Chapter 11

Medical Tourism in Asia: Thailand, Singapore, Malaysia, and India

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INTRODUCTION

Medical tourism appears to be a rapidly growing tourism product and market. Evans (2008) reported that the estimated worth of the worldwide medical tourism market was about US\$ 60 billion in 2006 and projected it to climb to US\$100 billion by 2012. In an Asian context, and of direct relevance to this chapter, Singh (2008) estimated that US\$4.4 billion revenue will be generated by medical tourism in Thailand, Singapore, Malaysia, and India in 2012. The expansion of medical tourism is regarded as being largely attributable to the broad globalization of healthcare services (Heung et al. 2011), whereby regulatory boundaries between nations have diminished, therefore enabling patients to move across borders for medical treatment with greater ease.

Even though there is no agreed-upon definition of medical tourism the phenomenon is broadly accepted as occurring when people leave their home country to another country for the purpose of paid medical care (Altes 2005; Whittaker 2008) including the stay at the destination for at least a period of post-discharge time (Whittaker 2008). Cohen (2008) stated that medical tourism occurs when both tourism and medical treatment take place at the same time. During recovery stage, patients may be spending their time recuperating at tourist resorts. The notion of medical tourism can also be observed through a traditional lens where wealthy patients from the less developed countries travel to the advanced medical centers in developed countries (Chanda 2002; Wachter 2006; Alleman et al. 2010). However, increasingly medical tourism is highlighted in reverse flows of the above, whereby travelers move from the higher income developed countries to the low-cost developing countries for the purpose of medical treatment (Chanda 2002; Alleman et al. 2010; Vijaya, 2010; Hall 2011; Ormond 2011), coupled with potential visitation to tourist sites (Hall 2011). However, the latter purpose highlighted by Hall (2011) may not be seen as an important element in defining medical tourism by Connell (2006) and Turner (2007a).

The domain of medical tourism also covers preventive medical services such as medical check-ups and health screening (Heung et al. 2011). Carrera and Bridges (2006) and Lunt and Carrera (2010) pointed out that medical tourism is a subset of the larger health tourism domain, whereby it has been transformed from a niche market into a highly competitive field within the tourism industry (Connell 2006; Heung et al. 2011).

Alleman et al. (2010) and Singh (2008) highlighted several countries around the world that have been identified as key medical tourism destinations, including Brunei, Cuba, Colombia, Costa Rica, Hong Kong, Hungary, India, Israel, Jordan, Lithuania, Malaysia, Mexico, Philippines, Singapore, Thailand, and United Arab Emirates. Among these countries, Asia remains the key medical tourism region

(Connell 2006), particularly in Thailand, India, Singapore (Connell 2006; Ernst 2006; Healy 2009; Alleman et al. 2010; Crooks et al. 2010; Lunt and Carrera 2010; Heung et al. 2011) and Malaysia (Lunt and Carrera 2010; Heung et al. 2011; Ormond 2011).

The real economic contribution of medical tourism to host countries is hard to estimate. Figures and forecasts are often contradictory, partly because of inaccurate data collection pertaining to the economic dimensions of medical tourism. Inconsistent value forecasts abound as evidenced in different research reports. India itself is estimated to contribute US\$2.2 billion by 2012 (CII and Mckinsey & Company, 2002; Bookman & Bookman 2007; Singh, 2008; Yanos, 2008) while Heung et al. (2011) reported a staggering US\$4 billion medical tourism market in Thailand by 2012. The value from these two reports at US\$6.2 billion by 2012 is well over what has been highlighted earlier by Singh (2008) as US\$4.4 billion for all four countries discussed in this chapter. Therefore, the many estimated claims of economic benefits of these four countries have to be treated with caution.

