THE STUDY OF INFLUENTIAL FACTORS ON HOSPITAL CHOICE FOR MEDICAL TOURIST IN THAILAND FOCUSING ON GENRAL BANGKOK HOSPITAL, BNH HOSPITAL, BUMRUNGRAD INTERNATIOANAL HOSPITAL

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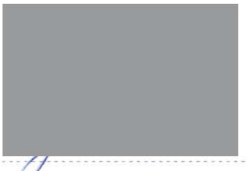
Field Specialist 

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The Study of Influential Factors on Hospital Choice for Medical Tourist in Thailand focusing on General Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital (pp.108)

Advisor: Sumas Wongsunopparat. Ph.D.

ABSTRACT

The research scope is primarily focused on foreign medical tourists, who travel outside of their home country to receive medical treatments in Thailand hospitals. The 400 questionnaires were distributed to international patients who came for medical treatment in General Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital separately, each hospital got 133 questionnaires within the duration of ten days. The sample population selected in this research was those which are readily available and convenient. The researcher focused on determining the factors of medical costs, service quality, recognizing for medical treatment, hospital image, medical technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctors quality, hospital ambiences environment which then effects on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital for medical treatment purposes.

Keywords: foreign medical tourists, hospital choice, medical treatments in Thailand

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CHAPTER 1
INTRODUCTION

In chapter one, the topic of a study of influential factors on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination, will be mainly introduced the first part introduces the background, and focuses on the Thai hospitals. Next follows the statement of the problem and the research objectives. Then at last, will present the scope and the limitation of this study.

1.1 Background

Thailand, along with its Asian neighbors Singapore and India, accounts for 90% of Asia's medical tourism market. Each year, over a million foreigners plan their medical travel around a Thailand holiday clubbing sight-seeing with medical treatments. On the tourism front, Thailand has been a popular destination for decades.

In the past few years, Thailand has gained a reputation as a high-quality and reliable medical tourism destination. In no small part, Thailand owes it to the hospitality of the Thai people. Thailand has earned the eponym of the 'Land of Smiles'. The Thais treat their guests with the utmost respect and try to serve them the best way they can. On another hand, Thailand medical tourism has seen its popularity rise owing to the fact that it is home to many internationally accredited hospitals. These hospitals offer a gamut of treatments, right from cosmetic/plastic surgery and dental tourism to organ transplants at affordable rates.

Many doctors and physicians in Thailand have medical certifications from the UK and US, and attend to patients with consummate professionalism and great care. Thailand is not only a major tourism destination in the world but also one of the most popular countries for medical tourism. More than a million foreigners travel to Thailand

every year to get medical and surgical procedures done. In 2012, the number of international patients getting treated in Thailand was about 2.5 million people and the number is constantly growing annually.

Thailand is a much sought after healthcare destination. More than a million healthcare tourists visit Thailand every year to avail healthcare services owing to its excellent medical and health care quality. Healthcare in Thailand is provided by government hospitals, private hospitals, non-governmental organizations and private practitioners. The Ministry of Public Health controls most of the hospitals in Thailand. There are more than a thousand government hospitals in the country. Government hospitals in Thailand are of three types, there are regional hospitals in the provinces with at least 500 beds, general hospitals in major districts or province capitals with a capacity of 200 to 500 beds, and community hospitals in the districts that can admit 10 to 30 patients. The community hospitals provide basic medical care and refer the more advanced cases to the general hospitals or the regional hospitals.

The quality of healthcare in the government hospitals is generally good; however, as the hospitals cater to a large number of people, customers can expect a long wait. Foreigners have to pay normal charges and the benefit of the government schemes is not available to them. The advantage is government hospitals offer low cost healthcare compared to costs levied by private hospitals. In all probability, customers will be admitted to a general ward unless customers are willing to pay extra for a room. The private hospitals are the best equipped and of these there are more than 300 in various parts of Thailand. Customers will find many of them in Bangkok and popular tourist destinations, while other major provinces will have at least one private hospital.

Specialist clinics such as dermatology clinics, cosmetic plastic surgery clinics as well as medical and wellness spas are widely available throughout the country. Hospitals and medical facilities in Thailand pride themselves on their high standards, and many

have subjected their premises and systems to the most rigorous classification by applying for international accreditation and certification.

International patients in Thailand will find that English-speaking general practitioners, dentists and surgeons are generally available in private hospitals and specialist clinics. Moreover, many hospitals offer translator services in most possible languages from Russian and Arabic to Dutch and Japanese.

Advantages of going to Thailand for medical treatment (Steve, 2014).

1. Affordability

The cost of medical treatment in Thailand is one of the lowest in the world. The huge savings and the fantastic quality of Thailand medical facilities draw many medical tourists to Thailand. Indeed, the medical facilities in Thailand are some of the best in the world. All the latest equipment and facilities for treating even the most difficult illnesses can be availed off in Thailand for an affordable cost (Steve, 2014). For example, a heart bypass surgery can cost upwards of $144,000 in the US, but the same operation will cost around $26,000 in Thailand.

2. World Class and International Accredited Medical facilities

Many private hospitals in Thailand are Joint Commission International (JCI) accredited. On last count there were 46 of these (as of September 2015). Many more are ISO certified and are in the process of getting a JCI accreditation (Steve, 2014). Over 350 hospitals have a hospital accreditation from the Ministry of Public Health (Steve, 2014). All the latest technologies and facilities are available in the largest private hospitals.

3. Highly trained and experienced doctors, nurses and paramedical staff

Thailand has a pool of highly trained doctors many of whom have studied/practiced abroad. With this international experience they are able to offer the latest and safest

medical procedures (Steve, 2014). They will perform a wide range of surgeries like plastic surgeries, cardio thoracic surgeries, pediatric surgery, neurological surgery, dental implants, LASIK, etc. Nearly all of the doctors and most of the nurses speak English. Translator services are also available should customers require them.

4. Excellent Service

Thailand is famous for its hospitable treatment of visitors. The people are a friendly lot and hospitable service to guests is engrained in the culture (Steve, 2014). Customers will be surprised to see how far the Thais will go to make their guests comfortable.

5. Holistic and Alternative treatments

There are many medical spas and wellness centers in Thailand offering alternative treatments like Thai massages, Thai foot massages, aromatherapy massages, and Thai therapeutic massages (Steve, 2014). Many of these therapies are exclusively found only in Thailand. Apart from this, Ayurveda and Traditional Chinese Medicine (TCM) is also widely known and can be easily found in Thailand.

6. Better bundling of services

Patients going to other Asian counties mostly focus on specialized treatments. But the major Thailand hospitals offer full-fledged services under one roof. One major private hospital in Thailand treats 1.2 million patients annually and offers more than 34 specialties (Steve, 2014). Thailand offers a range of services that even the most demanding foreign medical tourist will find comforting. The vast number of patients that the doctors work on has ensured that they have vast experience, the hospitals are better equipped and the prices are kept low due to economies of scale.

7. Fewer entry procedures

The procedures in Thailand are less cumbersome than many other countries in Asia. Foreigners who travel to Thailand must have a passport that is valid for the next 6

months. Travelers from over 41 countries can stay in Thailand for up to 30 days without a visa (Steve, 2014). This is also called Visa Exemption. If customers are traveling into Thailand overland, customers can get in for 15 days without a Visa. These include countries like the United States, United Kingdom, Germany, Australia, Hong Kong and many others. Travelers from 21 other countries can apply for a visa upon arrival.

8. Tourist destinations where customers can relax and recuperate

Thailand tourism offers diverse attractions, great tourism infrastructure, delicious Thai food and friendly people (Steve, 2014). The country has many tourist places and is one of the top draws for tourists from all over the world. Thailand is a beautiful country and the tourist places contrast from hill resorts and sun kissed beaches to exotic islands. Thailand is an aviation hub; all major international airlines run flights into Bangkok and elsewhere every day (Steve, 2014). Customers can choose from many first class hotels where accommodation and food boasts international standards. In fact many tourists choose to come to Thailand so that they can club it with a short exotic Thailand holiday.

General Bangkok Hospital

General Bangkok Hospital is a hospital in Bangkok, Thailand. It was opened in 1972 by a team of physicians, pharmacists and 30 nurses. It is one of the largest privately owned hospitals in Southeast Asia. The original hospital became the Bangkok Hospital Group, now Thailand's largest hospital operator with 40 locations in major cities throughout Thailand. With its main branch located at New Petchburi Rd., Hway Kwang, Bangkok, Bangkok Hospital is a medical care center that has achieved the Joint Commission International Gold Seal of Approval and Hospital Accreditation (HA) of Thailand. This hospital has branches all over Thailand and operates under the Bangkok Dusit Medical Services (BDMS) brand. Bangkok Hospital features world-renowned physicians that utilise the latest cutting-edge medical technology and has exceptional nursing staff members that have undergone overseas training who can provide patients with top quality medical care. The hospital strives to create a serene ambience for their

patients who are mostly multi-cultural and from a variety of countries. There are also translators who are onboard and can speak over 30 different languages.

BNH Hospital

Based on the needs of expatriates seeking quality medical treatment; a small nursing home was founded in 1898 under the royal patronage of King Rama 5th and supported wholeheartedly by King Rama 6th ; quickly earning trust and respect from the expat communities. Since then more than 100 years have gone by, and these days BNH Hospital is now internationally recognized as being the first international private hospital in the kingdom of Siam for 5 reigns. Despite the passage of time, BNH Hospital has retained its identity. That extra special touch has been handed down from generation to generation, as well as medical expertise especially in maternity care, pediatrics, and gynecology. BNH proudly stands as the leader in women's health care from prevention to treatment however simple or complex. To this end BNH provides a safe, feel good experience of healing.

Located on Convent Road, Silom, Bangkok, BNH Hospital is a modern hospital that operates accordingly to international standards. With the availability of over 100 beds, the hospital provides both inpatient and outpatient treatment services and its physicians are experienced in diverse fields of medicine. With some of the latest and most sophisticated medical equipment in Thailand, BNH is able to provide medical care to patients from more than 70 countries. Some of their most celebrated medical divisions include the Senior Care Clinic, Heart Centre, Dental Clinic, Check-Up Centre, BNH Shoulder and Joint Centre and BNH Spine Centre.

Bumrungrad International Hospital

Bumrungrad International is a Joint Commission International accredited, multi-specialty hospital located in the heart of Bangkok, Thailand. Founded in 1980, it is one of the largest private hospitals in Southeast Asia, with 580 beds and over 30 specialty

centres. Bumrungrad International offers state-of-the-art diagnostic, therapeutic and intensive care facilities in a one-stop medical centre. Bumrungrad International serves 1.1 million patients annually, including over 520,000 international patients. The hospital is located in the heart of Bangkok and is one of Thailand's most renowned hospitals. It is a 200-bed premier healthcare centre for specialty medicine and a leading provider in medical tourism. Many expat retirees who reside in Bangkok are big fans of this hospital as they have doctors and nurses who are fluent in their communications with an English speaking crowd. Bumrungrad International is also one of the few hospitals in Thailand that have achieved the coveted Joint Commission International Accreditation (JCIA). It treats more than 1 million patients every year. From normal medical check-ups to major surgeries, the hospital delivers high quality medical services with minimal waiting time.

1.2 Statement of the Problems

The study is focus on factors that impact on influential factors on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination. There is a long tradition of people traveling to seek herbal medicine or medical lore elsewhere (Alfaraj & Yunus, 2015). Thailand has a long history of massage therapy dating back to 100BC (Mahadzirah, et al., 2013). Through the ages people have chosen to travel in the interest of their health and well-being (Rajesh, 2013).

The study is about the factors that impact on influential factors on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination. The dependent variable is hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital, and the independent variables include medical costs, service quality, recognizing for medical treatment, hospital image, medical

technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctors quality, hospital ambiences environment.

1.3 Intention and Reason for Study

The purpose and reason to study, researcher is emphasizing on factors that impact on influential factors on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination. The paper can help tourist customers to know Thai hospital and environment better. More importantly, it is necessary for hospital to understand that how to retain, develop and target customers in the medical tourism market. In short, it is intended to carry out marketing activities for the hospitals.

1.4 Research Objectives

The research objective of the study is to find the relationships and the impact between independent variables and hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination. This study seeks to address that research gap by examining the motivations of tourists who sought medical treatments in Thailand, and to work toward the development of a medical tourism typology. By identifying the factors that effect on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination, the results of this study are expected to assist medical tourism service providers in creating strategies to provide better products and services for their patients, and to achieve higher levels of tourism satisfaction.

1.5 Scope of Research

The research scope is primarily focused on foreign medical tourists, who travel outside of their home country to receive medical treatments in Thailand hospitals. The

400 questionnaires were distributed to international patients who came for medical treatment in General Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital separately, each hospital got 133 questionnaires within the duration of ten days. The sample population selected in this research was those which are readily available and convenient. The researcher focused on determining the factors of medical costs, service quality, recognizing for medical treatment, hospital image, medical technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctors quality, hospital ambiences environment which then effects on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital for medical treatment purposes.

1.6 Benefit of the Research

This study can help the owners and managers of the hospitals understand better that the factors that can impact on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital as medical tourism destination. And to help the marketing department of Thai hospital to make decision for the right or proper marketing decision and marketing strategy as well. It’s useful for enterprises to promote Thai hospital’s value. Other non-leading hospitals can also benefit from this research study in which they can have information on the various aspects that they might need to improve upon in order to better serve international medical travelers. Furthermore, this research study is beneficial to the Tourism Authority of Thailand (TAT), in which profound details will be unveiled regarding the core determinants that motivate international patients seeking for medical treatments to choose hospitals in Thailand as their main destination for health care. Medical tourism is largely a consumer-driven trend and in order to survive and thrive, the health delivery industry must keep up with its consumers' demands and needs.

1.7 Limitation of the Research

The factors that impact on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, Bumrungrad international hospital as medical tourism destination will be studied by the researcher. There is a limitation for data collecting is only 400 questionnaires cannot cover all the target populations in Bangkok, and also the time period is only in the October 2016. Researcher cannot research other independent variables besides these nine independent variables which are medical costs, service quality, recognizing for medical treatment, hospital image, medical technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctors' quality, hospital ambiences environment and one dependent variable hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH hospital, bumrungrad international hospital which is another limitation for this study. Because of those two limitations this study cannot cover the entire Thai hospitals research.

CHAPTER 2

LITERATURE REVIEW

This chapter is literature review and mainly introduces the concepts of theories that give academic viewpoints to support study topic "a study of influential factors on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital". There included the literature definition and theories of factors that will study in this research. A study framework is presented. So the main purpose of chapter two is to give an insight and guide of this study.

2.1 Previous Study

Mohamed, & Moradi (2011) studied that "Model of E-Tourism Satisfaction Factors for Foreign Tourists". Information and Communications Technology (ICT) has an inevitable impact on different industries and their performances. The tourism industry as the largest and fastest growing industry in the world cannot be excluded from this technology and its huge impacts. ICT provides information about tourist attractions in the different destinations before travelling and may improve tourists' satisfaction. According to World Tourism Organization (WTO) statistics, Iran is among the top five countries in having tourism potentials. However, Iran has not performed well in promoting its attractions to international tourists via ICT tools yet. This research explores the impact of ICT on foreign tourists' satisfaction of the tourism industry and uses Shiraz city as a case study. The aim is to explore the factors of tourist satisfaction in e-tourism and to look at the most important problems that tourists face while they plan their trip by using the e-tourism facilities. This research proposes a model for the impact of ICT on foreign tourists' satisfaction in e-tourism. This research is based on both primary and secondary data; library data as the source of secondary data and survey data as the source of primary data. This research uses the quantitative approach methodology which includes a survey

where questionnaires were given to foreign tourists. Informal interviews via telephone and e-mail with tourism industry stakeholders, such as travel agencies and hotel managers were carried out to identify the most important factors in tourists' satisfaction. The result of this research shows that the use of taglines such as, "Using credit card to buy", "easy transfer money", "online payment" and "update information" are the most important factors for an E-Tourism system. However, the result of the survey shows that these most important factors have not been implemented well in the e-tourism system. Thus, it is concluded that there are essential needs for planning strategies in the field of e-tourism, particularly in e-ticketing, e-reservation, online payment, and multilingual and updated information websites. Finally, this research recommends that the tourism authorities to develop the e-tourism infrastructures in order to keep up with the competitiveness of this field to enable the country to benefit from the global benefits of the tourism industry.

Kristine (2011) make research about "A study of influencing factors that lead medical tourists to choose Thailand hospitals as medical tourism destination". Travelling around the globe for medical treatment is becoming more and more prevalent these days. The fundamental premise of medical tourism is that the same care, or even better quality of care, may be available in other countries, and obtained at a more affordable cost than in the home country (Medical Tourism Association, 2008). Thailand, as one of the several major destinations in medical tourism industry that is rapidly developing, is creating worldwide trademark as "The Medical Hub of Asia". The objective of this research study is to determine the influencing factors that lead international medical tourists to choose hospitals in Thailand as their medical tourism destination. These factors will be ranked according to importance so as to assist in determining which point the hospital should focus on. Medical tourism is largely a consumer-driven trend and in order to survive and thrive, the health-delivery industry must keep up with its consumers' demands and needs (Nakra, 2011).

