify	e -1.40000(*)	.59420	.020	-2.5743	2257
Middle Asians East	.69358	.43478	.113	1656	1.5528
Europeans	1.37500(*)	.64181	.034	.1066	2.6434
North Americ	ca 1.77500(*)	.67749	.010	.4361	3.1139
Other, please specify	e .37500	.49714	.452	6075	1.3575
Other, Asians please specify	.31858	.28829	.271	2511	.8883
Europeans	1.00000	.55317	.073	0932	2.0932
North Americ	ta 1.40000(*)	.59420	.020	.2257	2.5743
Middle East	37500	.49714	.452	-1.3575	.6075

<sup>\*</sup> The mean difference is significant at the .05 level.

#### **ANOVA**

Availability of bedside immigration concierge services

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.518	4	3.880	2.761	.030
Within Groups	206.560	147	1.405		
Total	222.079	151			

# **Post Hoc Tests**

# Multiple Comparisons

Dependent Variable: Availability of bedside immigration concierge services LSD

(I) Religion	(J) Religion	Mean Difference (I-J)	Std. Error	Sig.	95% Confide	ence Interval
(i) i teligieii	* * * *	+	A PAL	o.ig.	Lower Bound	Upper Bound
Christian	Hindu	.30303	.72956	.678	-1.1388	1.7448
	Buddhist	04718	.28576	.869	6119	.5175
	Muslim	36364	.31328	.248	9827	.2555
	Other, please specify	1.20779(*)	.51440	.020	.1912	2.2244
Hindu	Christian LABOR	30303	.72956	.678	-1.7448	1.1388
	Buddhist	35021	.69726	.616	-1.7282	1.0277
	Muslim	66667	.70899	.349	-2.0678	.7345
	Other, please specify	E   9.90476	.81800	.271	7118	2.5213
Buddhist	Christian	.04718	.28576	.869	5175	.6119
	Hindu	.35021	.69726	.616	-1.0277	1.7282
	Muslim	31646	.22817	.168	7674	.1345
	Other, please specify	1.25497(*)	.46747	.008	.3311	2.1788
Muslim	Christian	.36364	.31328	.248	2555	.9827
	Hindu	.66667	.70899	.349	7345	2.0678
	Buddhist	.31646	.22817	.168	1345	.7674
	Other, please specify	1.57143(*)	.48478	.001	.6134	2.5295
Other, please specify	Christian	-1.20779(*)	.51440	.020	-2.2244	1912
•	Hindu	90476	.81800	.271	-2.5213	.7118
	Buddhist	-1.25497(*)	.46747	.008	-2.1788	3311
	Muslim	-1.57143(*)	.48478	.001	-2.5295	6134

<sup>\*</sup> The mean difference is significant at the .05 level.

**ANOVA** 

Medical care providers pay attention to my religions, dietary and cultural needs

,	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.955	4	5.239	4.122	.003
Within Groups	186.809	147	1.271		
Total	207.763	151			

# **Post Hoc Tests**

#### Multiple Comparisons

Dependent Variable: Medical care providers pay attention to my religions, dietary and cultural needs

\_SD

		Mean	MA			
(I) Nationality	(J) Nationality	Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(1) Nationality	(3) Nationality	(1-3)	Sta. Liioi	olg.		
	THE ALL I		M		Lower Bound	Upper Bound
Asians	Europeans	1.42920(*)	.47228	.003	.4959	2.3625
/ total io	North America	.32920	.51518	.524	6889	1.3473
(A)	Middle East	69580	RIE 41243	.094	-1.5109	.1193
(A)	Other, please specify	47080	.27347	.087	-1.0112	.0696
Europeans	Asians	-1.42920(*)	.47228	.003	-2.3625	4959
	North America	-1.10000	.68261	.109	-2.4490	.2490
	Middle East	-2.12500(*)	.60881	.001	-3.3282	9218
	Other, please specify	1.90000(*)	.52473	.000	-2.9370	8630
North America	Asians	32920	.51518	.524	-1.3473	.6889
	Europeans	1.10000	.68261	.109	2490	2.4490
	Middle East	-1.02500	.64266	.113	-2.2950	.2450
	Other, please specify	80000	.56365	.158	-1.9139	.3139
Middle East	Asians	.69580	.41243	.094	1193	1.5109
	Europeans	2.12500(*)	.60881	.001	.9218	3.3282
	North America	1.02500	.64266	.113	2450	2.2950
	Other, please specify	.22500	.47158	.634	7070	1.1570
Other, please specify	Asians	.47080	.27347	.087	0696	1.0112
	Europeans	1.90000(*)	.52473	.000	.8630	2.9370
	North America	.80008	.56365	.158	3139	1.9139
	Middle East	22500	.47158	.634	-1.1570	.7070

<sup>\*</sup> The mean difference is significant at the .05 level.

**ANOVA** 

Medical care providers pay attention to my religions, dietary and cultural needs

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.948	4	5.487	4.341	.002
Within Groups	185.815	147	1.264		
Total	207.763	151			

# **Post Hoc Tests**

#### Multiple Comparisons

Dependent Variable: Medical care providers pay attention to my religions, dietary and cultural needs

LSD

(I) Religion	(J) Religion	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
T V				7	Lower Bound	Upper Bound
Christian	Hin <mark>du</mark>	1.00000	.69196	.151	3675	2.3675
	Buddhist	.16456	.27103	.545	3711	.7002
(1)	Muslim	43902	.29713	.142	-1.0262	.1482
	Other, please specify	1.14286(*)	.48789	.020	.1787	2.1070
Hindu	Christian	-1.00000	.69196	.151	-2.3675	.3675
	Buddhist	83544	.66133	.208	-2.1424	.4715
	Muslim	-1.43902(*)	.67244	.034	-2.7679	1101
	Other, please specify	.14286	.77584	.854	-1.3904	1.6761
Buddhist	Christian	E ]16456	.27103	.545	7002	.3711
	Hindu	.83544	.66133	.208	4715	2.1424
	Muslim	60358(*)	.21641	.006	-1.0312	1759
	Other, please specify	.97830(*)	.44337	.029	.1021	1.8545
Muslim	Christian	.43902	.29713	.142	1482	1.0262
	Hindu	1.43902(*)	.67244	.034	.1101	2.7679
	Buddhist	.60358(*)	.21641	.006	.1759	1.0312
	Other, please specify	1.58188(*)	.45979	.001	.6732	2.4905
Other, please specify	Christian	-1.14286(*)	.48789	.020	-2.1070	1787
	Hindu	14286	.77584	.854	-1.6761	1.3904
	Buddhist	97830(*)	.44337	.029	-1.8545	1021
1 -	Muslim	-1.58188(*)	.45979	.001	-2.4905	6732

The mean difference is significant at the .05 level.