

RELATIONSHIP OF SERVICE QUALITY AND HOSPITAL ACCREDITATION
ON PATIENT'S SATISFACTION AND LOYALTY

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ABSTRACT

Patient loyalty and its attributes are significant concerns for healthcare industries. A lot research has been done on this issue in numerous contexts but such research in the Malaysian healthcare industry is still scarce. This study investigated the relationship between service quality, hospital accreditation on customer satisfaction and customer loyalty in the Malaysian healthcare industry. The research examined five factors of service quality: responsiveness, assurance, tangibility, empathy, reliability. This study utilized nonprobability convenient sampling to gather the data from 20 private hospitals that promote medical tourism in Klang Valley, Malaysia. A total of 378 medical tourists participated in the survey. Statistical tests carried out include descriptive statistics, internal consistency, reliability and validity. Correlation analysis was also conducted to determine the relationships of the variables. In addition, the analysis also included the PLS Structural Equation Modeling (SEM). The main finding shows that service quality and customer satisfaction have a direct effect on customer loyalty. Also, the findings show there is a positive relationship between service quality and customer satisfaction, service quality and customer loyalty, hospital accreditation on customer satisfaction, and customer satisfaction on customer loyalty. However, hospital accreditation has no positive effect on patient loyalty. The findings of this study are useful to managers, board of directors and stakeholders of private hospitals to understand influential factors on patients' satisfaction and loyalty.

ABSTRAK

Kesetiaan pesakit dan atributnya merupakan kebimbangan yang ketara dalam industri penjagaan kesihatan. Banyak kajian telah dilakukan mengenai isu ini dalam pelbagai konteks namun kajian dalam industri penjagaan kesihatan di Malaysia masih terhad. Kajian ini mengkaji hubungan antara kualiti perkhidmatan, akreditasi hospital terhadap kepuasan pelanggan dan kesetiaan pelanggan dalam industri penjagaan kesihatan Malaysia. Kajian ini mengkaji lima faktor kualiti perkhidmatan: kebolehbalaan, jaminan, ketaraan, empati dan kebolehpercayaan. Kajian ini menggunakan persampelan mudah tidak berkemungkinan untuk mengumpul data dari 20 hospital swasta yang mempromosikan pelancongan perubatan di Lembah Klang, Malaysia. Sebanyak 378 pelancong perubatan mengambil bahagian dalam tinjauan ini. Ujian statistik dijalankan termasuk statistik deskriptif, konsistensi dalaman, kebolehpercayaan dan kesahan. Analisis korelasi juga dijalankan untuk menentukan hubungan antara pembolehubah kajian. Di samping itu, analisis juga termasuk Model Persamaan Struktur PLS (SEM). Dapatan utama menunjukkan bahawa kualiti perkhidmatan dan kepuasan pelanggan mempunyai kesan langsung kepada kesetiaan pelanggan. Selain itu, dapatan juga menunjukkan bahawa terdapat hubungan positif antara kualiti perkhidmatan dan kepuasan pelanggan, kualiti perkhidmatan dan kesetiaan pelanggan, akreditasi hospital terhadap kepuasan pelanggan, dan kepuasan pelanggan terhadap kesetiaan pelanggan. Walau bagaimanapun, akreditasi hospital tidak memberi kesan positif terhadap kesetiaan pesakit. Dapatan kajian ini berguna kepada pengurus, lembaga pengarah dan pihak berkepentingan di hospital swasta untuk memahami faktor berpengaruh terhadap kepuasan dan kesetiaan pesakit.