Hadyn and Wanthanee (2013) explored that “The impact of political instability on tourism: case of Thailand”. The purpose of this paper is to explore the relationship between political instability upon destination image and perception and tourism consumer behavior. The paper takes a case study approach and uses cross-sectional and qualitative methods to measure and contrast the perceptions of respondents who have and have not, visited Thailand. The study affirms the power of image as a subjectively-held, but important lever of consumer behavior. The findings reinforce the popularity of Thailand as a tourist destination, by both those who have and have not visited, and suggest that its image is a strong one. The paper concludes that destination managers need to work with governments to ensure political stability, which can lead to continued tourism revenues. The paper suggests that the effects of adverse publicity on political instability to tourism receipts may be temporary, providing a destination has a strong perceived image (such as Thailand) and the disruption does not last too long.

Methawee and McKercher (2013) studied that “Toward a typology of medical tourists: A case study of Thailand”. This paper examines the motivations of medical tourists who sought treatment in Thailand. Previous research has tended to treat the medical tourist market as undifferentiated, with the decision to seek treatment made prior to departure. These assumptions may be incorrect, and a significant finding of this study was that medical tourists can be categorized into four different groups, each of which displays significant differences in the types of treatment sought, the motivations for visiting Thailand, the decision making process, and their travel characteristics. One contribution of this study is its indication that if destination managers understand the nature and characteristics of each type of medical tourist, they will be able develop and promote more appropriate and satisfactory medical tourism products and services for their visitors.

Lam et al., (2011) also studied that “Macao’s potential for developing regional Chinese medical tourism”. This article aims to examine how Macao could become a destination to attract health and medical tourists from the People’s Republic of China (China), as since its return from Portuguese control in 1999 it has been capitalizing on its

position as a cultural link between Portugal and China. A study was conducted recently on the possible demand for Western and traditional Chinese medicine practices by mainland Chinese tourists visiting Macao. A survey was undertaken of their views on consuming health and medical tourism products. It was found that there is a definite opportunity for medical tourism in Macao among Chinese tourists. The body check is the medical service most highly sort and word-of-mouth together with the internet are the most preferred channels for information. Majority also prefer to package their medical trip with tourism activities. Macao is the perfect place to study outbound Chinese tourists and their potential desire for special interest tourism activities, because they are entitled to enter on independent visas. Eventually, this will be the case in many more destinations and the results could be seen as predictive. A mismatch between the requirements of the demand side and supply has been discovered and needs to be remedied with more public sector encouragement of this emerging niche. The first study of its kind is carried out amongst Chinese outbound tourists, who can obtain independent leisure travel visas to tour outside China.

Andrew and Heather (2008) studied that "Sensation seeking and tourism: Tourist role, perception of risk and destination choice". Sensation seeking (SS) is a personality trait associated with the need for novelty and stimulation and has been linked to tourist behavior. Tourist role, perceptions of risk associated with travel to particular regions of the world, and international travel experience were investigated in relation to SS and gender. Survey data were collected from 290 US young adults. Although males were higher in overall SS, gender was not a significant predictor of tourist role or international travel experience. However, SS was related to tourist role, with those higher in SS choosing explorer and drifter roles. SS was not related to perceptions of risk. Both high and low sensation seekers perceived risk similarly. However, those higher in SS were more likely to have traveled internationally and to have traveled to regions of the world rated as riskier. The findings provide empirical support for the proposition that personality traits may influence travel styles and destination choices.

Rajesh (2013) studied that "Impact of Tourist Perceptions, Destination Image and Tourist Satisfaction on Destination Loyalty: A Conceptual Model". The objective this research paper is develops a destination loyalty theoretical model by using tourist perception, destination image and tourist satisfaction. These study analysis components, attributes, factor influencing the destination image and examine the tourist satisfaction and determinants of destination loyalty. This is a conceptual paper attempts at evaluating recent empirical on destination image, tourist satisfaction and loyalty. The conceptual framework model is developed on the basis of existing theoretical and empirical research in the field of destination marketing. The models include four constructs. Tourist Perception constructs has been influenced by factors like Historical and Cultural Attractions, Destination Affordability, Travel Environment, Natural Attractions, Entertainments and Infrastructure. Destination image construct has been influenced by factors like Infrastructure & Facilities, Heritage Attractions, Natural Made Attractions, Destination Safety & Cleanness, Friendly Local Community & Clam Atmosphere, Rejuvenation and Service Price and Affordability. The satisfaction construct has been influenced by factors like Entertainments, Destination Attractions and Atmosphere, Accommodation, Food, Transportation Services and Shopping. The destination loyalty construct has influenced by intentions to revisit, word of mouth promotion and recommending to others. The earlier study result reveals that tourist perception, destination image and tourist satisfaction directly influence destination loyalty. The outcomes of the study have significant managerial implications for destination marketing managers.

Sarker and Begum (2013) studied that "marketing strategies for tourism industry in Bangladesh: emphasize on niche market strategy for attracting foreign tourists". Bangladesh has bright prospects of tourism in future. She possesses tourism potentials all over the country. But, Bangladesh tourism is facing so many problems including marketing strategy. By applying niche market strategies she can earn more foreign currency because Bangladesh is blessed with four key tourism products: Beaches, Forest, Hills and islands, Historical place and Archaeological Sites that are mostly pleasing to

many tourists. This paper is focusing the present strengths and weaknesses of tourism industry in Bangladesh and the ways to implement niche market strategy. Findings indicate that four iconic products can play significant role in the total earnings in this sector. Finally, this paper suggests how niche market strategy will help the policy maker to differentiate the tourists market and customize their service to achieve strategic marketing objectives and solve present downward earnings.

Maryam and Azizan (2012) studied that "Travel motivations and the influential factors: the case of Penang, Malaysia". Travel motivations have been one of the focal points of tourism research for several decades. This study aims to delineate travel motivation of international tourists to Penang, Malaysia. The results of factor analysis indicated that "novelty and knowledge seeking" and "cultural and historical attractions" were the most agreed upon push and pull travel domains for international tourists travelling to Penang.

Wessely (2002) studied that "travelling people, travelling objects". The paper introduces the essays on consumption, shopping tourism and informal trade in socialism, by presenting the framework of the research project in which they were produced. As opposed to tourists' shopping, shopping tourism is defined as travel abroad with the explicit aim to buy goods, unavailable, difficult to and, or inordinately costly in one's home country, for personal use or reselling to compatriots. Shopping tourism became a widespread practice in the East-European socialist economies of shortage as soon as travel restrictions, at first among socialist countries and, later, to the West, had been relaxed. Following a discussion of social and popular attitudes to consumption during socialism, the author points out that shopping tourism was not a form of popular resistance to the political system but rather a set of ingenious practices of adaptation to the everyday exigencies it created.

2.2 Definition and Theory of Factors

Choice Theory

Choice theory may refer to: rational choice theory, the mainstream choice theory in economics, and the "heart" of microeconomics non-standard theories are in their infancy and mostly the subject of behavioral economics social choice theory, a conglomerate of models and results concerning the aggregation of individual choices into collective choices Glaser's choice theory, a psychological theory used in some brands of counseling.

Rational choice theory, also known as choice theory or rational action theory, is a framework for understanding and often formally modeling social and economic behavior. The basic premise of rational choice theory is that aggregate social behavior results from the behavior of individual actors, each of whom is making their individual decisions. The theory also focuses on the determinants of the individual choices (methodological individualism).

Rational choice theory then assumes that an individual has preferences among the available choice alternatives that allow them to state which option they prefer. These preferences are assumed to be complete (the person can always say which of two alternatives they consider preferable or that neither is preferred to the other) and transitive (if option A is preferred over option B and option B is preferred over option C, then A is preferred over C). The rational agent is assumed to take account of available information, probabilities of events, and potential costs and benefits in determining preferences, and to act consistently in choosing the self-determined best choice of action.

Rationality is widely used as an assumption of the behavior of individuals in microeconomic models and analyses and appears in almost all economics textbook treatments of human decision-making. It is also used in political science, sociology, and philosophy. A particular version of rationality is instrumental rationality, which involves seeking the most cost-effective means to achieve a specific goal without reflecting on the worthiness of that goal. Gary Becker was an early proponent of applying rational actor

models more widely. Becker won the 1992 Nobel Memorial Prize in Economic Sciences for his studies of discrimination, crime, and human capital.

The concept of rationality used in rational choice theory is different from the colloquial and most philosophical use of the word. Colloquially, "rational" behavior typically means "sensible", "predictable", or "in a thoughtful, clear-headed manner." Rational choice theory uses a narrower definition of rationality. At its most basic level, behavior is rational if it is goal-oriented, reflective (evaluative), and consistent (across time and different choice situations). This contrasts with behavior that is random, impulsive, conditioned, or adopted by (unevaluated) imitation.

Early neoclassical economists writing about rational choice, including William Stanley Jevons, assumed that agents make consumption choices so as to maximize their happiness, or utility. Contemporary theory bases rational choice on a set of choice axioms that need to be satisfied, and typically does not specify where the goal (preferences, desires) comes from. It mandates just a consistent ranking of the alternatives. Individuals choose the best action according to their personal preferences and the constraints facing them. E.g., there is nothing irrational in preferring fish to meet the first time, but there is something irrational in preferring fish to meat in one instant and preferring meat to fish in another, without anything else having changed.

Rational choice theorists do not claim that the theory describes the choice process, but rather that it predicts the outcome and pattern of choices. An assumption often added to the rational choice paradigm is that individual preferences are self-interested, in which case the individual can be referred to as a homo economic us. Such an individual acts as if balancing costs against benefits to arrive at action that maximizes personal advantage. Proponents of such models, particularly those associated with the Chicago school of economics, do not claim that a model's assumptions are an accurate description of reality, only that they help formulate clear and falsifiable hypotheses. In this view, the only way to judge the success of a hypothesis is empirical tests. To use an example from Milton

Friedman, if a theory that says that the behavior of the leaves of a tree is explained by their rationality passes the empirical test, it is seen as successful.

Without specifying the individual's goal or preferences it may not be possible to empirically test, or falsify, the rationality assumption. However, the predictions made by a specific version of the theory are testable. In recent years, the most prevalent version of rational choice theory, expected utility theory, has been challenged by the experimental results of behavioral economics. Economists are learning from other fields, such as psychology, and are enriching their theories of choice in order to get a more accurate view of human decision-making. For example, the behavioral economist and experimental psychologist Daniel Kahnman won the Nobel Memorial Prize in Economic Sciences in 2002 for his work in this field.

Rational choice theory has become increasingly employed in social sciences other than economics, such as sociology, evolutionary theory and political science in recent decades. It has had far-reaching impacts on the study of political science, especially in fields like the study of interest groups, elections, behavior in legislatures, coalitions, and bureaucracy. In these fields, the use of the rational choice paradigm to explain broad social phenomena is the subject of active controversy.

The premise of rational choice theory as a social science methodology is that the aggregate behavior in society reflects the sum of the choices made by individuals. Each individual, in turn, makes their choice based on their own preferences and the constraints (or choice set) they face.

At the individual level, rational choice theory stipulates that the agent chooses the action (or outcome) they most prefer. In the case where actions (or outcomes) can be evaluated in terms of costs and benefits, a rational individual chooses the action (or outcome) that provides the maximum net benefit, i.e., the maximum benefit minus cost.

The theory applies to more general settings than those identified by costs and benefit. In general, rational decision making entails choosing among all available alternatives the

alternative that the individual most prefers. The "alternatives" can be a set of actions ("what to do?") or a set of objects ("what to choose/buy"). In the case of actions, what the individual really cares about are the outcomes that results from each possible action. Actions, in this case, are only an instrument for obtaining a particular outcome.

The available alternatives are often expressed as a set of objects, for example a set of j exhaustive and exclusive actions:

$$A = \{a_1, \ldots, a_i, \ldots, a_j\}$$

For example, if a person can choose to vote for either Roger or Sara or to abstain, their set of possible alternatives is:

$$A = \{\text{Vote for Roger, Vote for Sara, Abstain}\}$$

The theory makes two technical assumptions about individuals' preferences over alternatives:

Completeness – for any two alternatives ai and aj in the set, either ai is preferred to aj, or aj is preferred to ai, or the individual is indifferent between ai and aj. In other words, all pairs of alternatives can be compared with each other.

Transitivity – if alternative a1 is preferred to a2, and alternative a2 is preferred to a3, then a1 is preferred to a3.

Together these two assumptions imply that given a set of exhaustive and exclusive actions to choose from, an individual can rank the elements of this set in terms of his preferences in an internally consistent way (the ranking constitutes a partial ordering), and the set has at least one maximal element.

The preference between two alternatives can be:

Strict preference occurs when an individual prefers a1 to a2 and does not view them as equally preferred. Weak preference implies that individual either strictly prefers a1 over a2 or is indifferent between them. Indifference occurs when an individual neither

prefers a1 to a2, nor a2 to a1. Since (by completeness) the individual does not refuse a comparison, they must therefore be indifferent in this case.

Research that took off in the 1980s sought to develop models which drop these assumptions and argue that such behaviour could still be rational, Anand (1993). This work, often conducted by economic theorists and analytical philosophers, suggests ultimately that the assumptions or axioms above are not completely general and might at best be regarded as approximations.

Often preferences are described by their utility function or payoff function. This is an ordinal number an individual assigns over the available actions, such as:

$$u\,(a_i) > u\,(a_j)$$

The individual's preferences are then expressed as the relation between these ordinal assignments. For example, if an individual prefers the candidate Sara over Roger over abstaining, their preferences would have the relation:

$$u\,(Sara) > u\,(Roger) > u\,(abstain)$$

A preference relation that as above satisfies completeness, transitivity, and, in addition, continuity, can be equivalently represented by a utility function.

Brand choice theory

The theory of brand choice is one of the fundamental elements of marketing science. Virtually all decisions made by marketing managers involve assumptions – explicit or implicit – about how consumers make purchase decisions and how strategic marketing variables (such as price, advertising and distribution) impact these decisions. To support this effort, the goal of research in brand choice is to create models that both reflect the behavioral realities of consumer choice and allow accurate forecasts of future choice behavior.

The history of research in brand choice is a complex blend of research drawn from psychology, economics and statistics. Because brand choice covers a large number of distinct topics, it is best to think of the area in terms of a slow evolution from fundamental research in psychology in the 1950's to applied micro-economic theory in the 2000's. In Figure 1, we have organized this evolution under six general research themes: Theoretical Foundations, Single Choice, Consumer Heterogeneity, Multiple Decisions, Economic Theory, and Choice Dependence. These headings are listed in rough chronological order, with arrows denoting paths of influence. For the most part, the arrows are intended to show the relationships between subtopics, not between individual articles. However, it should be understood that chronology is important: earlier work almost always informs later work. For example, research on logit models (in the 1980's) and on consumer response parameter heterogeneity (in the 1990's) made possible later work on spatial choice (in the 2000's).

This chapter is not a detailed review of work in brand choice over the last 50 years. Readers interested in detailed discussions of early work in brand choice should consult Massy et al. (1970) (stochastic brand choice) and Corstjens and Gautschi (1980) (economics and psychology). Readers interested in a comprehensive examination of the impact of economic theory on the evolution of choice modeling should consult (Chandukala et al., 2007).

This chapter is organized as follows. Using Figure 1 as a guide, we first review (in chronological order) the six general research themes in brand choice. Within each theme, we discuss various subfields, noting interrelationships. As will be seen, this discussion illustrates the fact that improvements in data availability and statistical tools have repeatedly stimulated new work in choice theory and new application areas. We conclude with a brief discussion of possible future developments in brand choice.

Brand choice models rest upon key assumptions about how consumers make purchase decisions. In contrast to research by psychologists in marketing, theories in choice modeling are not intended to be process models detailing how the organization of

the human brain leads to choice outcomes. Rather, theories in choice modeling are artificial in the sense of Simon (1969): they are paramorphism ("as if") representations of choice behavior designed to improve our understanding of the impact of environmental influences (such as the marketing mix) on choice decisions. In this section, we review pioneering work in psychology that set the stage for future developments.

Researcher define a choice model in the following manner. A consumer is presented with the task of selecting one of N alternatives, denoted A(1), …. , A(N). For each alternative, the exists a mapping from the characteristics of each alternative to a real-valued number V(A(i)) = V(i). The consumer constructs U(V(i)) = U(i), called preference (psychology) or utility (economics), which allows an ordering of the alternatives on a one-dimensional continuum. Using the U(i) values, the consumer selects one alternative by employing some type of decision rule. The decision rule assigns a probability of choosing alternative i as Pr(i) = F(U(1), …, U(N)) where $0 < Pr(i) < 1$ and F(.) is some multivariate function with N arguments. That is, the choice process is assumed to be inherently stochastic: there is no alternative with Pr(i) = 0 or Pr(i) = 1.