In capturing the medical tourism market, Connell (2006) recommended the importance of branding strategy (see also Boga and Weiermair, Chapter 9). One of the important branding exercises is perhaps hospital accreditation. As stressed by Alleman et al. (2010), medical services accreditation often is the determining factor used by the medical tourism related agencies to recommend to potential medical tourists to purchase medical services overseas. For medical tourism the most sought after hospital accreditation is the Joint Commission International (JCI) (A not-for-profit American organization that provides standards and qualifications for medical facilities. Further information can be obtained from

http://www.jointcommissioninternational.org/). Even though Malaysia has the highest number of hospitals (35) catering for medical tourism, it has the lowest number of JCI accredited hospitals (eight). On the other hand, Singapore which has the lowest number of hospitals catering for medical tourism (20), has the highest number of JCI accredited hospitals (18). This signifies the overall high quality and standards of medical services in almost all the hospitals in Singapore. India came second with a total of 17 JCI accredited hospitals (out of 26), while Thailand has 14 JCI accredited hospitals (out of 34).

As well as significant variability in the type of medical tourism services offered by different countries and destinations there is also a corresponding range in the type of treatments that are being sought. Medical treatments being sought after by tourists include orthopedic (Alleman et al. 2010; Vijaya 2010; Crooks et al. 2011), cardiac (Chanda 2002; Alleman et al. 2010; Crooks et al. 2010; Vijaya 2010), neurology, skin diseases, endocrinology, nephrology, and urology (Chanda 2002), infertility (Alleman et al. 2010), liver transplant (Vijaya 2010), cosmetic/plastic surgery and dental procedures (Alleman et al. 2010; Crooks et al. 2011), and certain specific treatments such as stem cell and cancer treatment (Alleman et al. 2010). The following section examines the motivations of medical travel to Thailand, Singapore, Malaysia and India in more detail.

MOTIVATIONS OF MEDICAL TRAVEL TO THAILAND, SINGAPORE, MALAYSIA AND INDIA

The most commonly cited travel motivation, and perhaps the most important, is that the cost of treatment is cheaper in India, Malaysia, Singapore, and Thailand (Glinos et al. 2006; Milstein and Smith 2006; Healy 2009; Alleman et al. 2010; Crooks et al. 2011; Heung et al. 2011) as compared to the tourist generating countries (Alleman et al., 2010; Connell, 2006; MacReady, 2007; Ormond, 2011) (The key medical travel motivators are summarized in Table 11.1). Connell (2006) added that exchange rate also plays a role in determining the relative attractiveness of medical cost. For example, the Ministry of Health Malaysia (2010) has highlighted the favorable exchange of the Malaysian Ringgit as one of the reasons why medical tourists should choose Malaysia for the medical treatment.

[INSERT TABLE 11.1 ABOUT HERE]

Woodman (2007) made a direct comparison on the costs of seven major medical treatments between the United States and four prominent medical tourism destinations in Asia: Thailand, Singapore, Malaysia, and India. Medical treatment in Asia costs six to 33 per cent less compared to what it would have cost in the United States. For example, a heart bypass procedure costs US\$ 130,000 in the United States, only cost less than one tenth in Malaysia at US\$ 9,000. Similarly, a heart valve replacement in the United States would costs about 16 times higher than in India, Thailand, and Malaysia, at US\$ 160,000. Among the Asian countries, India and Malaysia appear to be the cheapest destinations for most of the major medical treatments, while Singapore is the most expensive. Nevertheless, medical treatment in Singapore is still much cheaper than it would be in the United States.

Even though the cost comparison does not include travelling cost, Connell (2006), Healy (2009), and Heung et al. (2011) all highlighted that the current relatively affordable cost of air travel has became one of the motivators for western medical tourists to travel to another part of the world to seek medical treatments. The introduction of the Malaysian AirAsia with low airfares has also increased the promotion of medical tourism among the four countries. For example, in its inaugural flight from Kuala Lumpur to Bangalore on May 21, 2010, 15 children who have congenital heart disease were flown together to undergo an open heart surgery at the Narayana Hrudayalaya Heart Institute in Bangalore (The Star 2010). In addition, the Indian Kingfisher Airlines introduced special medical emergency fares in an effort to benefit guests that travel together with their family members under medical emergency conditions (Kingfisher Airlines 2011). Both AirAsia and Kingfisher Airlines fly extensively within the Asian network as well as connections to the Middle East and Europe.