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LIST OF ABBREVIATIONS

ACHSI	- Australian Council on Healthcare Standards International
APHM	- Associate Of Private Hospitals In Malaysia
CCHSA	- Canadian Council on Health Services Accreditation
ETP	- Economic Transformation Programme
GDP	- Gross Domestic Product
GNI	- Gross National Income
IMTJ	- International Medical Travel Journal
ISO	- International Organization For Standardization
ISQUA	- International Society for Quality In Healthcare
JCI	- Joint Commission International
MATRADE	- Malaysia External Trade Development Corporation
MHTC	- Malaysia Health Travel Council
MOH	- Ministry of Health
MSQH	- Malaysia Society for Quality in Health
NCPMHT	- National Committee for Promotion of Medical and Health Tourism
NKEA	- National Key Economic Area
PEMANDU	- Performance Management & Delivery Unit
WTO	- World Trade Organization

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Increasing demand for health services is a global phenomenon that linked to economic development, which generates increasing revenue. Demographic change, especially population ageing and senior's requirements for more medical services, along with epidemiological change (i.e. increasing incidence of chronic conditions, as well as demand for more and better health services) waiting time and increasing cost of health services at home coupled with the availability of cheaper alternatives in developing countries has led new healthcare consumers or medical tourists to seek treatment overseas. Success in competitive and demand driven markets specifically healthcare industry depends on the ability to address patients' preferences. A loyal customer is the main goal of each business, which leads to a huge turnout in profit. Customer loyalty has achieved a great importance in the field of sales and marketing (Morgan and Hunt, 1994; Moncrief and Marshall, 2005). The overall efficiencies of the selling firms can be increased up to a great extent by knowing more about customer loyalty and its effects (Jacobs *et al.*, 2001; Reinartz *et al.*, 2005). Customer loyalty has achieved an important role among academics and practitioner, for example, Zeithamle *et al.* (1996) believe that customer loyalty leads to word of mouth and profit for the organization. Thus, to develop a loyalty strategy; organizations have to understand the antecedents of customer loyalty. Moreover, the issue of customer loyalty needs to be addressed in Business-to-Customer context. However, competition in the healthcare industry is fierce, hospitals are under continuous pressure to adapt to the changing environment in order to survive and

thrive in a market. Thus, customer loyalty is critical factors for hospitals in such industry.

The potential of medical tourism for creating alternate avenues of economic growth is increasingly being recognized by governments around the World. Healthcare globalization has given rise to an emerging medical tourism market, which is estimated to be worth US\$38-55 billion (Patients Beyond Borders, 2014). Medical tourism is a health service taken by customers through planned overseas travel to improve or treat various physical and psychological functions (Fottler *et al.*, 2014; Yun Feng, 2015). Medical tourism is a part of medical care globalization, the particular attention of which is for economic and financial gain. People may travel from their own countries to other places for medical services, which may not be available in their countries; usually, it is the travel from less developed to more developed ones where needed medical care is available. However, patients from more developed countries may travel to less developed countries for good quality health service for a cost-saving reason (Samlee, 2018).

The health sector in Southeast Asia is growing rapidly, attributable to the rapid growth of medical tourism, which is emerging as a profitable business opportunity. Countries in Southeast Asia are capitalizing on their popularity as tourist destinations by combining high-quality medical services at competitive prices with tourist packages. In terms of global market shares, Asian countries have become among the most preferred destinations for medical tourism and are receiving about 1.3 million foreign patients annually with a high growth rate of 20-30% per annum (Wan, 2016). Many nations around the world see the international medical tourism is an emerging phenomenon and a promising and fast-growing industry (Han & Hwang, 2013).

Asia has a head-start in this area with various countries having competitively positioned themselves as providers of affordable and high-quality medical care. Thailand, Singapore, and India are recognized as the three leading destinations on the subcontinent and are projected to control more than 80% of the Asian market in the future (Mary, 2014).

The major countries challenging for medical tourists in South Asia are Thailand, Singapore, and Malaysia (Rad, 2014). The Malaysian medical tourism industry has been experiencing consistent growth (15%) during 2008-2009 (Amin, 2015).

Data from the Malaysia Healthcare Travel Council (MHTC) in Table 1.1 shows that in 2016, Malaysia has subsequently received 578,403 foreign patients from over 20 countries in the world. Indonesia is the biggest contributor with the highest percentage with 335,150 patients (69%), Table 1.1 receiving medical treatments for the total medical tourists.