Although this definition may seem needlessly formal, it provides the researcher important guidelines for developing a choice model. Clearly, three elements are needed: a set of choice alternatives, a set of corresponding U(i) preference scale values, and a decision rule. The history of brand choice can be viewed as an evolving understanding of how these components ought to be specified in marketing applications.

The starting point for brand choice is the work of Louis Thurstone, a psychologist interested in psychophysics (the human perception of physical stimuli such as the intensity of light). His experiments required subjects to determine which of two stimuli was more intense (e.g., which light was brighter). His key insight, reported in his Theory of Comparative Judgment (Thurstone (1927), reprinted in Thurstone (1959)), is that humans do not perceive a stimulus in the same fashion on different occasions, even though the stimulus object has not changed. Using our earlier notation, Thurstone postulated a discriminable process of the form.

$$U(i) = V(i) + e(i)$$

Where V(i) is the true intensity of A(i), and e(i) is a normally distributed random variable with mean zero. That is, U(i) is the sensation of intensity that is perceived by the individual and is used to decide which stimulus has higher intensity. Thurstone argued that the choice rule is simple: the subject selects the stimulus with the higher U(i) value. Because the e(i) error varies across stimuli and over time, Thurstone's model implies that judgments of intensity made by one individual will be inconsistent, particularly when the true V(i) values are similar. As such, a researcher can only predict the probability that a certain alternative will be judged to be most intense. In a brand choice setting, V(i) is interpreted as the long-run average preference value of the alternative and e(i) is a situation-specific random effect that masks the relationship between the true V(i) value and perceived U(i). Following Thurstone (1927), researchers in marketing assume that the consumer always chooses the alternative with highest perceived U (i). This combination of a randomly generated U (i) value coupled with a (deterministic) maximum U(i) choice rule is today known as a random utility theory (RUT) model. Choice probabilities for a RUT model are obtained by writing down the N-dimensional multivariate distribution defined by equation (1) and then computing the probability Pr(i) = Pr{U(i) = max [U(1), …, U(N)]}. (See Train (2003) for details.) When the e(i) are normally distributed (as assumed by Thurstone (1927)), the resulting choice process is known as a probity choice model.

Luce (1959) proposed an alternative theory of choice based upon certain assumptions about choice probabilities. Let Pr(i|S) denote the probability of selecting item i from S, a set of alternatives including both item i and another item j. Let S* be another set of items, also including both i and j. Luce's Choice Axiom takes the form

$$Pr(i|S)/Pr(j|S) = Pr(i|S^*)/Pr(j|S^*)$$

In words, the Choice Axiom states that the ratio of choice probabilities is a fixed quantity that does not depend upon the choice set. Choice models with this property are said to exhibit independence from irrelevant alternatives. Luce (1959) shows that

equation (2) is sufficient to derive an explicit expression for the choice probabilities. If the Choice Axiom holds, then there exists a ratio-scaled preference value Q(i) for each item. Moreover, relative to a set of alternatives

$$S = \{A(1), \ldots, A(N)\}, \Pr(i|S) = Q(i)/\{Q(1) + \ldots + Q(N)\}$$

Luce (1959) argues that Q(i) represent psychologically-real preference values that are fixed over time. Accordingly, the stochasticity of choice (and the need for choice probabilities) is due to errors made in the decision process. The probability function in equation (3) is called a logit choice model in academic marketing. Logit models dominated the choice theory literature in marketing science during the 1980's. One key reason is that the model is computationally tractable, even for large choice sets. However, an equally important reason is that logit models are also RUT models. Yellott (1977) showed that logit choice probabilities are consistent with a RUT model in which the e(i) are independent draws from an extreme value distribution. Relative to equation (1), the Luce preference values depend upon RUT utilities according to the expression Q(i) = exp(V(i)), where exp(.) denotes the exponential function. Moreover, McFadden (1980) showed that the logit model can also be derived using a micro-economic argument based upon RUT. (In the economic interpretation of the logit model, the e(i) errors represent variables that impact choice, but are not observed by the researcher.) The popularity of the logit model is due in large part to these connections to theories in both psychology and economics.

Idiosyncratic mean equal to $\lambda(h)$. Further, the $\lambda(h)$ parameters vary across the household population as a Gamma distribution. By analytically "mixing" the household-level Poisson distributions using the Gamma household population distribution, Ehrenberg obtained a market-level forecasting model: the Negative Binomial Distribution or NBD. Strictly speaking, the NBD model is a count model, not a single choice model. Nevertheless, the NBD model has two important links to previous and subsequent work in brand choice. First, Bass et al. (1978) showed analytically that a heterogeneous population of consumers, each making choices according to the Luce Choice Axiom, will

have a long-run purchase count histogram that approximates an NBD distribution. Second, the NBD model can be viewed as an early attempt to model consumer-level heterogeneity with respect to model parameters. This modeling approach, today known as unobserved heterogeneity, was elaborated in considerable detail by other researchers in the 1990's.

Early work in stochastic brand choice was also dominated by Markov models. A zero-order Markov model can be regarded as a logit model. A first-order Markov model assumes that that choice probabilities on each purchase occasion are defined by a logit model whose parameters depend upon the brand purchased on the previous choice occasion. Higher order Markov models, such as the linear learning model (Kuehn and Rohloff 1967), allow for dependence upon a longer string of purchase decisions.

Early studies employed Markov models to study differences in decision rules across the consumer population. Blattberg and Sen (1976) used different parameterizations of first order Markov models (different types of loyalty and switching patterns) to argue that consumers within the same product category exhibit a wide variety of decision rules. Kahn et al. (1986) used different parameterizations of zero, first-order and second-order Markov models to analyze consumer tendency to either repeat buy (inertia) or switch away from (variety seeking) the previous brand purchased. They found that inertia and variety seeking varies both across brands and across product categories, suggesting that consumers use different choice rules in different product categories.

Supply/demand theory of hospital

In microeconomics, supply and demand is an economic model of price determination in a market. It postulates that in a competitive market, the unit price for a particular good, or other traded item such as labor or liquid financial assets, will vary until it settles at a point where the quantity demanded (at the current price) will equal the

quantity supplied (at the current price), resulting in an economic equilibrium for price and quantity transacted. An equilibrium is defined to be the price-quantity pair where the quantity demanded is equal to the quantity supplied. It is represented by the intersection of the demand and supply curves. Market equilibrium is a situation in a market when the price is such that the quantity demanded by consumers is correctly balanced by the quantity that firms wish to supply. In this situation, the market clears.

For the supply and demand for hospital has been showed as following:

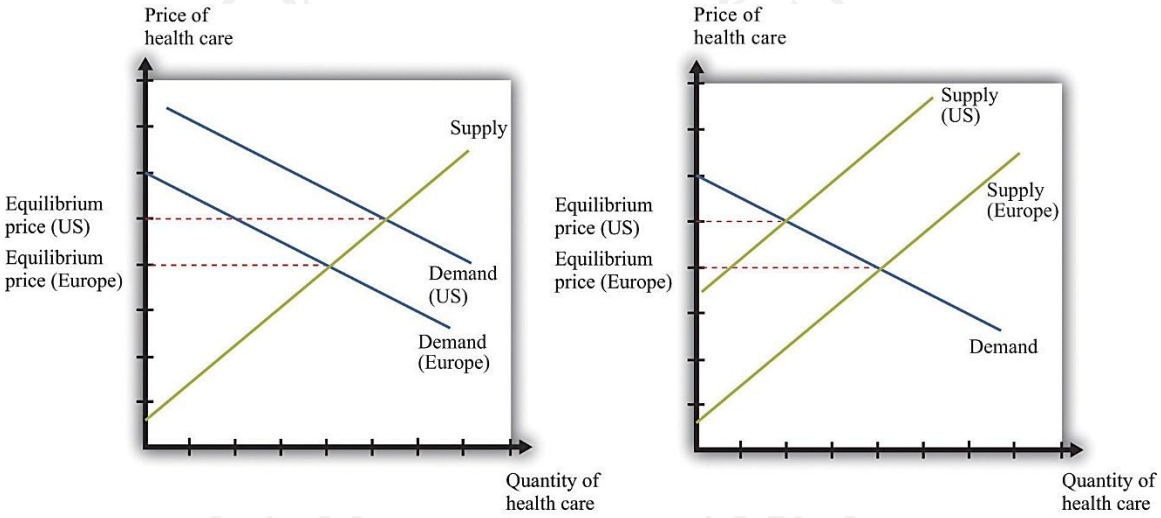

Figure 2.1: Supply and Demand Theory for Hospital Industrial

Service Quality Theory

The model of service quality, popularly known as the gaps model was developed by a group of American authors.The model identifies the principal dimensions (or components) of service quality; proposes a scale for measuring service quality (SERVQUAL) and suggests possible causes of service quality problems.

The five SERVQUAL dimensions are:

- TANGIBLES-Appearance of physical facilities, equipment, personnel, and communication materials
- RELIABILITY-Ability to perform the promised service dependably and accurately
- RESPONSIVENESS-Willingness to help customers and provide prompt service
- ASSURANCE-Knowledge and courtesy of employees and their ability to convey trust and confidence
- EMPATHY-Caring, individualized attention the firm provides its customers

Businesses use the SERVQUAL instrument (i.e. questionnaire) to measure potential service quality problems and the model of service quality to help diagnose possible causes of the problem. The SERVPERF model developed by Cronin & Taylor, (1992), was derived from the SERVQUAL model by dropping the expectations and measuring service quality perceptions just by evaluating the customer's the overall feeling towards the service. In their study, they identified four important equations:

SERVQUAL =Performance – Expectations

Weighted SERVQUAL = importance x (performance – expectations)

SERVPERF = performance

Weighted SERFPERF = importance x (performance)

Implicitly the SERVPERF model assesses customers experience based on the same attributes as the SERVQUAL and conforms more closely on the implications of satisfaction and attitude literature.

Medical Tourism

Medical tourism can be considered a new, fluctuating, and rapidly changing phenomenon that it cannot be adequately measured, however its tremendous potential has drawn the attention of scholars, policy makers, investors, the medial, and individual tourists worldwide (Mohammad and Sumayya, 2013). It is a twenty-first century manifestation of an ages old phenomenon, with individuals traveling further than ever, moving from rich to poor countries, and seeking medical care that is high tech and invasive in nature (Maryam and Azizan, 2012). Modern medical tourism is a nascent industry, straddling different established domains such as trade, health, and tourism (Mohammad and Sumayya, 2013). For the purposes of this paper we will consider medical tourism to be defined as the "organized travel outside one's natural healthcare jurisdiction for the enhancement or restoration of the individual's health through medical intervention" (Mohammad and Sumayya, 2013). Medical tourism is the travel of people to a place other than where they normally reside for the purpose of obtaining medical treatment in that country. Traditionally, people would travel from less-developed countries to major medical centers in highly developed countries for medical treatment that was unavailable in their own communities; the recent trend is for people to travel from developed countries to third-world countries for medical treatments because of cost consideration, though the traditional pattern still continues. Another reason for travel for medical treatment is that some treatments may not be legal in the home country, such as some fertility procedures.

Some people travel to obtain medical surgeries or other treatments. Some people go abroad for dental tourism or fertility tourism. People with rare genetic disorders may travel to another country where treatment of these conditions is better understood. However, virtually every type of health care, including psychiatry, alternative treatments, and convalescent care and even burial services, is available. Medical tourists are subject to a variety of risks, which may include deep vein thrombosis, tuberculosis, amoebic dysentery, paratyphoid, poor post-operative care, and others.

Medical costs

Medical costs varied by severity of injury (fatal or nonfatal) and place of treatment. For fatal injuries, depending on place of death, medical costs included: ambulance transport, coroner/medical examiner costs, emergency department, inpatient hospitalization, and/or nursing home costs. HCUP-NIS data and cost-to-charge ratios from the Agency for Healthcare Research and Quality were used to compute inpatient facility costs. Adjustments were made to inpatient facility costs to quantify no facility costs (e.g., for specialist care) incurred during an inpatient admission. Medical costs is any cost incurred in the prevention or treatment of injury or disease. Medical expenses include health and dental insurance premiums, doctor and hospital visits, co-pays, prescription and over-the-counter drugs, glasses and contacts, crutches and wheelchairs, to name a few. Medical expenses that are not reimbursed are deductible within certain limits

Service quality

Service quality (SQ) is a comparison of expectations (E) about a service with performance (P) SQ=P-E. A business with high service quality will meet customer needs whilst remaining economically competitive. Improved service quality may increase economic competitiveness. This aim may be achieved by understanding and improving operational processes; identifying problems quickly and systematically; establishing valid and reliable service performance measures and measuring customer satisfaction and other performance outcomes. From the viewpoint of business administration, service quality is an achievement in customer service. It reflects at each service encounter. Customers form service expectations from past experiences, word of mouth and advertisement. In general, Customers compare perceived service with expected service in which if the former falls short of the latter the customers are disappointed. Service quality can be related to service potential (for example, worker's qualifications); service process (for example, the quickness of service) and service result (customer satisfaction).

Well recognized medical treatment

Medical treatment includes nursing, and also includes care, habilitation and rehabilitation under medical supervision. Accordingly, the definition covers medical treatment in its normal sense as well as the other forms of treatment mentioned. Practical examples of psychological interventions include cognitive therapy, behavior therapy and counselling. "Habilitation" and "rehabilitation" are used in practice to describe the use of specialized services provided by professional staff, including nurses, psychologists, therapists and social workers, which are designed to improve or modify patients' physical and mental abilities and social functioning. Such services can, for example, include helping patients learn to eat by themselves or to communicate for the first time, or preparing them for a return to normal community living. The distinction between habilitation and rehabilitation depends in practice on the extent of patients' existing abilities - "rehabilitation" is appropriate only where the patients are relearning skills or abilities they have had before.

Hospital Image

“Image" was once advertising jargon but is today a common phrase referring to a company's reputation. The "image" is what the public is supposed to see when the corporation is mentioned. The ordinary man and woman on the street usually have a wry view of public relations, advertising, hype, hoopla, and therefore also of corporate image—and this often for good reasons. But a good corporate image is a genuine asset; it translates into dollars at the counter and higher stock valuation. The perception people have of your business when they hear your company name. A business's image is composed of an infinite variety of facts, events, personal histories, advertising and goals that work together to make an impression on the public. The concept is usually associated with large corporations, but small businesses also have a corporate image even if neither their owners nor customers think of it that way. In the absence of active efforts, corporate image "simply happens": it is how a company is perceived. Management, however, may

actively attempt to shape the image by communications, brand selection and promotion, use of symbols, and by publicizing its actions. Corporations trying to shape their image are analogous to individuals who will dress appropriately, cultivate courteous manners, and choose their words carefully in order to come across competent, likeable, and reliable. In the personal as in the corporate case, the image should match reality. When it does not, the consequence will be the opposite of the one intended.

Medical Technology

Medical technology, encompasses a wide range of healthcare products and is used to diagnose, monitor or treat diseases or medical conditions affecting humans. Such technologies (applications of medical science) are intended to improve the quality of healthcare delivered through earlier diagnosis, less invasive treatment options and reductions in hospital stays and rehabilitation times. Recent advances in medical technology have also focused on cost reduction. Medical technology may broadly include medical devices, information technology, biotech, and healthcare services. The impacts of medical technology may involve social and ethical issues.

Word of Mouth

Word of mouth or viva voce, is the passing of information from person to person by oral communication, which could be as simple as telling someone the time of day. Storytelling is a common form of word-of-mouth communication where one person tells others a story about a real event or something made up. Oral tradition is cultural material and traditions transmitted by word of mouth through successive generations. Storytelling and oral tradition are forms of word of mouth that play important roles in folklore and mythology. Another example of oral communication is oral history—the recording, preservation and interpretation of historical information, based on the personal experiences and opinions of the speaker. Oral history preservation is the field that deals

with the care and upkeep of oral history materials collected by word of mouth, whatever format they may be in. In marketing, word-of-mouth communication (WOM) involves the passing of information between a non-commercial communicator (i.e. someone who is not rewarded) and a receiver concerning a brand, a product, or a service. When WOM is mediated through electronic means, the resulting electronic word of mouth (eWoM) refers to any statement consumers share via the Internet (e.g., web sites, social networks, instant messages, news feeds) about a product, service, brand, or company. The eWOM is typically executed via social media or social networking platforms. The process in which the sender of word-of-mouth communication is rewarded is referred to as word-of-mouth marketing. This process relies on the added credibility of person-to-person communication, a personal recommendation. Using WOM as an opposing force to commercially motivated word-of-mouth marketing has been coined Proconsumer WOM. Researchers have formulated a series of recommendations for how nonprofits and public sector organizations can utilize Proconsumer WOM effectively.