Countries where medical treatments are provided by the government (e.g. Canada, New Zealand, United Kingdom), often involve a long waiting list, causing its citizens to seek for speedier medical treatments in another country (Connell 2006; Healy 2009; Alleman et al. 2010; Ormond 2011; Woodman 2007). Thus, a shorter waiting list or immediate medical treatment (Eggertson 2006; MacReady 2007) is also one of the reasons medical tourists travel across the globe. For example, the waiting period for certain elective procedures (e.g. open heart procedure and joint replacement) in Canada and United Kingdom can be up to a year or more while in Thailand, India, and Malaysia, these could be carried out almost immediately (Discover Medical Tourism 2008a; Meditrips India 2011).

Medical tourists may also travel overseas to seek specific medical treatments, which are not approved by their governments or are still in testing stages, such as stemcell therapy, cancer treatment, and abortion procedures (Glinos et al. 2006; MacReady 2007; Woodman 2007; Alleman et al. 2010; Crooks et al. 2010; Hall 2011; Ormond 2011). Those who are not insured or underinsured or simply have no universal medical insurance available (e.g. the United States) may also need to seek medical treatments overseas in order for it to be affordable (Connell 2006; Healy 2009; Crooks et al. 2011; Ormond 2011). Even among those with medical insurance coverage, there are certain procedures that may not be covered by their insurance in the home country, such as dental, eye, cosmetic, and fertility procedures (Woodman 2007). The more relaxed immigration policy in some of the Asian countries provides easy access to tourists for medical treatments which results in the flourishing of medical tourism (Healy 2009).

Expatriates and migrants may be motivated to return home for medical treatment (Lee et al. 2010), for cultural and social familiarity in home country (Glinos et al. 2006; Hall and James 2011). The non-availability of certain medical procedures (e.g. organ transplant) in their home country, leave medical tourists with no choice but to travel abroad in search of medical solutions (Bramstedt and Xu 2007; Glinos et al. 2006). This is evident in the growing importance of organ transplants in India (IMTJ 2011d; Valueaddedblog 2011).

Medical tourists also appear willing to seek medical treatment overseas if they are convinced of the availability of equal if not better medical services in medical tourism destinations compared to their home country (Glinos et al. 2006; Woodman 2007; Ye et al. 2008). The aggressive promotion of well-qualified medical practitioners and expertise (Ye et al. 2008) in India, Thailand, Singapore, and Malaysia, coupled with the provision of state-of-the-art medical facilities and services (Ye et al. 2008) are some of the motivators which attract medical tourists to seek treatment in these countries.

The concept of medical tourism would potentially not be valid without the element of leisure tourism itself (although see Chapter 1 by Hall for a further discussion of this point). Connell (2006), Turner (2007c), and Woodman (2007) have pointed out that medical tourists' decisions on the final destinations could also be motivated by their perception of the destination in terms of tourism sites. Western patients may also be looking for some new and exotic destination overseas in order to enhance their tourism experience.

Healy (2009) and Heung et al. (2011) noted that information technology has made information on health tourism destination easily accessible through a click of a mouse. Kumar (2009) stated that internet is most important, followed by newspapers, the sources from which medical tourists obtain information on medical facilities and treatment offered by the Indian hospitals. Governments from all four countries that are the focus for this chapter have prepared medical tourism web sites (e.g.: Thailand - thailandmedtourism.com; India - incredibleindia.org; Singapore singaporemedicine.com; Malaysia - myhealthcare.gov.my) on medical tourism for prospective medical tourists. Information may be obtained as a result of aggressive advertising of the medical tourism destinations and its facilities (Ye et al. 2008), implemented by both the government and private medical centres. The nature of medical tourism in Thailand, Singapore, Malaysia, and India is provided in more detail below.

Medical Tourism in Thailand

Medical tourism in Thailand started in the 1970s, when the demand in Western countries for cosmetic and other alternative treatments, such as sex change operations (Connell 2006), which were normally not approved by their government or were beyond the boundary of their national or private health insurance coverage began to be provided (Cohen 2008). Despite being involved early, it was not until the late 1980s to early 1990s that Thailand started to develop its medical tourism through the establishment of several private hospitals catering for both local elite and foreign patients. These hospitals are fully equipped with state-of-the-art medical facilities and techniques, luxurious hotel-appearance facilities, and highly trained medical personnel as found in the Western countries (Cohen 2008). Even though cosmetic surgery is one of the key treatments in Thailand medical tourism, the choices have expanded to a wider scope of medical treatments, including dental care (Cohen 2008).