Table 1.1: Medical tourists from top 20 countries of Origin, 2016

No.	Country of Origin	Total Patients	Percentage (%)
1.	Indonesia	335,150	69
2.	India	18,604	4
3.	Japan	16,111	3
4.	United Kingdom	12,704	3
5.	China	11,029	2
6.	United States	10,584	2
7.	Australia	9,678	2
8.	Iran	8,836	2
9.	Libyan Arab Jamahiriya	7,225	1
10.	Nepal	6,727	1
11.	Saudi Arabia	6,580	1
12.	Myanmar	5,885	1
13.	Singapore	5,879	1
14.	Philippines	5,602	1
15.	Virgin Islands, British	5,479	1
16.	Others	5,367	1
17.	Bangladesh	5,071	1
18.	Germany	3,991	1
19.	Korea, Republic Of	3,521	1
20.	France	3,394	1

Source: Malaysia Healthcare Travel Council (2016)

Originally, the development of medical tourism in Malaysia evolved due to a paradigm shift in the awareness and provision of health care services towards

patients and their companions. This has also been highlighted by the Malaysian Deputy Health Minister, Datuk Rosnah Abdul Rashid Shirlin in the Asia Healthcare Operations Summit 2011 in which the government wishes to spur the growth of the healthcare transformation as well as the industry under the *Tenth Malaysia Plan* (TMP). The accessibility, coverage and quality of healthcare are the main focus of the transformation with continuous improvement in delivery healthcare services to all the patients and other stakeholders. Hence, the needs of both entities of the medical tourists and their companions should become the highest priority for any healthcare providers in order to retain their customers.

In January 2010, the Prime Minister launched the Malaysia Healthcare Travel Council (MHTC) with the responsibility to formulate strategic plans in promoting healthcare travel (Yacopetti *et al.*, 2010).

Is this growth sustainable? Should Malaysia focus on costs alone or focus on customer satisfaction and loyalty? Attracting or finding new customers is essential, however, as it is more desirable and much less expensive to retain current customers. Research has shown that in the short run, loyal customers are more profitable because they spend more and are less price sensitive (Kroto, Heath, O'Brien, Curl, & Smalley, 1985). Customer loyalty (CL) encompasses re-purchase intention, willingness to suggest to others a product or service and reluctance to change to another competitor (Leong *et al.*, 2014). Customer loyalty is considered the most important goals for the relationship between suppliers and customers (Abdullah, *et al.*, 2014). Hayes (2013) argues that customer is the only source of a profitable growth, and customer loyalty may contribute to it. As such, a good service provider believes that any process of growth runs through customers that are, by not only attracting new customers but also holding on to existing customers, motivating them to spend more and getting them to recommend products and services to other people (Carol, *et al.*, 2015). Therefore, in the medical tourism markets, identifying vital factors in medical travelers repurchase decision making processes and understanding specific role is becoming more important for any destination country.

1.2 Background of the Study

Patient loyalty is an important tool in order to share service quality in a hospital. There is an increased interest around the world in the evaluation of healthcare from the government, healthcare providers, and consumers. According to Carmichael (1996) and Yellen *et al.* (2015), medical services satisfaction should be made as one of the key performance indicators in the medical tourism industry. In the fiercely competitive environment such as the healthcare industry, the improvement in quality, as well as patient satisfaction, are the vital elements to consider. A satisfied customer is a fundamental element in enhancing loyalty and healthy long-term relationships (Chahal and Mehta, 2013). A satisfied customer is more likely to continue to use the service, spread positive views which assist healthcare providers to get new customers without additional cost such as advertising (Zeithaml and Bitner, 2014). Patient satisfaction is concerned with the degree to which the expectations of a patient are fulfilled by the medical services. Moreover, patient satisfaction is a critical indicator for the medical service industry (Wu, 2015). Medical service providers need to understand the patients' expectations and try to meet those (Lee *et al.*, 2014).

In the healthcare setting, perceived quality of care has been shown to influence intention to repurchase, word-of-mouth behavior (recommending, complimenting, complaining), and switching behavior and loyalty (Headley & Miller, 2013).

Searching for medical care is not a new incident in developed countries. Therefore, the use of medical care in another country is part of a standard design of intake of foreign goods and services. Many countries around the world have been promoting medical care because the service generates benefits and profits for them.