WOM has been researched for many years and as a result much is known about what drives WOM (e.g. customer satisfaction, trust and brand commitment) and its far-reaching consequences (e.g. affective/emotional, cognitive, and behavioral) for both consumers and organizations. WOM's effectiveness as an information source for consumers can be broken down into two factors: WOM's reach and WOM's impact.

Hospital Brand Credibility

Brand credibility is often pointed out by marketing experts as one psychological factor that could trigger the buying impulse of consumers. However, just like with any type of triggers, it can produce a positive or negative effect. In this case, it refers to your brand's reputation and its ability (or inability) to convert that into sales. Credibility is broadly defined as the believability of an entity’s intentions at a particular time and is

posited to have two main components: trustworthiness and expertise. Thus, brand credibility is defined as the believability of the product information contained in a brand, which requires that consumers perceive that the brand have the ability (i.e., expertise) and willingness (i.e., trustworthiness) to continuously deliver what has been promised (in fact, brands can function as signals since if and when they do not deliver what is promised their brand equity will erode). Both the expertise and trustworthiness of a brand reflect the cumulative impacts of associated past and present marketing strategies and activities. The credibility of a brand has been shown to be higher for brands with higher marketing mix consistency over time and higher brand investments, ceteris paribus (Erdem and Swait 1998).

A big brand is a brand that customers trust and believe in. When consumers don't trust a brand they do not buy or consume it. One of the biggest reasons for people buying a brand repeatedly is the credibility the brand has among the consumers. In brand building, credibility is vital to the success of any brand. There are many brands which claim to provide various benefits. However, a consumer does not believe these claims easily. He needs credibility. Here are 6 basic steps for building brand credibility:

- Make sure that company have a good product and a good service which gives benefits to the consumer
- Ensure that the product or service experience during usage by the consumer is positive
- Ensure regular and consistent customer satisfaction and not just a one-off good experience
- Make sure that company brand meets and delivers the promise it makes to the customers
- Provide evidence in the form of facts or statistics to make the consumer believe in the benefits offered
- Generating good word-of-mouth publicity wherein satisfied customers speak well of company informally or formally through testimonials

Hospital Brand Preference

Brand preference is strongly linked to brand choice that can influence the consumer decision making and activate brand purchase. Brand Preferences can be defined as the subjective, conscious and behavioral tendencies which influence consumer's predisposition toward a brand. Understanding the brand preferences of consumers' will dictate the most suitable and successful Marketing Strategies. One of the indicators of the strength of a brand in the hearts and minds of customers, brand preference represents which brands are preferred under assumptions of equality in price and availability. Measures of brand preference attempt to quantify the impact of marketing activities in the hearts and minds of customers and potential customers. Higher brand preference usually indicates more revenues (sales) and profit, also making it an indicator of company financial performance. Brand preference reflects a desire to use a particular company's products or services, even when there are equally priced and equally-available alternatives. In fact, more often than not, brand preference indicates a desire to seek out a specific product or service, even when it requires paying more or expending more effort to obtain it. Brand preference is important to companies because it provides an indicator of their customers' loyalty, the success of their marketing tactics, and the strength of their respective brands.

Treatment Quality and Variety

High-quality treatment means that customer will receive health services according to need at the right time and in the right place. High quality also means the services are provided smoothly and efficiently. The concept of quality is highlighted in a number of sections of the Health Care Act. The service provided by the healthcare system must be of high quality, safe and appropriately organized. Everyone residing in Finland on a permanent basis is entitled to good healthcare and medical care, and related treatment. Good care and treatment consists of, for example, the quality of treatment, patient safety, equality and professionalism and competence of the personnel. A high quality health

service is characterized by the following aspects: A client-focused approach to treatment: you are respected as a patient and your right to self-determination is the starting point in delivering the service.

- Availability and reachability of services: customer receive services within a reasonable period of time regardless of socio-economic status, gender or ethnicity.
- Fairness: clients in a similar situation receive treatment or service on an equal basis. Emergency treatment must be given to everyone without unnecessary delay.
- Freedom of choice: you can choose your place of treatment and the healthcare professional treating you.
- Patient safety: treatment, medication and equipment are safe. Healthcare professionals are highly competent, and their expertise includes practical know-how such as people skills.
- Effectiveness: the social and health services you use are effective and increase your wellbeing and health as much as possible.

Doctor's quality

Most people think they have a general idea of what a "good" doctor should do or have not given the idea much thought. Knowing qualities of a good doctor can help customer ensure that customer and customer family get the care that customer need without unnecessary worries.

Essential Qualities of a Good Doctor

1. Knowledge and Professionalism

A good doctor needs to know how patient whole body functions as a unit and what patient should do to maintain your overall health. They should stay informed of all the latest breakthroughs in the field and communicate their knowledge in a way that makes it easy to understand. Offering a wide range of information and clearly stating why they

believe a certain type of medical care is beneficial will make it easier for patients to follow this advice correctly and trust their doctor if there is a problem.

2. Good Reputation

Doctors are often chosen by word of mouth, but it is important to consider your sources when finding a new doctor. Ask a variety of people and see which name continuously pops up. Asking patient primary care doctor about specialists or others in the area can also help patient find good advice. Today, many go online to seek out reviews for new doctors but this can be biased. Look for consistency in the comments, both positive and negative, to get a clearer picture of what a doctor is like.

3. Strong Credentials

A diploma from a good school or other credentials does not necessarily mean a doctor provides quality care, but this can be a great place to start. If patient doctor does not have the credentials or strong affiliations in the field this should be a warning sign. Check to ensure patient doctor has met all licensing requirements and is board certified. Knowing what hospital they are affiliated with or the credentials others in their practice hold can help you get a feel for the level of care patient will receive when patient require additional treatment.

3. Sincere and Empathetic

Doctor’s bedside manner will make patient feel more comfortable during appointments. Patient want to feel as though patient doctor genuinely cares so that patient and patient family can share questions or concerns openly. If patient are not connecting with a doctor on an emotional level there is no harm in finding someone new. Look for someone that is warm and attentive, encouraging their patients to speak openly. Patient doctor should also explain what they are doing and why to put patient at ease and make it easier to follow treatments properly.

4. Patient

This is one of the most important qualities of a good doctor. Some doctors focus on seeing as many patients as possible during the day which means they will rush appointments and caregiving decisions. If patient notice a long line in the waiting room or doctor scheduling a lot of patients in a day it may not be the best circumstance for patient health. Patient want to focus on finding a doctor that is patient and willing to answer questions and provide quality time with their patients. If a diagnosis is rushed, it could lead to a patient getting incorrect care for their symptoms.

5. Open and Responsive

A good doctor should listen to what patient have to say and respond to patient carefully. It is not simply a matter of making an accurate diagnosis, but letting the patient know that the doctor has listened to their concerns and is offering a response that is most appropriate for patient unique situation. If patient have strong opinions on medical issues such as vaccines, sleep schedules or similar activities doctor should take patient concerns into account. However, if there is strong medical knowledge that indicates patient views are unsafe they should inform patient of these concerns.

6. Strong Communication Skills

Communication is key for any physician, which includes both listening to the patient and providing information in a way that it can clearly be understood. Patients that are able to understand their doctors will be more likely to manage their treatment properly and reveal additional health problems they may be experiencing. This will help doctors understand unhealthy patterns the patient may be experiencing and intercept them to ensure that treatments will be effective.

7. Easy to Reach

This is another important quality of a good doctor. Patient should be aware of doctor’s office hours and how patient can contact them in the event of an emergency. All phone calls should be returned promptly and it should be easy to make appointments or cancellations as they are necessary. Check to see if doctor keeps appointments open for

emergencies and how they handle their on-call policy in the event of an emergency. Also check to see if doctor's staff is known for being on time and performing their tasks with the same efficiency.

8. Respect for Patient Schedule

When patient make an appointment patient should not have to wait for a long period of time before patient are seen. There will always be some wait and there will be circumstances where a doctor has to handle an emergency which cannot be accounted for, but if doctor is consistently late or rushing through appointments this can result in inadequate care. A good doctor's office will be able to inform patient the approximate wait time for patient appointment when patient arrive.

9. Thorough

A mistake in the medical field can have disastrous results. It is important to know that doctor has not overlooked a part of patient care which could lead to an inaccurate diagnosis. A good doctor needs to pay careful attention to their patients, schedules appropriate follow-ups and take the time to administer whatever care is most appropriate. Taking the extra time to perform these steps can prevent additional discomfort or ailments which could necessitate additional visits.

Hospital Ambiences Environment

Hospital ambiences environment, for healthcare buildings describes a physical setting and organizational culture that supports patients and families through the stresses imposed by illness, hospitalization, medical visits, the process of healing, and sometimes, bereavement. The concept implies that the physical healthcare environment can make a difference in how quickly the patient recovers from or adapts to specific acute and chronic conditions. The most important thing for inpatients at hospitals is the comfort and normalcy of having family members and friends that visit and spend time with them. With advances in healthcare most patients are treated in an outpatient setting, where they

come in have a procedure or test run and then go back to their homes. Today's inpatients are more likely to have a serious condition and be there for a period of at least several days and sometimes even months. This explains the growing trend of creating healthcare environments that make not only the patient, but also their loved ones feel like they can relax and maybe even forget that they're at the hospital. It is proven that if someone feels comfortable and relaxed, they can rest easier and heal faster

Brand Choice of hospital

The theory of brand choice is one of the fundamental elements of marketing science. Virtually all decisions made by marketing managers involve assumptions – explicit or implicit – about how consumers make purchase decisions and how strategic marketing variables (such as price, advertising and distribution) impact these decisions. Brand choice models rest upon key assumptions about how consumers make purchase decisions.

The choice has been defined by different researchers in varied aspects, Flemming (1976) viewed the choice with supporting example by saying, that" the person walking down a road who hesitates at a fork in the road before choosing which route to take classically illustrates choice". To choose a brand among from available brands of low involvement product category in a situation where consumer does not know about the brands under consideration seems very critical, because the most theories of consumer behavior support the awareness as a dominant factor in consumer choice. On the other hand it was also assumed that excess of everything is dangerous, likely it can be guessed that more information may confuse the consumer about the brand to be selected. Jacoby, Speller, and Berning (1974) are of the opinion that "Consumers actually make poorer purchase decisions with more information".

Among specific marketing mix variables, pricing appears to have the most consistent impact in studies. Promotions such as sales promotions have shown influence on brand choice which ultimately effect bottom-line prices for consumers. For example, pricing promotions could involve coupons or simply a reduction of price within the product category (Singh et al. 2005; Papatla and Krishnamurthi, 1996). In probability modeling studies, it has been shown that displays and features have some impact on brand choice, but this evidence is not as overwhelming or as consistent as other factors among brand choice research studies (Alvarez and Casielles, 2005). Product attributes have high importance on discovering what areas of the product can be altered in order to make their brand more appealing to the consumer. According to current research, it has been found that the greater the number of brand attributes for a product, then the more likely the consumer is to make that particular band choice (Romaniuk, 2003). Product attributes are important to marketers in order to differentiate products from their competitors (Aaker et al. 1992).

2.3 Hypothesis

$H1_o$ Medical costs do not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H1_a$: Medical costs significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H2_o$ Service quality do not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H2_a$: Service quality significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H3_o$ Well recognized medical treatment does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H3_a$: Well recognized medical treatment does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H4_o$ Hospital Image does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H4_a$: Hospital Image does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H5_o$ Medical Technology does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H5_a$: Medical Technology does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H6_o$ Word of Mouth does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H6_a$: Word of Mouth does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H7_o$ Hospital Brand Credibility does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H7_a$: Hospital Brand Credibility does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H8_o$ Hospital Brand Preference does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H8_a$: Hospital Brand Preference does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H9_o$ Treatment Quality and Variety does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H9_a$: Treatment Quality and Variety does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H10_o$: Doctor quality does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H10_a$: Doctor quality does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H11_o$: Hospital Ambience Environment does not significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

$H11_a$: Hospital Ambience Environment does significantly influence hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, Samitivej Sukhumvit Hospital, bumrungrad international hospital

2.4 Conceptual Framework

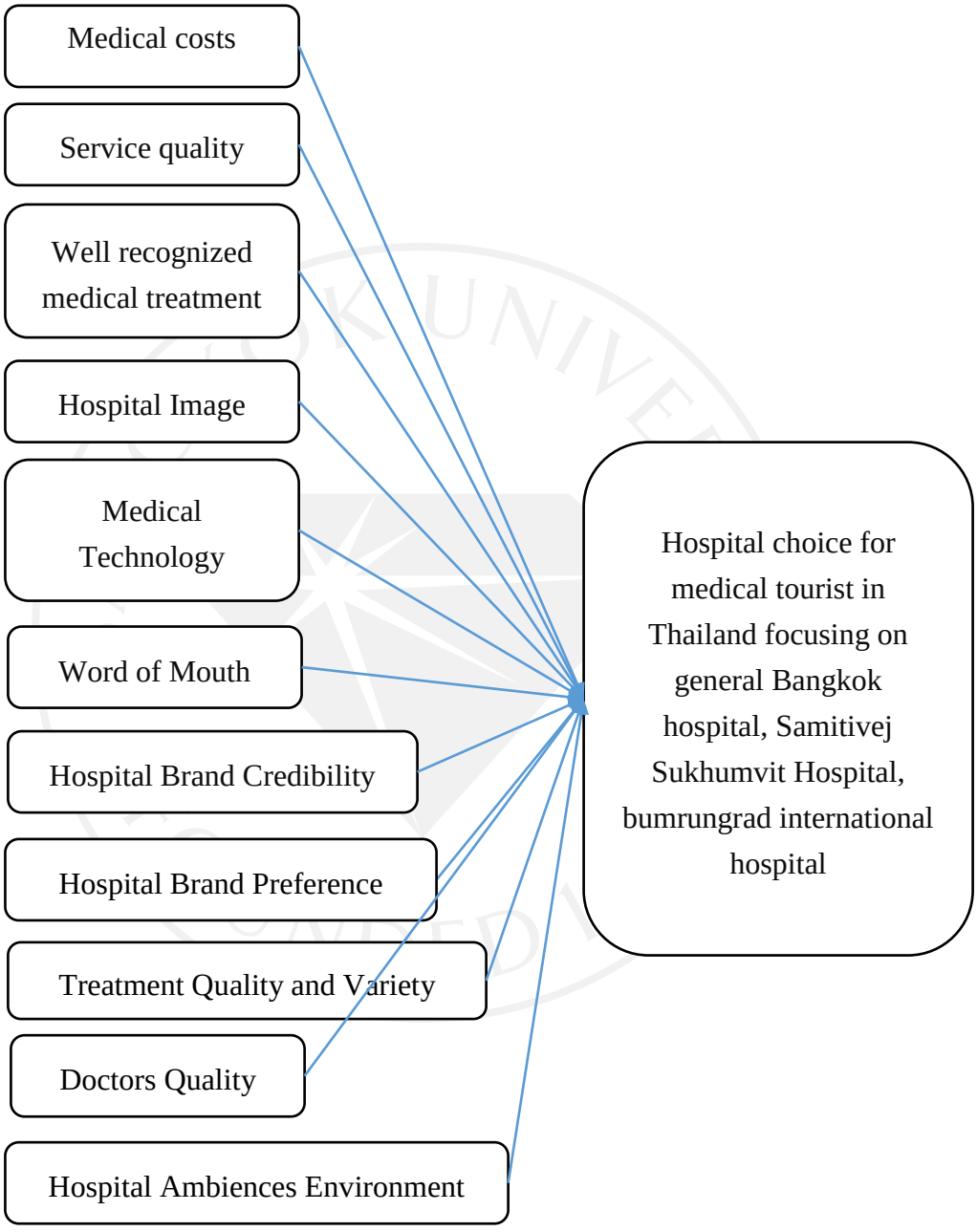

Figure 2.2: Conceptual Framework

CHAPTER 3
METHODOLOGY

3.1 Research Design

The study aims to examine factors that impact on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital by conducting survey research. A survey research is conducted to collect the data in order to investigate the correlation between medical costs, service quality, Well recognized medical treatment, hospital image, medical technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctors quality, hospital ambiences environment and hospital choice of international medical travelers to come to the hospitals in Thailand for medical treatment purposes. This study uses research of scale, which is used for independent and dependent variables. Surveys indicate that respondents' answers are completely anonymous, but other demographic information such as age, income, education. Participants' privacy is protected. All participants are voluntary, and agree to use the data to focus their answers. Participants were asked to complete the cross-sectional survey of self-management. And researchers conduct quantitative methods in this study.

The researcher used the sample survey method as the data collection process and preceded into the statistical test steps. And also used the survey method to distribute the composition of questionnaires to collect the information from the respondents. Zikmund (2003) stated that a survey is a technique of conducting research which could gather information from a sample of people by using questionnaires as a tool to collect information.

3.2 Population and Sampling Selection

Population in Research

The population of this study is the foreign medical tourists, who travel outside of

their home country to receive medical treatments in Thailand hospitals. The target customers has limited on age and genders. The number of population of foreign medical tourists in Bangkok is unknown so that the researcher decided to determine the sample size by applying the population proportion. Dodge (2006) stated that the whole category of subjects in studying on the research project is indicated as the population and a sample is selected from the population. The questionnaires are distributed to customers who are foreign medical tourists, and travel outside of their home country to receive medical treatments in Thailand hospitals.

Sample Size in Research

Sample size is the act of choosing the number of observations or replicates to include in a statistical sample (Dodge, 2006). The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample (Romijn, 2014). In practice, the sample size used in a study is determined based on the expense of data collection, and the need to have sufficient statistical power (Romijn, 2014). In complicated studies there may be several different sample sizes involved in the study: for example, in a stratified survey there would be different sample sizes for each stratum.

The researcher will determine sample size by applying an equation proposed by Dodge, (2006) which is the adaptation of Yamane (1973) at confidences level of 95% and precision levels = 0.05

The total of sample size is

$$n = \frac{Z^2 p(1-p)}{E^2}$$

$$n = \frac{1.96^2 * 0.5(1-0.5)}{(0.05)^2}$$

n = 384.16 samples

≈385 samples

Researcher tried to use 400 samples to conduct the questionnaires in this study.

Convenience Random Sampling

Since the market share data of medical tourists of each hospital is confidential therefore given their population amount variables tourist is doesn't mention we are random sampling equally form each hospital this means that each stratum has the same sampling fraction. The sampling areas of this study are in Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital. Total 400 questionnaires distribute into three hospitals equally, each hospital will ask 133 respondents to fill in questionnaires.

Sample Selection in Research

According to this study, researcher has decided to use primary data collected through self-administered questionnaires which distribute to customers international patients who came for medical treatment in the Bangkok, Thailand within the duration of ten days. Survey is a mean of using an appropriated questionnaire to gather information for a sample of population (Dodge, 2006). The survey questionnaires are distributed during first and second week of Oct 2016, at Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital.

3.3 Research Instrument

This study applied questionnaire as research instrument for collecting primary data because the questionnaire is flexibility and by far the most common instrument used (Freedman, 2005).

Then, for the sake of maintaining the validity of the questionnaire, the measurement items will be chosen from established questionnaires of previous studies

(Freedman, D.A. 2005). The questionnaire will be classified into three segments. Part one is medical tourism choice. For part two is questionnaire design, this study applied Likert 5 points scale (Freedman, 2005). From point 1 to point 5, which represents strongly disagree, slightly disagree, moderate, slightly agree, and strongly agree, because this scaling format allowed customers to express the degree of their opinions about the specific service or product without restriction of 'yes' and 'no' (Freedman, 2005). Part three is Demographic Data and Part two is measuring variables. This study designs to use Category scale as a tool for measuring the demographic information about the respondents.

3.4. Survey Design and Development

The non-probability is applied by researcher to find the sampling unit in this study. Zikmund (2003) stated that probability sample is the process of probability sampling which is randomly chosen and non-probability sampling is the probability of specific member of the population which is unknown information for the researchers. The sampling unit is an individual component or group of components point to the selection of the sample stated by Zikmund (2003).

The researchers in this study applied convenience sampling which is the sampling procedure of obtaining the people or units that are most conveniently available (Zikmund, 2003). Convenience sampling, this kind of sampling focuses on people who are available to answers questions from researchers. The researchers distributed questionnaires to 100 respondents.

3.5. Statement of Research Method Used

The researchers selected the international patients who came for medical treatment in the Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital as the target population. And Researcher decides to apply 400 questionnaires, each hospital will distribute 133 questionnaires to target customers, which is the sample size of this study.

The researchers applied the non-probability to find the sampling unit in this study. The researchers in this study applied convenience sampling which is the sampling procedure of obtaining the people or units that are most conveniently available. The researchers developed the questionnaire to be seven parts.

In conducting this research, the data employed was obtained chiefly from one source. The source was primary data, that is, data was collected from respondents to the questionnaires distributed to the customers drawn from the sampling procedure. Questionnaires were hand distributed to customers experienced with international patients who came for medical treatment in the Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital. After collecting all of the necessary data, they were analyzed and summarized in a readable and easily interpretable from using the Statistical Package of Social Science (SPSS).

Descriptive Analysis

Descriptive Analysis refers to the transformation of the raw data into a form that makes them easily comprehensible and interpreted. This method typically describes the responses of observations. The calculation of the average, frequency distribution, and the percentage distribution is the most common form of summarizing data (Freedman, 2005)

Multinomial Logistic Regression

In statistics, multinomial logistic regression is a classification method that generalizes logistic regression to multiclass problems, i.e. with more than two possible discrete outcomes. That is, it is a model that is used to predict the probabilities of the different possible outcomes of a categorically distributed dependent variable, given a set of independent variables (which may be real-valued, binary-valued, categorical-valued, etc.).

Multinomial logistic regression is known by a variety of other names, including

polytomous LR, multiclass LR, softmax regression, multinomial logit, maximum entropy (MaxEnt) classifier, conditional maximum entropy model.

Multinomial logistic regression is used when the dependent variable in question is nominal (equivalently categorical, meaning that it falls into any one of a set of categories which cannot be ordered in any meaningful way) and for which there are more than two categories. These are all statistical classification problems. They all have in common a dependent variable to be predicted that comes from one of a limited set of items which cannot be meaningfully ordered, as well as a set of independent variables (also known as features, explanators, etc.), which are used to predict the dependent variable. Multinomial logistic regression is a particular solution to the classification problem that assumes that a linear combination of the observed features and some problem-specific parameters can be used to determine the probability of each particular outcome of the dependent variable. The best values of the parameters for a given problem are usually determined from some training data (e.g. some people for whom both the diagnostic test results and blood types are known, or some examples of known words being spoken).

The multinomial logit model assumes that data are case specific; that is, each independent variable has a single value for each case. The multinomial logit model also assumes that the dependent variable cannot be perfectly predicted from the independent variables for any case. As with other types of regression, there is no need for the independent variables to be statistically independent from each other (unlike, for example, in a naive Bayes classifier); however, collinearity is assumed to be relatively low, as it becomes difficult to differentiate between the impact of several variables if this is not the case.

If the multinomial logit is used to model choices, it relies on the assumption of independence of irrelevant alternatives (IIA), which is not always desirable. This assumption states that the odds of preferring one class over another do not depend on the

presence or absence of other "irrelevant" alternatives. For example, the relative probabilities of taking a car or bus to work do not change if a bicycle is added as an additional possibility. This allows the choice of K alternatives to be modeled as a set of K-1 independent binary choices, in which one alternative is chosen as a "pivot" and the other K-1 compared against it, one at a time. The IIA hypothesis is a core hypothesis in rational choice theory; however numerous studies in psychology show that individuals often violate this assumption when making choices. An example of a problem case arises if choices include a car and a blue bus. Suppose the odds ratio between the two is 1 : 1. Now if the option of a red bus is introduced, a person may be indifferent between a red and a blue bus, and hence may exhibit a car : blue bus : red bus odds ratio of 1 : 0.5 : 0.5, thus maintaining a 1 : 1 ratio of car : any bus while adopting a changed car : blue bus ratio of 1 : 0.5. Here the red bus option was not in fact irrelevant, because a red bus was a perfect substitute for a blue bus.

If the multinomial logit is used to model choices, it may in some situations impose too much constraint on the relative preferences between the different alternatives. This point is especially important to take into account if the analysis aims to predict how choices would change if one alternative was to disappear (for instance if one political candidate withdraws from a three candidate race). Other models like the nested logit or the multinomial probit may be used in such cases as they allow for violation of the IIA.

There are multiple equivalent ways to describe the mathematical model underlying multinomial logistic regression. This can make it difficult to compare different treatments of the subject in different texts. The article on logistic regression presents a number of equivalent formulations of simple logistic regression, and many of these have analogues in the multinomial logit model.

The idea behind all of them, as in many other statistical classification techniques, is to construct a linear predictor function that constructs a score from a set of weights that

are linearly combined with the explanatory variables (features) of a given observation using a dot product:

$$\text{score}(\mathbf{X}_i, k) = \boldsymbol{\beta}_k \cdot \mathbf{X}_i,$$

where Xi is the vector of explanatory variables describing observation i, βk is a vector of weights (or regression coefficients) corresponding to outcome k, and score(Xi, k) is the score associated with assigning observation i to category k. In discrete choice theory, where observations represent people and outcomes represent choices, the score is considered the utility associated with person i choosing outcome k. The predicted outcome is the one with the highest score.

The difference between the multinomial logit model and numerous other methods, models, algorithms, etc. with the same basic setup (the perceptron algorithm, support vector machines, linear discriminant analysis, etc.) is the procedure for determining (training) the optimal weights/coefficients and the way that the score is interpreted. In particular, in the multinomial logit model, the score can directly be converted to a probability value, indicating the probability of observation i choosing outcome k given the measured characteristics of the observation. This provides a principled way of incorporating the prediction of a particular multinomial logit model into a larger procedure that may involve multiple such predictions, each with a possibility of error. Without such means of combining predictions, errors tend to multiply. For example, imagine a large predictive model that is broken down into a series of submodels where the prediction of a given submodel is used as the input of another submodel, and that prediction is in turn used as the input into a third submodel, etc. If each submodel has 90% accuracy in its predictions, and there are five submodels in series, then the overall model has only .95 = 59% accuracy. If each submodel has 80% accuracy, then overall accuracy drops to .85 = 33% accuracy. This issue is known as error propagation and is a serious problem in real-world predictive models, which are usually composed of numerous parts. Predicting probabilities of each possible outcome, rather than simply making a single optimal prediction, is one means of alleviating this issue.

The basic setup is the same as in logistic regression, the only difference being that the dependent variables are categorical rather than binary, i.e. there are K possible outcomes rather than just two. The following description is somewhat shortened; for more details, consult the logistic regression article.

Specifically, it is assumed that we have a series of N observed data points. Each data point i (ranging from 1 to N) consists of a set of M explanatory variables x1,i ... xM,i (aka independent variables, predictor variables, features, etc.), and an associated categorical outcome Yi (aka dependent variable, response variable), which can take on one of K possible values. These possible values represent logically separate categories (e.g. different political parties, blood types, etc.), and are often described mathematically by arbitrarily assigning each a number from 1 to K. The explanatory variables and outcome represent observed properties of the data points, and are often thought of as originating in the observations of N "experiments" — although an "experiment" may consist in nothing more than gathering data. The goal of multinomial logistic regression is to construct a model that explains the relationship between the explanatory variables and the outcome, so that the outcome of a new "experiment" can be correctly predicted for a new data point for which the explanatory variables, but not the outcome, are available. In the process, the model attempts to explain the relative effect of differing explanatory variables on the outcome.

As in other forms of linear regression, multinomial logistic regression uses a linear predictor function *f(k,i)* the probability that observation *i* has outcome *k*, of the following form:

$$f(k,i) = \beta_{0,k} + \beta_{1,k}x_{1,i} + \beta_{2,k}x_{2,i} + \cdots + \beta_{M,k}x_{M,i},$$

where $\beta_{m,k}$ is a regression coefficient associated with the *m*th explanatory variable and the *k*th outcome. As explained in the logistic regression article, the regression coefficients

and explanatory variables are normally grouped into vectors of size *M+1*, so that the predictor function can be written more compactly:

$$f(k,i) = \boldsymbol{\beta}_k \cdot \mathbf{x}_i,$$

where $\boldsymbol{\beta}_k$ is the set of regression coefficients associated with outcome *k*, and $\mathbf{x}_i$ (a row vector) is the set of explanatory variables associated with observation *i*.

One fairly simple way to arrive at the multinomial logit model is to imagine, for *K* possible outcomes, running *K*-1 independent binary logistic regression models, in which one outcome is chosen as a "pivot" and then the other *K*-1 outcomes are separately regressed against the pivot outcome. This would proceed as follows, if outcome *K* (the last outcome) is chosen as the pivot:

$$\begin{aligned}
\ln \frac{\Pr(Y_i = 1)}{\Pr(Y_i = K)} &= \boldsymbol{\beta}_1 \cdot \mathbf{X}_i \\
\ln \frac{\Pr(Y_i = 2)}{\Pr(Y_i = K)} &= \boldsymbol{\beta}_2 \cdot \mathbf{X}_i \\
&\cdots\cdots \\
\ln \frac{\Pr(Y_i = K-1)}{\Pr(Y_i = K)} &= \boldsymbol{\beta}_{K-1} \cdot \mathbf{X}_i
\end{aligned}$$

Note that we have introduced separate sets of regression coefficients, one for each possible outcome.

If we exponentiate both sides, and solve for the probabilities, we get:

$$\begin{aligned}
\Pr(Y_i = 1) &= \Pr(Y_i = K) e^{\boldsymbol{\beta}_1 \cdot \mathbf{X}_i} \\
\Pr(Y_i = 2) &= \Pr(Y_i = K) e^{\boldsymbol{\beta}_2 \cdot \mathbf{X}_i} \\
&\cdots\cdots \\
\Pr(Y_i = K-1) &= \Pr(Y_i = K) e^{\boldsymbol{\beta}_{K-1} \cdot \mathbf{X}_i}
\end{aligned}$$

Using the fact that all *K* of the probabilities must sum to one, we find:

$$\Pr(Y_i = K) = 1 - \sum_{k=1}^{K-1} \Pr(Y_i = K) e^{\boldsymbol{\beta}_k \cdot \mathbf{X}_i} \Rightarrow \Pr(Y_i = K) = \frac{1}{1 + \sum_{k=1}^{K-1} e^{\boldsymbol{\beta}_k \cdot \mathbf{X}_i}}$$

We can use this to find the other probabilities:

$$\begin{aligned}
\Pr(Y_i = 1) &= \frac{e^{\boldsymbol{\beta}_1 \cdot \mathbf{X}_i}}{1 + \sum_{k=1}^{K-1} e^{\boldsymbol{\beta}_k \cdot \mathbf{X}_i}} \\
\Pr(Y_i = 2) &= \frac{e^{\boldsymbol{\beta}_2 \cdot \mathbf{X}_i}}{1 + \sum_{k=1}^{K-1} e^{\boldsymbol{\beta}_k \cdot \mathbf{X}_i}} \\
&\cdots\cdots \\
\Pr(Y_i = K-1) &= \frac{e^{\boldsymbol{\beta}_{K-1} \cdot \mathbf{X}_i}}{1 + \sum_{k=1}^{K-1} e^{\boldsymbol{\beta}_k \cdot \mathbf{X}_i}}
\end{aligned}$$

The fact that we run multiple regressions reveals why the model relies on the assumption of independence of irrelevant alternatives described above.

Estimating the coefficients

The unknown parameters in each vector β_k are typically jointly estimated by maximum a posteriori (MAP) estimation, which is an extension of likelihood using regularization of the weights to prevent pathological solutions (usually a squared regularizing function, which is equivalent to placing a zero-mean Gaussian prior distribution on the weights, but other distributions are also possible). The solution is typically found using an iterative procedure such as generalized, iteratively reweighted least squares (IRLS),by means of gradient-based optimization algorithms such as L-BFGS, or by specialized coordinate descent algorithms.

3.6 Reliability Analysis of Research Instrument

The reliability test for this research is processed on computer program by using Cronbach's alpha coefficient. The researcher apply pilot test to examine the reliability of the questionnaire.

Table 3.1: Reliability test summary

Variables	Alpha (α-test)
Medical costs	0.763
Service quality	0.712
Well recognized medical treatment	0.764
Hospital Image	0.708
Medical Technology	0.745
Word of Mouth	0.786
Hospital Brand Credibility	0.750
Hospital Brand Preference	0.709
Treatment Quality and Variety	0.798
Doctors Quality	0.728
Hospital Ambiences Environment	0.792

3.7 Content Validity

The questions from questionnaires had been review by the 5 qualified experts in the field of high hospital industry and researcher can get the content validity from the questionnaire.

The five qualified experts are: Ms. Zheng Chang, Nurse of Yanhee General Hospital; Ms. Lan Liu, Nurse of Yanhee General Hospital; Ms. Wanxiao He, translator of Jetanin hospital; Mr.Yun Zhang, translator of BNH hospital; Mr. Ze Yang, , translator of BNH hospital.