The global growth of medical treatment together with the advancement of medical technology, expertise and medical travel facilitators has given a wider selection of choice on the place and type of healthcare that suits the medical tourists

and their families. In fact, medical tourists spend longer time and money than the traditional tourists when they seek medical treatment in other country (Wan, 2016).

Medical Tourism has grown to such great heights globally, that almost every year countries with the most advanced medical facilities and access to medication make it a mandatory drill every year to promote tourism in their land. The possibilities of medical tourism include extending a cordial existence between countries and generating huge revenue raked in from all the tourism activities every year.

When it comes to being a medical tourist, many factors require serious thinking and decision makings need to be really prompt and perfect. There are always many facts to consider when setting off for a medical retreat, especially in a new country. Following are the most common problems that highlighted by medical tourists (www.medicaltourism.com;Behrmann, 2010).

1.2.1 Safety

As they say “Safety First,” it is an important point to consider when planning for a medical tourism holiday. Safety here refers to the how secure medical tourists are going to be in a foreign country and the how efficiently they need to abide by the laws to evade any sort of national integrity issues. There may be even problems related to acts of terrorism and violence in some countries that can be avoided with proper planning.

1.2.2 The reputation of Medical Institutions

It is always good and maybe even mandatory to research on the reputation of the medical centres that medical tourist about to visit.

1.2.3 Level of Advancements

Another concern is to note the level of technical proficiency that a medical institution or clinic possesses. This means the level of hygiene maintained, update in technical and medical equipment and factors related to the medical staff available. The more, the better.

1.2.4 Follow-up Care

The level of treatment and care, which medical tourist receives in a new country, may be good enough; but sometimes problems can happen when patients are looking for a follow-up consultation, which may not be available in their country, hence making it necessary to revisit the country in which patients had undergone the treatment. This can incur unnecessary expenses and can be a waste of time.

Medical tourism has gained huge popularity due to various reasons such as; the increased demand for better healthcare, increasing healthcare costs in the developed countries and though visa regulations in such countries. Hence, the emerging market creates an opportunity for countries around the world to promote healthcare (Han, 2015).

Among the medical tourism providers, Asian countries such as Singapore, Thailand, India, Philippines, and Malaysia are considered the most likely places for producing medical tourism. Nonetheless, due to a hugely competitive market and the hospitality industry in all these countries, they are under severe pressure. As part of the hospitality industry, the medical tourism sector is also required to invest and focus on their customers for future sustainability. Medical tourism is becoming a multibillion-dollar industry. For example, medical tourism in India is growing at a rate of 30% per year. Singapore, as another example of a key player in Asia, aims to receive one million foreign patients every year; which brings over US\$1.6 billion annually. Similarly, Malaysia estimated to earn up to US\$590 million from 2009-2013 which has the lowest earning from its neighboring countries (Musa, 2012). The

Malaysian government has identified healthcare industry, in particular extensive treatment as one of the promising businesses to generate national economic growth due to its fast gaining recognition as a popular destination for healthcare travelers. In addition, Dato Seri Liow Tiong Lai, the Minister of Health Malaysia stated in the Malaysian Tourism Report for the First Quarter of 2010 that Malaysian medical tourism generated about US\$85 million (RM280.5 million) revenue in 2008 and treated 375,000 medical tourists. In line with the greater focus on healthcare development, under the *Tenth Malaysia Plan* (2011-2015), a total of RM20 billion has been allocated to boost private sector investment in strategic priority areas including infrastructure, education and healthcare (Heu, 2014).

Specifically, healthcare has been declared as one of the 12 National Key Economic Areas (NKEAs) priority sector investment as it has the potential to drive the economic growth of Malaysia (Lai, 2011). Due to this, Malaysia aims to become the regional hub for medical tourism in Southeast Asia. In Asia, Thailand, Malaysia, Singapore and India are the major hubs of the trade. (Smith, Chanda, & Tangcharoensathien, 2009).

To promote health tourism, there is a need to develop medical centres at national and regional levels. The network of those medical centres in a region may be called medical hubs, such as ASEAN medical hub, or even world medical hub. Usually, the strongest medical centres may be assigned the task of coordinating the work of other medical centres in the region (centre of regional medical hub). In reality, it is not difficult to identify medical centres, in a country or region, but organization and function of the regional medical hub or network may be difficult to define or delineate (Plianbangchang, 2018).