Table 3.2: Content Validity

No.	Expert1			Expert2			Expert3			Expert4			Expert5			ΣR	IOC	Data analysis
	1	0	-1	1	0	-1	1	0	-1	1	0	-1	1	0	-1			
MC1	☑			☑				☑		☑				☑		3	0.6	Accepted
MC2	☑			☑			☑			☑			☑			5	1	Accepted
MC3	☑			☑			☑				☑		☑			4	0.8	Accepted
SQ1	☑			☑			☑			☑			☑			5	1	Accepted
SQ2		☑		☑			☑			☑			☑			4	0.8	Accepted
SQ3	☑				☑		☑			☑			☑			4	0.8	Accepted
WRT1	☑			☑				☑		☑				☑		3	0.6	Accepted
WRT2	☑			☑				☑		☑				☑		3	0.6	Accepted
WRT3	☑			☑			☑			☑			☑			5	1	Accepted
HI1	☑				☑		☑			☑			☑			4	0.8	Accepted
HI2	☑			☑				☑		☑				☑		3	0.6	Accepted
HI3	☑			☑			☑			☑			☑			5	1	Accepted
MT1	☑				☑		☑			☑			☑			4	0.8	Accepted
MT2	☑			☑				☑		☑				☑		3	0.6	Accepted
WOM1	☑			☑			☑			☑			☑			5	1	Accepted
WOM2	☑			☑			☑				☑		☑			4	0.8	Accepted
WOM3	☑			☑			☑			☑			☑			5	1	Accepted
HBC1		☑		☑			☑			☑			☑			4	0.8	Accepted
HBC2	☑				☑		☑			☑			☑			4	0.8	Accepted
HBP1	☑			☑				☑		☑				☑		3	0.6	Accepted
HBP2	☑			☑				☑		☑				☑		3	0.6	Accepted
TQV1	☑			☑				☑		☑				☑		3	0.6	Accepted
TQV2	☑			☑			☑			☑			☑			5	1	Accepted
DQ1	☑				☑		☑			☑			☑			4	0.8	Accepted
DQ2	☑			☑			☑			☑			☑			5	1	Accepted

(Continued)

Table 3.2 (Continued): Content Validity

DQ3	☑			☑			☑				☑		☑			4	0.8	Accepted
HAE1		☑		☑			☑			☑			☑			4	0.8	Accepted
HAE2	☑				☑		☑			☑			☑			4	0.8	Accepted
HAE3	☑			☑				☑		☑				☑		3	0.6	Accepted

To prove the consistency of questions, the author use Index of Item - Objective Congruence (IOC) method to calculate the consistency between the objective and content or questions and objective.

$$IOC = \frac{\Sigma R}{N}$$

$$= 25.8/32$$

$$=0.806$$

Where: IOC = Consistency between the objective and content or questions and objectives.

Σ R= Total assessment points given from all qualified experts.

N = Number of qualified experts.

The consistency index value must have the value of 0.5 or above to be accepted.

There are 3 levels of assessment point as follow:

- +1 means the question is certainly consistent with the objective of the questionnaire.

- 0 means the question is unsure to be consistent with the objective of the questionnaire.

- -1 means the question is inconsistent with the objective of the questionnaire.

The consistency index value must have the value of 0.5 or above to be accepted.

Index of Item - Objective Congruence (IOC) from three experts result are as followed;

As calculate that the IOC is 0.806 which is more than 0.5 can be accepted in this study.

CHAPTER 4

DATA PRESENTATION

4.1 Introduction

From the previous study in chapter two, Ibrahim and Leila (2011), Kristine (2011) and Hadyn and Wanthanee (2013), Methawee and, McKercher (2013) the researchers finally obtained valid questionnaire which equal to the calculated sample size numbers. In this study, for the sake of obtaining the exact sample size as calculated in chapter 3, the questionnaire was actually distributed 400 during Oct 2016.

So the information acquired from 400 valid questionnaires survey which collected, and then the results of data collection and analysis were presented based on the research methodology discussed in chapter3. The data were showed in three parts; the first part was the data analysis of demographic characteristics by using frequency and percentage. Then second part was the data analysis of measuring variables by using mean and standard deviation. The last part was hypothesis test. The data presented also explored to support research questions mentioned in chapter 3. The reliability of research instrument will be test.

4.2 Descriptive Analysis

Table 4.1: Descriptive analysis of gender

gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	220	55.0	55.0	55.0
	female	180	45.0	45.0	100.0
	Total	400	100.0	100.0	

From table 4.1, the descriptive analysis of gender shows that the male of respondents get 55% (220 out of 400). Female of respondents get 45% (180 out of 400).

Table 4.2: Descriptive analysis of age

age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 23	162	40.5	40.5	40.5
	23-40	206	51.5	51.5	92.0
	More than 40	32	8.0	8.0	100.0
	Total	400	100.0	100.0	

From table 4.2, the descriptive analysis of age shows that the Age that 23-40 get 51.5% (206 out of 400). Age of less than 23 years old get 40.5% (162 out of 400). Age more than 40 years old get 8% (32 out of 400).

Table 4.3: Descriptive analysis of education

education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor Degree	71	17.8	17.8	17.8
	Master Degree	263	65.8	65.8	83.5
	Doctor Degree	66	16.5	16.5	100.0
	Total	400	100.0	100.0	

From table 4.3, the descriptive analysis of education shows that the education level of master degree get 65.8% (263 out of 400). Education level of bachelor degree get 17.8% (71 out of 400). Education level of master degree get 16.5% (66 out of 400).
As a result medical tourists whom came to choose their three major hospitals mostly are master Degree.

Table 4.4: Descriptive analysis of work status

work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	271	67.8	67.8	67.8
	Part time	56	14.0	14.0	81.8
	Full time	45	11.3	11.3	93.0
	Students	28	7.0	7.0	100.0
	Total	400	100.0	100.0	

From table 4.4, the descriptive analysis of work status shows that the respondents doing unemployed get 67.8% (271 out of 400). Respondents doing part time job get 14% (56 out of 400). Respondents doing full time job get 11.3% (45 out of 400).
As a result medical tourists whom came to choose their three major hospitals mostly are unemployed.

Table 4.5: Descriptive analysis of marital status

marital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	136	34.0	34.0	34.0
	Single	183	45.8	45.8	79.8
	Divorced	81	20.3	20.3	100.0
	Total	400	100.0	100.0	

From table 4.5, the descriptive analysis of marital status shows that the respondents with single status get 45.8% (183 out of 400). Respondents with married status get 34% (136 out of 400). Respondents with divorced status get 20.3% (81 out of 400).
As a result medical tourists whom came to choose their three major hospitals mostly are single.

Table 4.6: Descriptive analysis of “How often you usually go medical tourism”

often

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 time per 1 year	171	42.8	42.8	42.8
	2-3 times per 1 year	182	45.5	45.5	88.3
	more than 3 times per 1 year	47	11.8	11.8	100.0
	Total	400	100.0	100.0	

From table 4.6, the descriptive analysis of “How often you usually go medical tourism” shows that the respondents will go medical tourism 2-3times per 1 year get 45.5% (182 out of 400). Respondents will go medical tourism 1 times per 1year get 42.8% (171 out of 400). Respondents will go medical tourism more than 3 times per 1 year get 11.8% (47 out of 400).

Table 4.7: Descriptive analysis of hobby

hobby

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Travel	67	16.8	16.8	16.8
	Party	190	47.5	47.5	64.3
	Reading	23	5.8	5.8	70.0
	Shopping	120	30.0	30.0	100.0
	Total	400	100.0	100.0	

From table 4.7, the descriptive analysis of hobby shows that the respondents like party get 47.5% (190 out of 400). Respondents like shopping get 30% (120 out of 400). Respondents like travel get 16.8% (67 out of 400). Respondents like reading get 5.8% (23 out of 400).

Table 4.8: Descriptive analysis of “Where you normally go?”

go

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mountain	56	14.0	14.0	14.0
	Beach	145	36.3	36.3	50.3
	Plaza	149	37.3	37.3	87.5
	Club	50	12.5	12.5	100.0
	Total	400	100.0	100.0	

From table 4.8, the descriptive analysis of “Where you normally go?” shows that the respondents like go to plaza get 37.3% (149 out of 400). Respondents like go to beach get 36.3% (145 out of 400). Respondents like go to mountain get 147% (56 out of 400). Respondents like go to club a get 12.5% (50 out of 400).

Table 4.9: Descriptive analysis of “What kind of food you like?”

food

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	47	11.8	11.8	11.8
	Western food	154	38.5	38.5	50.3
	Local food	153	38.3	38.3	88.5
	Japanese food	46	11.5	11.5	100.0
	Total	400	100.0	100.0	

From table 4.9, the descriptive analysis of “What kind of food you like?” shows that the respondents like western food get 38.5% (154 out of 400). Respondents like local food get 38.3% (153 out of 400). Respondents like Chinese food get 11.8% (47 out of 400). Respondents like Japanese food get 11.5% (46 out of 400). As a result medical tourists whom came to choose their three major hospitals mostly are like westernl food.

Table 4.10: Descriptive analysis of "Normally how you take care of your body?"

body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fitness	47	11.8	11.8	11.8
	Clean food	77	19.3	19.3	31.0
	Regular checkup	53	13.3	13.3	44.3
	All of above	223	55.8	55.8	100.0
	Total	400	100.0	100.0	

From table 4.10, the descriptive analysis of "Normally how you take care of your body?" shows that the respondents take care their body include fitness, clean food and regular checkup get 55.8% (223 out of 400). Respondents take their body by clean food get 19.33% (77 out of 400). Respondents take their body by regular checkup get 13.3% (53 out of 400). Respondents take their body by fitness get 11.8% (47 out of 400).

4.11: Mean, Standard Deviation and Respondents perception of Medical costs.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. The hospital offers cheaper fees & administrative fees.	400	2	5	3.66	.891
2. The total cost of medical treatment in the hospital gives value for money.	400	2	5	3.49	.804
3. The hospital offers reasonable and affordable medical treatment costs.	400	2	5	3.62	1.009
Valid N (listwise)	400				

From table 4.11, the highest mean is question of "The hospital offers cheaper fees & administrative fees" which is 3.66, the lowest mean is question of "The total cost of medical treatment in the hospital gives value for money" which is 3.49. The highest std. deviation is question of "The hospital offers reasonable and affordable medical treatment costs" which is 1.009. The lowest std. deviation is question of "The total cost of medical treatment in the hospital gives value for money" which is 0.804.

Table 4.12: Mean, Standard Deviation and Respondents perception of Service quality.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1.Multi language provided	400	1	5	3.87	.762
2. General information is good	400	2	5	3.80	.887
3. Fulfilling required expectations	400	2	5	3.81	.732
Valid N (listwise)	400				

From table 4.12, the highest mean is question of "Multi language provided" which is 3.87, the lowest mean is question of "General information is good" which is 3.80. The highest std. deviation is question of "General information is good" which is .887. The lowest std. deviation is question of "Fulfilling required expectations" which is 0.732.

Table 4.13: Mean, Standard Deviation and Respondents perception of Well recognized medical treatment.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. The hospital has an international accreditation.	400	2	5	3.64	.782

(Continued)

Table 4.13 (Continued): Mean, Standard Deviation and Respondents perception of Well recognized medical treatment.

2. The hospital provides professional, top-notch, and certified doctors as well as hospitable nurses and staffs	400	2	5	3.89	.638
3. The hospital provides fast service and outstanding patient care.	400	2	5	3.96	.840
Valid N (listwise)	400				

From table 4.13, the highest mean is question of "The hospital provides fast service and outstanding patient care." which is 3.96, the lowest mean is question of "The hospital has an international accreditation." which is 364. The highest std. deviation is question of "The hospital provides fast service and outstanding patient care." which is .840. The lowest std. deviation is question of "The hospital provides professional, top-notch, and certified doctors as well as hospitable nurses and staffs" which is 0.638.

Table 4.14: Mean, Standard Deviation and Respondents perception of Hospital Image.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. I have a clear understanding on this hospital brand	400	2	5	3.70	.805
2. Symbol of the hospital can build recognition to me.	400	2	5	3.72	.797
3.This hospital comes to my mind at first when mentions medical tourism	400	2	5	3.74	.809
Valid N (listwise)	400				

From table 4.14, the highest mean is question of "This hospital comes to my mind at first when mentions medical tourism" which is 3.74, the lowest mean is question of "I have a clear understanding on this hospital brand" which is 370. The highest std. deviation is question of "This hospital comes to my mind at first when mentions medical tourism" which is .809. The lowest std. deviation is question of "Symbol of the hospital can build recognition to me." which is 0.797.

Table 4.15: Mean, Standard Deviation and Respondents perception of Medical Technology.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. The hospital provides high technology medical equipment.	400	1	5	3.51	1.076
2. The hospital offers superb facilities and a range of excellent medical treatments.	400	2	5	3.39	.764
Valid N (listwise)	400				

From table 4.15, the highest mean is question of "The hospital provides high technology medical equipment." which is 3.51, the lowest mean is question of "The hospital offers superb facilities and a range of excellent medical treatments." which is 3.39. The highest std. deviation is question of "The hospital provides high technology medical equipment." which is 1.076. The lowest std. deviation is question of "The hospital offers superb facilities and a range of excellent medical treatments." which is 0.764.

Table 4.16: Mean, Standard Deviation and Respondents perception of Word of Mouth.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. I would like to introduce my friend to try this hospital	400	1	5	3.53	1.023
2. I know the hospital is from others' people's mouth	400	2	5	3.75	.933
3. I like the hospital because my friend also like it	400	2	5	3.59	.737
Valid N (listwise)	400				

From table 4.16, the highest mean is question of "I know the hospital is from others' people's mouth" which is 3.75, the lowest mean is question of "I would like to introduce my friend to try this hospital" which is 3.53. The highest std. deviation is question of "I would like to introduce my friend to try this hospital" which is 1.023. The lowest std. deviation is question of "I like the hospital because my friend also like it" which is 0.737.

Table 4.17: Mean, Standard Deviation and Respondents perception of Hospital Brand Credibility.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. This hospital claims about its service are believable	400	1	5	3.42	.957
2. This hospital delivers what it promises	400	2	5	3.51	.832
Valid N (listwise)	400				

From table 4.17, the highest mean is question of "This hospital delivers what it promises" which is 3.51, the lowest mean is question of "This hospital claims about its service are believable" which is 3.42. The highest std. deviation is question of "This hospital claims about its service are believable" which is .957. The lowest std. deviation is question of "This hospital delivers what it promises" which is 0.832.

Table 4.18: Mean, Standard Deviation and Respondents perception of Hospital Brand Preference.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. This hospital is my preferred brand over any other brand of hospital	400	2	5	3.83	.698
2. Thai culture is nice	400	2	5	3.93	.867
Valid N (listwise)	400				

From table 4.18, the highest mean is question of "Thai culture is nice" which is 3.93, the lowest mean is question of "This hospital is my preferred brand over any other brand of hospital" which is 3.83. The highest std. deviation is question of "Thai culture is nice" which is .867. The lowest std. deviation is question of "This hospital is my preferred brand over any other brand of hospital" which is 0.698.

Table 4.19: Mean, Standard Deviation and Respondents perception of Treatment Quality and Variety.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. I choose this hospital because of its treatment quality	400	2	5	3.75	.754
2. I choose this hospital because of its treatment variety	400	2	5	3.89	.681
Valid N (listwise)	400				

From table 4.19, the highest mean is question of "I choose this hospital because of its treatment variety" which is 3.89, the lowest mean is question of "I choose this hospital because of its treatment quality" which is 3.75. The highest std. deviation is question of "I choose this hospital because of its treatment quality" which is .754. The lowest std. deviation is question of "I choose this hospital because of its treatment variety" which is 0.681.

Table 4.20: Mean, Standard Deviation and Respondents perception of Doctors Quality.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. I choose this hospital because of its doctor quality	400	2	5	3.70	.749
2. The doctors quality is quite high in this hospital	400	2	5	3.69	.803
3. The doctor quality can meet my medical requirements	400	2	5	3.65	.859
Valid N (listwise)	400				

From table 4.20, the highest mean is question of "I choose this hospital because of its doctor quality" which is 3.70, the lowest mean is question of "The doctor quality can meet my medical requirements" which is 3.65. The highest std. deviation is question of "The doctor quality can meet my medical requirements" which is .859. The lowest std. deviation is question of "I choose this hospital because of its doctor quality" which is 0.749.

Table 4.21: Mean, Standard Deviation and Respondents perception of Hospital Ambiences Environment.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. physical setting of hospital is quite good	400	2	5	3.80	.802
2. hospital's culture can supports patients	400	1	4	3.40	.649
3. Hospital ambiences environment can really help to heal the sickness	400	1	5	3.44	1.012
Valid N (listwise)	400				

From table 4.21, the highest mean is question of "physical setting of hospital is quite good" which is 3.80, the lowest mean is question of "hospital's culture can supports patients" which is 3.40. The highest std. deviation is question of "Hospital ambiences environment can really help to heal the sickness" which is 1.012. The lowest std. deviation is question of "hospital's culture can supports patients" which is 0.649.

Table 4.22: Mean, Standard Deviation and Respondents perception of Hospital choice.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. I will choice this hospital.	400	2	5	3.69	.660
2. I will recommend my friend to use this hospital	400	3	5	3.79	.719
3. This hospital is the best choice for me	400	2	5	3.45	.898
Valid N (listwise)	400				

From table 4.22, the highest mean is question of "I will recommend my friend to use this hospital" which is 3.79, the lowest mean is question of "I will recommend my friend to use this hospital." which is 3.45. The highest std. deviation is question of "This hospital is the best choice for me" which is .898. The lowest std. deviation is question of "I will choice this hospital" which is 0.660.