In India, the government promoting medical tourism which fueled by the corporate sector. According to industry estimates, the market tourism valued US\$2 billion in 2012. Patients from 55 countries, mostly from the UK and the US, visit India every year. For example, the Taj Medical Group, one of the biggest hospitals in India, receives 200 inquiries every day from around the world. The government predicts that India's healthcare industry could grow by 13% in the next six years. The

main selling points of the Indian medical tourism industry are a high quality of facilities, English-speaking medical professionals, cost-effective treatment, international certified hospitals and the attraction of tourism (Grabherr *et al.*, 2011).

Thailand is also one of the key players in SE Asia. Thailand has been promoted as “the health tourism hub of Asia”, “Wellness Capital of Asia”. The key selling points in Thailand tourism industry are medical services, high-quality health care services, Thai herbal products, and international accredited hospitals. The market expected the Thai medical tourism to generate \$3 billion in 2015 (Noore *et al.*, 2014). Moreover, Thailand has been hosted by a large number of patients from GCC countries (Gulf Cooperation Council) like Oman, Saudi Arabia, and the United Arab Emirates. They traveled there because of the excellent reputation of the country's many Joint Commission International (JCI) accreditation and high quality of services of the Thai hospitals, the better and more affordable health care than they can find at home and the convenience (Han & Hyun, 2014).

Singapore is not unfamiliar with medical tourism. In 1997, Singapore has received 370,000 healthcare visitors. The country spends less than 4% of GDP on healthcare yet was ranked the best healthcare system in Asia by the WHO and has more Joint Commission International (JCI) accredited hospitals than any other country in Asia (Smith *et al.*, 2011).

The drastic devaluation of Thai baht in July 1997 affected hugely other Asian currencies including Malaysian Ringgit. This currency fluctuation affected exports and essential imports such as pharmaceuticals, medical supplies, and medical equipment. Moreover, this compound problem affected many of private hospitals. Thus, the 1997 financial crisis pushed many Malaysian private hospitals to target foreign patients to cover the decline. In January 1998 Ministry of Health (MOH) established a national committee for the promotion of medical and health tourism which brand Malaysia as a regional hub for healthcare services (Chee, 2007, Ormond, 2011).

This has recently been renamed as Malaysia Healthcare Travel Council which performs in the packaging and standardization of the prices for health care services and international marketing. For many years MOH has been assisting medical tourism in different ways such as allocation for accreditation (MSQH) activities of private hospitals, conducting workshop on branding and quality of services for 35 private hospitals in country and executing promotional trips to neighboring countries (Wilkins, Nahal, Foong, Provar, & Campbell, 2009). Despite this pattern of growth, experts believe Malaysia still lagged neighboring countries; for example, private hospitals in Thailand contributing 30% to their total revenue while private hospitals in Singapore managed to achieve 50% revenue, but private hospitals in Malaysia represent only 3% of medical tourists; scholars believe the winning factors in Thailand, India, and Singapore are advanced service quality and international accreditation (Frost and Sullivan, 2010; Wong *et al.*, 2014), therefore, a thorough study on this issue is inevitable.

1.3 Problem Statement

Having a loyal customer or patient is paramount to every business such as the healthcare industry. Loyal customers increase the organizations' revenue (Berndt, Du Plessis, Klopper, Lubbe and Robert, 2009:228-229; Kotler and Keller, 2006:156 and Wah, 2005:543). Therefore, patient loyalty is a very important promotion tool to share service quality in a hospital. Customer loyalty is considered the most important goal of implementing relationship marketing theory (Abdullah, 2013). Oliver (1999) defines loyalty as the profound commitment of a customer to repurchase the same product or service and remain repetitive in this behavior. Hayes (2008) argues that customer is the only source of a profitable growth, and customer loyalty may contribute to it. There is an increased interest around the world in an evaluation of healthcare, coming not only from governments but also from healthcare providers and consumers. The presence of a strong relationship between employee satisfaction and patient perception of provided service quality is measured by the intention of returning and recommendation to others about the hospital. Employee dissatisfaction can negatively affect service quality, produce a reverse effect on patient loyalty, and

later affect hospital profit (Ayu *et al.*, 2013). Facing a fiercely competitive environment in the healthcare industry, many service providers have come out with intensive marketing strategies to compete in order to gain customer loyalty. Zhang & Feng (2013) stated that although much extensive research has been carried out in relationship marketing theory, there is still little to be known about its effect of service quality and customer satisfaction on customer loyalty. This research explores three types of relationship marketing theory such as service quality, customer satisfaction and customer loyalty on how they influence the behavioral intention on a long-term relationship.

Customer satisfaction leads to developing and maintaining loyal customers who may become advocates for a firm and promote the organization further by making positive referrals through credible word-of-mouth communication (Zeithaml, Bitner, & Gremler, 2009). Patient satisfaction has been defined as an instantaneous post-purchase phenomenon evaluating the service after experiencing it, which forms more quickly and is more vulnerable to change corresponding to variance in medical care experiences (Kingstrom, 1983; McGlone, Butler, & McGlone, 2002; Taylor & Cronin, 1994).

Patient satisfaction is concerned with the degree to which the expectations of a patient are fulfilled by the medical services. Moreover, patient satisfaction is a critical indicator for the medical service industry (Wu, 2015). Studies on general patients' satisfaction in public and private hospitals are widely documented (e.g. Baalbaki, Ahmed, Pashtenko, & Makarem, 2008; Duggirala, Rajendran, & Anantharaman, 2008, Kessler & Mylod, 2011; Manaf & Phang, 2009; Padma, Rajendran, & Lokachari, 2010; Ramsaran-Fowdar, 2008). However, studies particularly focusing on the effect of satisfaction on medical tourists remain limited, especially in Malaysia (Musa, 2012). Identification of the determinants of satisfaction is a critical element for managers in the healthcare industry (Ridah ladhari and Benny Rigau, 2013). Study of patient satisfaction needs to be tied to quality improvement efforts within Malaysian healthcare delivery and patient satisfaction is also ranked among the most important performance measures for healthcare service delivery (Noor Hazilah Abd Manaf, 2010).

It is imperative for Malaysia to provide and maintain satisfactory medical services to inbound tourists if the industry is to be sustained (Thirumorthy, 2012). For hospitals, satisfied patients are important because they are more likely to keep using medical services, follow the prescribed treatment plan, and maintain the relationship with a specific healthcare provider, and recommend the hospital to others (chan, 2011).

The majority of the studies such as Puri *et al.* (2012); Donabedian (1996); Camilleri and Callaghan (1998); Sardana (2003); Chahal and Sharma (2004); Kang and Jeffrey (2004); Raftopoulous (2005); have remarked the need to explore the influence of patient satisfaction in healthcare sector (Chahal and Mehta, 2013).

Measuring service quality in healthcare is quite difficult due to rare and infrequent purchases and stealthy behavior regarding intentions to revisit in the future (Ranjan and Sree, 2015). Healthcare quality is more difficult to define than other services because it is the customer himself and the quality of his life being evaluated (Alrubaiee, 2011). Since quality is a crucial factor in health care, initiatives to address the quality of healthcare have become a worldwide phenomenon (Mohamed, 2012). For over two decades, researchers have been studying service quality and its relationship to critical business outcomes. To this end, a number of studies have addressed the relationship between service quality and customer satisfaction and it is generally believed that higher levels of service quality lead to higher levels of customer satisfaction (Laith, 2011).

Today, private healthcare plays a significant role in Malaysia healthcare sector growth. This is also evident in recent growth projections that Malaysia's private health cares will be responsible for half its needs by 2020 (Ramesh and Wu, 2010).