4.3 Findings of Hypotheses Testing.

The result of multinomial logistic regression that is used to test has showed in the following LRT outcomes with the highlight significant independent variables with p-value are less than 0.05. Those significant independent variables include RT3，MT1，DQ1，HAE1.

Table 4.23: Likelihood Ratio Tests

Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
MC1	407.513	2.368	8	.968
MC2	412.795	7.650	4	.105
MC3	411.583	6.438	4	.169
SQ1	410.656	5.511	4	.239
SQ2	407.710	2.565	6	.861
SQ3	407.355	2.209	6	.899
RT1	410.025	4.880	6	.559
RT2	413.983	8.838	8	.356
RT3	**428.194**	**23.049**	**6**	**.001**
HI1	384.533	9.597	6	.143
HI2	379.738	4.802	6	.569
HI3	379.941	5.005	6	.543
MT1	**387.497**	**12.560**	**6**	**.050**
MT2	378.831	3.895	6	.691
WOM1	377.823	2.887	4	.577
WOM2	379.763	4.827	4	.306
WOM3	379.536	4.600	6	.596
HBC1	532.319	.590	4	.964
HBC2	539.885	8.156	6	.227
HBP1	536.192	4.463	4	.347
HBP2	539.394	7.664	4	.105
TQV1	532.488	.759	4	.944
TQV2	535.588	3.859	4	.425
DQ1	**546.410**	**14.681**	**4**	**.005**
DQ2	535.613	3.884	6	.692
DQ3	540.902	9.173	8	.328
HAE1	**546.254**	**14.525**	**6**	**.024**
HAE2	537.016	5.286	6	.508
HAE3	538.049	6.319	6	.388

As the analysis by SPSS of Likelihood Ratio Tests, researcher can summarize the results as following:

Hypothesis 1:

Ho: Medical Costs do not influence hospital choice for medical tourism. (all beta_MCi = 0)

Ha: Medical Costs significantly influence hospital choice for medical tourism. (at least one beta_MCi $\neq$ 0)

Since p-value of all beta_MCi > 0.05 so we cannot reject Ho therefore Medical Costs do not influence hospital choice for medical tourism.

Hypothesis 2:

Ho: Service quality does not influence hospital choice for medical tourism. (all beta_SQi = 0)

Ha: Service quality significantly influences hospital choice for medical tourism. (at least one beta_SQi $\neq$ 0)

Since p-value of all beta_SQi > 0.05 so we cannot reject Ho therefore Service quality does not influence hospital choice for medical tourism.

Hypothesis 3:

Ho: Well-recognized medical treatment does not influence hospital choice for medical tourism. (all beta_RTi = 0)

Ha: Well-recognized medical treatment significantly influences hospital choice for medical tourism. (at least one beta_RTi $\neq$ 0)

Since p-value of RT3 = 0.001 (< 0.05) so we can reject Ho and accept Ha therefore well-recognized medical treatment significantly influences hospital choice for medical tourism.

Hypothesis 4:

Ho: Hospital Image does not influence hospital choice for medical tourism. (all beta_HIi = 0)

Ha: Hospital Image significantly influences hospital choice for medical tourism. (at least one beta_HIi $\neq$ 0)

Since p-value of all beta_HIi > 0.05 so we cannot reject Ho therefore Hospital Image does not influence hospital choice for medical tourism.

Hypothesis 5:

Ho: Medical Technology does not influence hospital choice for medical tourism. (all beta_MTi = 0)

Ha: Medical Technology significantly influences hospital choice for medical tourism. (at least one beta_MTi $\neq$ 0)

Since p-value of MT1 = 0.05 (= 0.05) so we can reject Ho and accept Ha therefore Medical Technology significantly influences hospital choice for medical tourism.

Hypothesis 6:

Ho: Word of Mouth does not influence hospital choice for medical tourism. (all beta_WOMi = 0)

Ha: Word of Mouth significantly influences hospital choice for medical tourism. (at least one beta_WOMi $\neq$ 0)

Since p-value of all beta_WOMi > 0.05 so we cannot reject Ho therefore Word of Mouth does not influence hospital choice for medical tourism.

Hypothesis 7:

Ho: Hospital Brand Credibility does not influence hospital choice for medical tourism. (all beta_HBCi = 0)

Ha: Hospital Brand Credibility significantly influences hospital choice for medical tourism. (at least one beta_HBCi $\neq$ 0)

Since p-value of all beta_HBCi > 0.05 so we cannot reject Ho therefore Hospital Brand Credibility does not influence hospital choice for medical tourism.

Hypothesis 8:

Ho: Hospital Brand Preference does not influence hospital choice for medical tourism. (all beta_HBPi = 0)

Ha: Hospital Brand Preference significantly influences hospital choice for medical tourism. (at least one beta_HBPi $\neq$ 0)

Since p-value of all beta_HBPi > 0.05 so we cannot reject Ho therefore Hospital Brand Preference does not influence hospital choice for medical tourism.

Hypothesis 9:

Ho: Treatment Quality and Variety does not influence hospital choice for medical tourism. (all beta_TQVi = 0)

Ha: Treatment Quality and Variety significantly influences hospital choice for medical tourism. (at least one beta_TQVi $\neq$ 0)

Since p-value of all beta_TQVi > 0.05 so we cannot reject Ho therefore Treatment Quality and Variety does not influence hospital choice for medical tourism.

Hypothesis 10:

Ho: Doctors quality does not influence hospital choice for medical tourism. (all beta_DQi = 0)

Ha: Doctors quality significantly influences hospital choice for medical tourism. (at least one beta_DQi $\neq$ 0)

Since p-value of DQ1 = 0.005 (< 0.05) so we can reject Ho and accept Ha therefore Doctors quality significantly influences hospital choice for medical tourism.

Hypothesis 11:

Ho: Hospital Ambiences Environment does not influence hospital choice for medical tourism. (all beta_HAEi = 0)

Ha: Hospital Ambiences Environment significantly influences hospital choice for medical tourism. (at least one beta_HAEi $\neq$ 0)

Since p-value of all beta_HAEi > 0.05 so we cannot reject Ho therefore Hospital Ambiences Environment does not influence hospital choice for medical tourism.

4.4 Cross Table Analysis

Researcher applied data of questionnaire into cross table analysis, and the output of cross table analysis will be show as following:

Table 4.24: Cross table of gender and brand choice

gender * most Cross tabulation

			most			Total
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	
gender	male	Count	64	75	81	220
		% within gender	29.1%	34.1%	36.8%	100.0%
		% within most	64.6%	55.1%	49.1%	55.0%
	female	Count	35	61	84	180
		% within gender	19.4%	33.9%	46.7%	100.0%
		% within most	35.4%	44.9%	50.9%	45.0%
Total		Count	99	136	165	400
		% within gender	24.8%	34.0%	41.2%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Male medical tourists tend to go to BIH>BNH>BGH.
- Female medical tourists tend to go to BIH>BNH>BGH.
- For BGH, the numbers of male medical tourists are almost double that of female (64.6% vs. 35.4%).
- For BNH, the numbers of male medical tourists are slightly higher than that of female.
- For BIH, the numbers of male and female medical tourists are about the same.

Table 4.25: Cross table of age and brand choice

age * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
age	Less than 23	Count	43	20	99	162
		% within age	26.5%	12.3%	61.1%	100.0%
		% within most	43.4%	14.7%	60.0%	40.5%
	23-40	Count	25	116	65	206
		% within age	12.1%	56.3%	31.6%	100.0%
		% within most	25.3%	85.3%	39.4%	51.5%
	More than 40	Count	31	0	1	32
		% within age	96.9%	.0%	3.1%	100.0%
		% within most	31.3%	.0%	.6%	8.0%
Total		Count	99	136	165	400
		% within age	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Age less than 23 years old medical tourists tend to go to BIH>BGH>BNH.
- Age between 23-40 years old medical tourists tend to go to BNH>BIH>BGH.
- Age more than 40 years old medical tourists tend to go to BGH>BIH>BNH.
- For BGH, the numbers of age less than 23 years old medical tourists are more than age between 23-40 and age more than 40 years old (43.4% vs.25.3% vs.31.3%)
- For BNH, the numbers of age between 23-40 years old are significantly higher than age less than 23 and age more than 40.
- For BIH, the numbers of age less than 23 years old are significantly higher than age between 23-40 and age more than 40.

Table 4.26: Cross table of education and brand choice

education * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
education	Bachelor Degree	Count	0	31	40	71
		% within education	.0%	43.7%	56.3%	100.0%
		% within most	.0%	22.8%	24.2%	17.8%
	Master Degree	Count	87	62	114	263
		% within education	33.1%	23.6%	43.3%	100.0%
		% within most	87.9%	45.6%	69.1%	65.8%
	Doctor Degree	Count	12	43	11	66
		% within education	18.2%	65.2%	16.7%	100.0%
		% within most	12.1%	31.6%	6.7%	16.5%
Total		Count	99	136	165	400
		% within education	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Education level at bachelor degree medical tourists tend to go to BIH>BNH>BGH.
- Education level at master degree medical tourists tend to go to BIH>BGH>BNH.
- Education level at doctor degree medical tourists tend to go to BNH>BGH>BIH.
- For BGH, the numbers of education level at master degree are significantly higher than education level at doctor degree and bachelor degree
- For BNH, the numbers of the numbers of education level at master degree are higher than education level at doctor degree and bachelor degree (45.6% vs. 31.6% vs. 22.8%)
- For BIH, the numbers of the numbers of education level at master degree are higher

than education level at doctor degree and bachelor degree (69.1% vs. 6.7% vs. 24.2%)

Table 4.27: Cross table of work and brand choice

work * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
work	Unemployed	Count	74	81	116	271
		% within work	27.3%	29.9%	42.8%	100.0%
		% within most	74.7%	59.6%	70.3%	67.8%
	Part time	Count	19	18	19	56
		% within work	33.9%	32.1%	33.9%	100.0%
		% within most	19.2%	13.2%	11.5%	14.0%
	Full time	Count	0	28	17	45
		% within work	.0%	62.2%	37.8%	100.0%
		% within most	.0%	20.6%	10.3%	11.3%
	Students	Count	6	9	13	28
		% within work	21.4%	32.1%	46.4%	100.0%
		% within most	6.1%	6.6%	7.9%	7.0%
Total		Count	99	136	165	400
		% within work	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Unemployed medical tourists tend to go to BIH>BNH>BGH.
- Part time medical tourists tend to go to BIH=BGH>BNH.
- Full time medical tourists tend to go to BNH>BIH>BGH.
- Students medical tourists tend to go to BIH>BNH>BGH.
- For BGH, the numbers of unemployed are significantly higher than part time, full time, and students
- For BNH, the numbers of unemployed are significantly higher than part time, full

time, and students

- For BIH, the numbers of unemployed are significantly higher than part time, full time, and students

Table 4.28: Cross table of marital and brand choice

marital * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
marital	Married	Count	36	44	56	136
		% within marital	26.5%	32.4%	41.2%	100.0%
		% within most	36.4%	32.4%	33.9%	34.0%
	Single	Count	32	92	59	183
		% within marital	17.5%	50.3%	32.2%	100.0%
		% within most	32.3%	67.6%	35.8%	45.8%
	Divorced	Count	31	0	50	81
		% within marital	38.3%	.0%	61.7%	100.0%
		% within most	31.3%	.0%	30.3%	20.3%
Total		Count	99	136	165	400
		% within marital	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Married medical tourists tend to go to BIH>BNH>BGH.
- Single medical tourists tend to go to BNH>BIH>BGH.
- Divorced medical tourists tend to go to BIH>BGH>BNH.
- For BGH, the numbers of married, single and divorced are about the same.
- For BNH, the numbers of single are significantly higher than married and divorced
- For BIH, the numbers of married, single and divorced are about the same.

Table 4.29: Cross table of often and brand choice

often * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
often	1 time per 1 year	Count	34	61	76	171
		% within often	19.9%	35.7%	44.4%	100.0%
		% within most	34.3%	44.9%	46.1%	42.8%
	2-3 times per 1 year	Count	57	44	81	182
		% within often	31.3%	24.2%	44.5%	100.0%
		% within most	57.6%	32.4%	49.1%	45.5%
	more than 3 times per 1 year	Count	8	31	8	47
		% within often	17.0%	66.0%	17.0%	100.0%
		% within most	8.1%	22.8%	4.8%	11.8%
Total		Count	99	136	165	400
		% within often	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Go medical tourism 1 time per 1 year medical tourists tend to go to BIH>BNH>BGH.
- Go medical tourism 2-3 times per 1 year medical tourists tend to go to BIH>BGH>BNH.
- Go medical tourism more than 3 times per 1 year medical tourists tend to go to BNH>BGH=BIH.
- For BGH, the numbers of 2-3 times per 1 year are significantly higher than time per 1 year and more than 3 times per 1 year
- For BNH, the numbers of 1 time per 1 year are significantly higher than 2-3 times per 1 year and more than 3 times per 1 year
- For BIH, the numbers of 1 time per 1 year and 2-3 times per 1 year are almost same , however, are significantly higher than more than 3 times per 1 year

Table 4.30: Cross table of hobby and brand choice

hobby * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
hobby	Travel	Count	0	11	56	67
		% within hobby	.0%	16.4%	83.6%	100.0%
		% within most	.0%	8.1%	33.9%	16.8%
	Party	Count	60	64	66	190
		% within hobby	31.6%	33.7%	34.7%	100.0%
		% within most	60.6%	47.1%	40.0%	47.5%
	Reading	Count	5	13	5	23
		% within hobby	21.7%	56.5%	21.7%	100.0%
		% within most	5.1%	9.6%	3.0%	5.8%
	Shopping	Count	34	48	38	120
		% within hobby	28.3%	40.0%	31.7%	100.0%
		% within most	34.3%	35.3%	23.0%	30.0%
Total		Count	99	136	165	400
		% within hobby	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- With hobby of traveling medical tourists tend to go to BIH>BNH>BGH.
- With hobby of party medical tourists tend to go to BIH>BNH>BGH.
- With hobby of reading medical tourists tend to go to BNH>BGH=BIH.
- With hobby of shopping medical tourists tend to go to BNH>BIH>BGH.
- For BGH, the numbers of party hobby are significantly higher than hobby of traveling, reading, and shopping
- For BNH, the numbers of party hobby are significantly higher than hobby of traveling, reading, and shopping
- For BIH, the numbers of party hobby and travel hobby are almost same, but are

significantly higher than hobby of reading, and shopping

Table 4.31: Cross table of normal go and brand choice

go * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
go	Mountain	Count	7	17	32	56
		% within go	12.5%	30.4%	57.1%	100.0%
		% within most	7.1%	12.5%	19.4%	14.0%
	Beach	Count	28	45	72	145
		% within go	19.3%	31.0%	49.7%	100.0%
		% within most	28.3%	33.1%	43.6%	36.3%
	Plaza	Count	52	57	40	149
		% within go	34.9%	38.3%	26.8%	100.0%
		% within most	52.5%	41.9%	24.2%	37.3%
	Club	Count	12	17	21	50
		% within go	24.0%	34.0%	42.0%	100.0%
		% within most	12.1%	12.5%	12.7%	12.5%
Total		Count	99	136	165	400
		% within go	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Normal go mountain medical tourists tend to go to BIH>BNH>BGH.
- Normal go beach medical tourists tend to go to BIH>BNH>BGH.
- Normal go plaza medical tourists tend to go to BNH>BGH>BIH.
- Normal go club medical tourists tend to go to BIH>BNH>BGH.
- For BGH, the numbers of go plaza are significantly higher than go mountain, beach, and club
- For BNH, the numbers of go plaza are significantly higher than go mountain, beach,

and club

- For BIH, the numbers of go beach are significantly higher than go mountain, plaza, and club

Table 4.32: Cross table of food and brand choice

food * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
food	Chinese	Count	10	15	22	47
		% within food	21.3%	31.9%	46.8%	100.0%
		% within most	10.1%	11.0%	13.3%	11.8%
	Western food	Count	28	50	76	154
		% within food	18.2%	32.5%	49.4%	100.0%
		% within most	28.3%	36.8%	46.1%	38.5%
	Local food	Count	51	54	48	153
		% within food	33.3%	35.3%	31.4%	100.0%
		% within most	51.5%	39.7%	29.1%	38.3%
	Japanese food	Count	10	17	19	46
		% within food	21.7%	37.0%	41.3%	100.0%
		% within most	10.1%	12.5%	11.5%	11.5%
Total		Count	99	136	165	400
		% within food	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Like Chinese food medical tourists tend to go to BIH>BNH>BGH.
- Like western food medical tourists tend to go to BIH>BNH>BGH.
- Like local food medical tourists tend to go to BNH>BGH>BIH.
- Like Japanese food medical tourists tend to go to BIH>BNH>BGH.
- For BGH, the numbers of like local food are significantly higher than Chinese food,

western food and Japanese food

- For BNH, the numbers of like local food and western food are almost same, but are significantly higher than Chinese food and Japanese food
- For BIH, the numbers of like Japanese food and western food are almost same, but are significantly higher than Chinese food and local food

Table 4.33: Cross table of body and brand choice

body * most Crosstabulation

			most			
			Bangkok General Hospital	BNH Hospital	Bumrungrad International Hospital	Total
body	Fitness	Count	21	18	8	47
		% within body	44.7%	38.3%	17.0%	100.0%
		% within most	21.2%	13.2%	4.8%	11.8%
	Clean food	Count	23	23	31	77
		% within body	29.9%	29.9%	40.3%	100.0%
		% within most	23.2%	16.9%	18.8%	19.3%
	Regular checkup	Count	0	18	35	53
		% within body	.0%	34.0%	66.0%	100.0%
		% within most	.0%	13.2%	21.2%	13.3%
	All of above	Count	55	77	91	223
		% within body	24.7%	34.5%	40.8%	100.0%
		% within most	55.6%	56.6%	55.2%	55.8%
Total		Count	99	136	165	400
		% within body	24.8%	34.0%	41.3%	100.0%
		% within most	100.0%	100.0%	100.0%	100.0%

This table shows the following results:

- Take care of body by fitness medical tourists tend to go to BGH>BNH>BIH.
- Take care of body by clean food medical tourists tend to go to BIH>BNH=BGH.
- Take care of body by regular check medical tourists tend to go to BIH>BNH>BGH.