Researchers argue that private healthcare sector growth is the direct consequences of customer's negative perception about the quality offered by public healthcare institutions (Lafond, 1995). Therefore, it is important for private healthcare providers to understand foreign patients perceive healthcare quality. As

Malaysia is positioning itself as the hub of medical tourism in Southeast Asia, more efforts are required to develop and promote the industry and issues impacting industry growth such as service quality and patients' satisfaction will be addressed in a concerted manner (Pocock & Phua, 2011). Therefore the current study examined the effect of healthcare service quality on foreign patients' satisfaction. Although the healthcare industry is growing rapidly and has captured international attention because of its seemingly high-profit potential, little academic research has been carried out on service quality in the context of the healthcare industry in Malaysia (Guiry and Vequist, 2011).

Patients' perceptions of health care quality are critical to a healthcare organization's success because of its influence on satisfaction and hospital profitability (Ranjan ; Bhaswati ; Sankar; Sree , 2015). Following recommendations in the literature (e.g. Ramsaran-Fowdar, 2008; Venagre, and Neves, 2008; Lim and Tang 2000; Andaleeb, 2001; Lam, 1997; Headley, and Miller, 1993; Babakus and Mangold, 1992; Carman, 1990; Kilbourne *et al.*, 2004; Vandamme and Leunis, 1992; Lim. *et al.*, 1999) to measure healthcare quality perceptions used and an adapted SERVQUAL scale (Parasuraman *et al.*, 1988) for the particular health care sector contexts. This study proposed several important factors in examining foreign patient loyalty, and adopted the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1985) dimensions: tangibility; reliability; responsiveness; empathy and assurance from Parasuraman *et al.* (1994) on foreign patient satisfaction in the private hospitals that are accommodated and providing the healthcare serviced to the foreign patients.

The relationship between healthcare quality and satisfaction is not clear in studies of the healthcare service industry (Andaleeb, 2000; Chaniotakis & Lymperopoulos, 2009; Naidu, 2007; Ruytera, Bloemerb, & Peetersa, 1997). Therefore, this research tries to determine the effect of healthcare service quality on foreign patients' satisfaction and loyalty in the Malaysian healthcare industry.

The International Medical Travel Journal (IMTJ) in 2015 announced Thailand had the highest number of medical tourists (2,800, 000) followed by India

(1,500,000); Singapore (1,000,000) and Malaysia (850,000) which relatively has the lowest number of medical tourists compared to its neighboring countries. Although the growth of medical tourism has made a great contribution to Malaysia's economy, however very little attention has been paid to the interrelationship between healthcare issues and tourism (Rad et. al, 2010; Musa *et al.*, 2012).

As mentioned in the background of the study, the two common selling points which generated higher customer satisfaction and loyalty in successful neighboring countries like India, Singapore, and Thailand are international hospital accreditation and service quality. Even though Malaysia has the highest number of hospitals (35) catering for medical tourists, it has the lowest number of JCI accredited, Whilst Malaysia has only 7 certified hospitals with the Joint Commission International (JCI), Singapore, Thailand, and India have 22, 53 and 27 respectively (Debata *et al.*, 2015).

So far, many of the major studies reviewed in the area of service quality and customer satisfaction in the hospital both local and private hospitals and there are relatively fewer researches in the relationship of hospital service quality and international hospital accreditation on foreign patient satisfaction and loyalty which is the main concern for this research in the Malaysia's healthcare industry and moreover this study contributes to knowledge on the formation of dimensions and items that relevant to measuring patient loyalty and the results provide insights into managerial and marketing implications and despite the criticality of product/service quality, satisfaction, and international accredited hospitals, lack of study of medical tourism research has yet examined their associations with behavioral intentions in healthcare industry context. Furthermore, most of the research in South East Asia focused more on Thailand, Singapore, and India (Leng, 2010). Thus, given the importance of healthcare industry in Malaysia and the critical role of loyalty, this research attempts to investigate the antecedents of tourists' loyalty towards healthcare industry in Malaysia.

1.4 Research Objective

Since Malaysia is positioning itself as the hub of medical tourism in Southeast Asia, this study will try to evaluate the industry and issues on industry growth such as service quality, hospital accreditation, patient satisfaction and patient loyalty. The results of this study can help hospital managers to develop more effective marketing strategies that enhance patient satisfaction and patient loyalty that leads to increase in medical tourists and better positioning among competitors.