- Take care of body by all of fitness, clean food, and regular check medical tourists tend to go to BIH>BNH>BGH.
- For BGH, the numbers of take care of body by all of fitness, clean food, and regular check are significantly higher than fitness, clean food, and regular check.
- For BNH, the numbers of take care of body by all of fitness, clean food, and regular check are significantly higher than fitness, clean food, and regular check.
- For BIH, the numbers of take care of body by all of fitness, clean food, and regular check are significantly higher than fitness, clean food, and regular check.

CHAPTER 5

CONCLUSIONS AND SUGGESTIONS

The research is to find the relationships and the impact between independent variables and hospital choice for medical tourist in Thailand focusing on General Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital. This study seeks to address that research gap by examining the motivations of tourists who sought medical treatments in Thailand, and to work toward the development of a medical tourism typology. By identifying the factors that affect the hospital choice for medical tourist in Thailand focusing on General Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital, the results of this study are expected to assist medical tourism service providers in creating strategies to provide better products and services for their patients.

The 400 questionnaires were distributed to international patients who came for medical treatment in General Bangkok Hospital, BNH Hospital, Bumrungrad International Hospital separately, each hospital got 133 questionnaires within the duration of ten days. The sample population selected in this research was those which are readily available and convenient. The researcher focused on determining the factors of medical costs, service quality, well recognized medical treatment, hospital image, medical technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctors quality, hospital ambiences environment which then effects on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital as medical tourism destination for medical treatment purposes.

5.1 Conclusion

For demographic factor:

After analysis of SPSS, male of respondents get 55% (220 out of 400). Age that 23-40 years old get 51.5% (206 out of 400). Respondents' education level of master degree get 65.8% (263 out of 400). Respondents doing unemployed get 67.8% (271 out of 400). The respondents with single status get 45.8% (183 out of 400). The respondents will go medical tourism 2-3 time per 1 year get 45.5% (182 out of 400). Respondents like party get 47.5% (190 out of 400). The respondents like go to plaza get 37.3% (149 out of 400). Respondents like western food get 38.5% (154 out of 400). The respondents take care their body include fitness, clean food and regular checkup get 55.8% (223 out of 400).

For Hypothesis testing:

Table 5.1: Hypothesis summary

Hypotheses	status	Final Hypotheses
H1	$H1_o$ cannot be rejected	Medical costs does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H2	$H2_o$ cannot be rejected	Service quality does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital

(Continued)

Table 5.1 (Continued): Hypothesis summary

H3	Rejected $H3_o$	Well recognized medical treatment does significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H4	$H4_o$ cannot be rejected	Hospital Image does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H5	Rejected H5o	Medical Technology does significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H6	$H6_o$ cannot be rejected	Word of Mouth does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H7	$H7_o$ cannot be rejected	Hospital Brand Credibility does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H8	$H8_o$ cannot be rejected	Hospital Brand Preference does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital

(Continued)

Table 5.1 (Continued): Hypothesis summary

H9	$H9_o$ cannot be rejected	Treatment Quality and Variety does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H10	Rejected $H10_o$	Doctors quality does significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital
H11	$H11_o$ cannot be rejected	Hospital Ambiences Environment does not significantly influence with hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital

5.2 Discussion

The majority of customers will come to Thailand as medical tourism are married male, age that 23-40 years old, education level of master degree who unemployed, usually go medical tourism 2-3 time per 1 year, and like party, like go to plaza, also like western food and take care their body include fitness, clean food and regular checkup.

The most obvious reason that well recognized medical treatment is the key dominant factor in the decision of international medical tourists to travel abroad for medical treatment, the most influential factor that attracts customers or patients to come to Thailand also include the medical technology, doctor's quality. Tourists would want professional and certified doctors, fast service and outstanding patient care, superb facilities and excellent medical treatments, and high technology medical equipment. With emerging medical hubs such as India, Singapore and Malaysia, competition is getting

fiercer. Hospitals in Thailand should emphasize on improving and developing the quality of doctors and staff and the quality of health care services and medical procedures offered, and medical technologies. International hospital accreditations should be regularly renewed as this inspires confidence and trust from consumers of medical tourism. Also, professional staff, including nurses, psychologists, therapists and social workers, which are designed to improve or modify patients' physical and mental abilities and social functioning.

5.3 Limitation and Suggestion for Future Study

The study is about the influential factors on hospital choice for medical tourist in Thailand focusing on general Bangkok hospital, BNH Hospital, Bumrungrad international hospital. Researcher cannot research other independent variables besides these eleven independent variables which are medical costs, service quality, well recognized medical treatment, hospital image, medical technology, word of mouth, hospital brand credibility, hospital brand preference, treatment quality and variety, doctor’s quality, hospital ambiences environment and one dependent variable hospital choice which is another limitation for this study. Because of those two limitations this study cannot cover the entire Thai hospitals research.

As a suggestion on future researches, a qualitative method of research study of international medical tourists’ satisfaction and customer loyalty of medical tourists receiving medical treatments in Thailand would allow deeper understanding for the reasons why medical tourists return or revisit to Thailand for health care services. Personal interviews would result on lengthy and comprehensive findings on the research objective. Another suggestion is a study of customer perception on the overall service quality of the various hospitals in Thailand. This study could determine the hotels and airline providers that cater to medical tourists. Different package deals that hotels and airline providers typically offer to medical travelers could also be explored in this study.

A future research study on customer perception of Thailand's brand image as a medical tourism hub in Asia would allow an in depth knowledge of Thailand's competitive strengths and core competencies which could be used as an advantage for the country to compete in the emerging global medical tourism industry.

BIBLIOGRAPHY

Ahmed, J., & Rouf, M. (2014). Controlled, Uncontrolled Communication, Brand Name and Brand Attitude: A Relational Study on Cellular Telecom Sector of Bangladesh. *American Journal Of Trade And Policy, 1*(3), 102-108.

Alam, N., & Rubel, A. (2014). Impacts of Corporate Social Responsibility on Customer Satisfaction in Telecom Industry of Bangladesh. *ABC Journal of Advanced Research, 3*(2), 26-37.

Alexandru M. D. et al.,(2000). Consumer choice behavior in online and traditional supermarkets: The effects of brand name, price, and other search attributes. *Intern. J. of Research in Marketing,* 17(2000), 55–78

Amir, O., & Levav, J. (2008), Choice construction versus preference construction: The instability of preferences learned in context. *Journal of Marketing Research, 45*(2), 145-158.

Bies, W., & Zacharia, L. (2007). Medical tourism: Outsourcing surgery. *Mathematical and Computer Modeling, 46,* 1144 - 1159.

Bookman, M. Z., & Bookman, K. R. (2007). *Medical Tourism in Developing Countries.* New York: Palgrave Macmillan.

Catherine, C. et al., (2008). *Decision making and brand choice by older consumers.* Market Lett DOI 10.1007/s11002-008-9058-x

Chanda, R. (2002). Trade in health services. *Bulletin of the World Health Organization, 80*(2), 158 - 163.

Charumbira, L. (2015). Perceived Brand Equity in Professional Sports Teams: A Zimbabwean Consumers‟Perspective. *Asian Business Review*, *5*(3), 131-140.

Chernev, A., Hamilton, R., & Gal, D. (2011). Competing for Consumer Identity: Limits to Self-Expression and the Perils of Lifestyle Branding. *Journal of Marketing, 75*(3), 66-82.

Chile, L., & Talukder, D. (2014). The Paradox of Agricultural Trade Liberalization in Bangladesh and Tanzania.American. *Journal of Trade And Policy, 1*(1), 23-31.

Chowdhury, A., Chowdhury, M., & Imran, M. (2015). Branding strategies for service firms- a study on the selected Internet Service Providers (ISPs) in Bangladesh. *Asian Business Review, 2*(1), 47-53.

Chowdhury, M., & Rahman, M. (2015). Consumer Attitude Towards the Cell Phone: A study on Young Generations of Chittagong Metropolitan City, Bangladesh. *Asian Business Review, 3*(3), 16-20.

Chung, J., & Vithala, R. R. (2003). A General Choice Model for Bundles with Multiple Category Products: Application to Market Segmentation and Pricing of Bundles. *Journal of Marketing Research, 40,* 115-130.

Dube, J. P. G. (2009). Estimating Durable Goods Adoption Decision From Stated Preference Data, Chicago-Booth, *working paper*.

Duvvuri, S., Ansari, A., & Gupta, S. (2007). Consumers' Price Sensitivities Across Complementary Product Categories. *Management Science, 53*,1933-1945.

El Taguri, A. (2007). Medical tourism and the Libyan national health services. *Libyan Journal of Medicine, 2*, 1 – 4.

Elangeswaran, V. R. (2014). The Influence of Brand Association on Customer Preference: A Study on Branded Carbonated Soft Drinks, IUP. *Journal of Brand Management, 11*(2), 38-54.

Fodness, D. (1994). Measuring tourist motivation. *Annals of Tourism Research, 21*(3), 555 – 581.

Forgione, D. A., & Smith, P. C. (2007). Medical tourism and its impact on the US health care system. *Journal of Health Care Finance, 34*(1), 27 - 35.

Freimer, M. D. H. (2008). Try it you will like it does consumer learning lead to competitive price promotions? *Marketing Sci. 27*, 796-810.

Hafiz, R. (2015). Rethinking Brand Identity to Become an Iconic Brand - A Study on Pepsi. *Asian Business Review, 5*(3), 97-102.

Howze, K. S. (2007). Medical tourism: symptom or cure? *Georgia Law Review, 41*(3), 1013-1052.

Islam, M., Noor, J., & Farhana, S. (2012). Performance Analysis of UMTS Cellular Network using Sectorization Based on Capacity and Coverage in Different Propagation Environment. *Asian Journal of Applied Science and Engineering, 1*(2), 48-55.

Jain. E., & Madan. M. (2015). An empirical study on impact of brand knowledge and brand experience on brand preference. *International Conference on Recent Advances on Engineering Sciences and Management, 2*(1), 1143-1174.

Kahn et al., (1986). Imipramine and chlordiazepoxide in depressive and anxiety disorders: Efficacy in anxious outpatients. *Archives of General Psychiatry, 43*, 79-85.

Mohamed, I., & Moradi, L. (2011). A model of e-tourism satisfaction factors for foreign tourists. *Australian Journal of Basic and Applied Sciences, 5*(12), 877-883.

Narayanan, S. P. M. (2009). Heterogeneous learning and the targeting of marketing communications for new products. *Marketing Sci, 28*, 424-441.

Petrin, A., & Kenneth, T. (2010). A Control Function Approach to Endogeneity in Consumer Choice Models, *Journal of Marketing Research, 47*, 3-13.

Russell, G. J. (2014). Brand Choice Models in Russell Winer and Scott A. Neslin (eds.), *The History of Marketing Science, Hanover, MA: Now*.

Sarmin, S. (2015). Factors affecting the Consumer Brand Choice Preference towards New Package of Cellular Phone: A Study on Comilla Region. *Global Disclosure of Economics and Business, 4*(2), 181-196.

Steve, F. (2014). Thailand top destination for medical tourists. *CMAJ, 186* (1), E1-E2, doi: 10.1503/cmaj.109-4655

Tülin, E. et al., (2008). A Dynamic Model of Brand Choice When Price and Advertising Signal Product Quality. *Marketing Science 27*(6), 1111–1125.

Yuvaraj, S. (2014). A Study on the Brand Choice Decisions of Consumers With Reference to Cosmetics. *Indian Journal of Applied Research 4*(6), 91-95.

APPENDIX

Questionnaire

Part I Medical Tourism Choice

1. Which hospital is your most preferred when you choose of Medical Tourism Destination?

____ General Bangkok Hospital ____ BNH Hospital

____ Bumrungrad International Hospital

2. Please rank these factors that influence your destination medical choice?

0 (No influence at all) 1 (Low influence) 2 (Slightly influence) 3 (Somewhat influence) 4 (Moderately influence) 5 (Very influence) 6 (Strongly influence) 7 (Extremely influence)

	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
1. Medical costs								
2. Service quality								
3. Well Recognized medical treatment								
4. Hospital Image								
5. Medical Technology								

6. Word of Mouth								
7. Hospital Brand Credibility								
8. Hospital Brand Preference								
9. Treatment Quality and Variety								
10. Doctors Quality								
11. Hospital Ambiences Environment								

Part II. Measuring Independent Variables

Please answer the following question by mark "√" in the space given below and do kindly answer truthfully and complete all questions. The following factors affect my medical tourism choice destination's decision.

1 (Strongly Disagree) 2 (Slightly Disagree) 3 (Neutral)

4 (Slightly Agree) 5 (Strongly Agree)

	1	2	3	4	5
Medical costs					

1. The hospital offers cheaper fees & administrative fees.					
2. The total cost of medical treatment in the hospital gives value for money.					
3. The hospital offers reasonable and affordable medical treatment costs.					
Service quality					
1.Multi language provided					
2. General information is good					
3. Fulfilling required expectations					
Well Recognized medical treatment					
1. The hospital has an international accreditation.					
2. The hospital provides professional, top-notch, and certified doctors as well as hospitable nurses and staffs					
3. The hospital provides fast service and outstanding patient care.					
Hospital Image					
1. I have a clear understanding on this hospital brand					
2. Symbol of the hospital can build recognition to me.					
3.This hospital comes to my mind at first when					

mentions medical tourism					
Medical Technology					
1. The hospital provides high technology medical equipment.					
2. The hospital offers superb facilities and a range of excellent medical treatments.					
Word of Mouth					
1. I would like to introduce my friend to try this hospital					
2. I know the hospital is from others' people's mouth					
3. I like the hospital because my friend also like it					
Hospital Brand Credibility					
1. This hospital claims about its service are believable					
2. This hospital delivers what it promises					
Hospital Brand Preference					
1. This hospital is my preferred brand over any other brand of hospital					
2. When it comes to making choice decision, this brand of hospital is my first preference					
Treatment Quality and Variety					

1.I choose this hospital because of its treatment quality					
2.I choose this hospital because of its treatment variety					
Doctors Quality					
1.I choose this hospital because of its doctor quality					
2.The doctors quality is quite high in this hospital					
3.The doctor quality can meet my medical requirements					
Hospital Ambiences Environment					
1. physical setting of hospital is quite good					
2. hospital's culture can supports patients					
3. Hospital ambiences environment can really help to heal the sickness					

Part III Demographic Information

1. Gender?

____ Male ____ Female

2. Age?

____ Less than 23 ____ 23-40 ____ More than 40

3. Education level?

____ Bachelor Degree ____ Master Degree ____ Doctor Degree

4. Work situation:

____ Unemployed ____ Part time ____ Full time ____ Students

5. Marital statues

____Married ____ Single ____Divorced

6. How often you usually go medical tourism?

____1 time per 1 year ____2-3 times per 1 year ____ more than 3 times per 1 year

Part IV Lifestyle Information

1. What's your hobby?

____Travel ____Party ____ Reading ____Shopping

2. Where you normally go?

____Mountain ____Beach ____ Plaza ____Club

3. What kind of food you like?

____Chinese ____Western food ____ Local food ____Japanese food

4. Normally how you take care of your body?

____Fitness ____Clean food ____ Regular checkup ____All of above

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