Therefore, the following are the objectives of this study:

1. To determine the relationship of service quality on foreign patient satisfaction and loyalty.
2. To examine the relationship of international hospital accreditation on foreign patient satisfaction and loyalty.
3. To identify the relationship of foreign patient satisfaction on foreign patient loyalty.
4. To determine the mediating effect of patients' satisfaction in the relationship between service quality, international hospital accreditation, and patients' loyalty.

1.5 Research Questions

This study then seeks to address the following research questions:

1. What is the relationship of service quality on foreign patients' satisfaction and loyalty?
2. What is the relationship of international hospital accreditation on foreign patients' satisfaction and loyalty?
3. What is the relationship of foreign patient satisfaction on foreign patient loyalty?

4. What is the relationship between the mediating effect of patient satisfaction on service quality, international hospital accreditation, and patient loyalty?

1.6 The scope of the Study

The objective of this study is to share the insights obtained from the data collection process in conducting empirical research in the medical tourism industry and to assess what causes international patients to stay loyal to the Malaysian hospitals. According to the Ministry of Health (MOH) there are 268 private hospitals in Malaysia in the year 2018 (APHM); out of which only 35 private hospitals are promoting and hosting medical tourists. This study focuses on 20 private hospitals which are located in the Klang Valley area, that host medical tourists and is accredited internationally and locally.

The hospital facilities and services offered with regards to their service quality and the accreditation of the selected hospitals is the main concern of this study. The international inbound medical tourists who visited these 20 hospitals for their medical treatment are the population of this study. The proper sampling process will represent this population and it will be discussed in depth systematically in the third chapter. This is a cross-sectional study whereby data will be taken from one point in time.

1.7 The significance of the Study

Obviously, one of the key points of research is the significance of the study where the importance of the study is explained by the researcher. This study is significant since it is one of the kinds of relationship between business providers to customer (patients) relationship focusing on Malaysia' private hospitals. Moreover, this study investigates the effect of foreign patient's loyalty in Malaysia's healthcare industry. To understand a foreign patient's loyalty, this research provides managers

of the hospitals with the ability to map out a typology of patient loyalty. The classification can be valuable to Malaysia's government to improve the policy and consider the important decisions as it tries to promote Malaysia's medical tourism in the region, as medical tourism is believed to be contributing to the national economy which has the direct effect on GDP of Malaysia (Bernama, 2012). Furthermore, this study can assist the managers, board of directors and stakeholders of the hospitals to distinguish influential factors on patients' satisfaction and loyalty. This research could assist as a base to rectify the confusion of those hospitals that are not aware of or neglect the importance of their buyer retention and loyalty.

1.8 Operational Definition

This research will use the conceptual and operational terms that are linked to the research objectives. The definitions are as follows:

1.8.1 Customer Loyalty

Customer loyalty is defined as the committed behavior which is manifested by a propensity to participate in a particular reformation service (Yoon and Uysal, 2005). Accordingly, this study will measure the level of tourists' intention to revisit the hospital and also their recommendation to others in Malaysian medical tourism industry.

1.8.2 Service Quality

Service quality is defined as any intangible act or performance that one party offers to another with mutual consideration for pleasure (Kotler and Keller, 2009). Therefore, this research will measure the level of service quality expectations in Malaysian hospitals which practicing medical tourism.

1.8.3 Hospital Accreditation

Hospital accreditation is defined as a recognized assessment process used in various countries to evaluate the quality of health care service which can be in the form of domestic or international (Braithwaites *et al.*, 2006).

1.8.4 Customer Satisfaction

Customer satisfaction is defined as comparing the customer expectations of products or services with the perceived performance (Kotler and Keller, 2009; Thom *et al.*, 2004).

1.9 Summary

The rest of this thesis is categorized as follows; chapter 2 indicates a complete overview of the related literature, and the demonstrable hypotheses and theoretical or causal models are then developed. Chapter 3 will explain the research methodology, measurement development, questionnaire design, research setting, and data collection. Chapter 4 will present the data analysis and hypothesis testing outcomes. Finally, in chapter 5, the author will exemplify the research implications and indicate a suggestion for future research.

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