In Thailand, economic growth and financial markets liberalization in the 1990s have strengthened the expansion of private hospitals. However, a weak internal banking and political system led the country into a severe economic crisis in the late 1990s (Lew and Hall 1999). Low purchasing power during the crisis has forced many who used to patronize private hospitals for medical treatment, to revert to public hospitals (Connell 2006; Vijaya 2010). During the period, the private hospital occupancy rates dropped by 20-30 per cent (Vijaya 2010). This phenomenon led to a combined effort from both government and private sector to lure international patients to help ensure the survival of private hospitals. The collaboration between the government and private sectors was initiated in the form of revising the government's and hospitals' policies and government-sponsored

"health hub" promotional activities (Cohen 2008) to attract further foreign medical tourists.

In catering to the foreign patients' needs, private and some public hospitals provide interpreters and well-trained and certified medical personnel from overseas. Phuket Hospital, which provides treatments to 20,000 medical tourists a year, claimed to have interpreters in 15 languages (Connell 2006). The high-profile Bumrungrad International Hospital in Bangkok (Heung et al. 2011) is reported to have 70 interpreters and all of its staff are able to converse in English. The hospital has about 200 surgeons who have obtained certification from the United States (Connell 2006). As noted above, there are 14 hospitals in Thailand that have obtained the Joint Commission International (JCI) accreditation, which is an important factor for medical tourism related agencies to recommend overseas healthcare centers to their customers (Smith and Forgione 2007; Alleman et al. 2010;).

Teh and Chu (2005) reported that there are about 400,000 international patients seeking medical treatment in Thailand each year. The Japanese made up the majority while patients from the United States, United Kingdom, and Middle East also contribute sizable numbers (Heung et al. 2011). Taffel (2004) estimated that foreign medical tourists contributed about US\$1.6 billion to Thailand in 2003 while Heung et al. (2011) estimated that the figure could reach US\$4 billion by 2012. Nevertheless, the actual forecast may be difficult to judge as the number of genuine medical tourists is rather difficult to obtain. As remarked by Cohen (2008), only the annual gross total of foreigners (that may include genuine medical tourists, expatriates, and long-term residents) who sought treatments in hospitals in Thailand was released by the governmental agencies and hospitals.

The key medical tourism spots being highlighted by Heung et al. (2011) are Bangkok, Chiang Mai, Koh Samui, and Phuket. As the capital city, Bangkok tops the list, with ten out of 14 JCI accredited hospitals (JCI 2011) being located in the city. Other medical tourism destinations in the country are Chiang Mai, Koh Samui, and Phuket. Thailand has also sought to encourage foreign direct investment in the medical tourism sector (Chanda 2002). Medical colleges in Thailand have seats reserved for foreign students from other developing countries, in its effort to diversity medical tourism into medical education in the areas of medicine and paramedics as well as alternative medicines and treatments.

The Tourism Authority of Thailand (TAT) launched "Thailand Medical Tourism Blog Contest" in October 2010 which attracted 219 participants from 24 countries. Among its aims were to create awareness, widen opportunities for worldwide medical tourists to access to online information on medical tourism in Thailand, and enhance confidence among foreign medical tourists on Thailand's medical tourism's quality (IMTJ 2010d). In addition, TAT also actively promotes its medical tourism online through e-marketing campaign, such as the "Healthy Beauty Holiday in Thailand" campaign in December 2010, which offered exclusive rates for several medical treatments (e.g., dental treatments, cosmetic surgery, medical check-ups). Another campaign was "You are in Good Hands" which was also carried out in the same month to promote the safety and credibility of Thailand in providing medical services, and stimulate higher arrival and longer stay among medical tourists (IMTJ 2010d). A more recent promotional effort featured the government inviting some of the major global and regional news agencies, including Fox News (US), Xinhua (China), VNA (Vietnam), and Bernama (Malaysia), to Chiang Mai (March 2011), Phuket (April 2011), Chanthaburi (May 2011), and border provinces in the South (June 2011) for a few days tour to promote the available medical and wellness treatments (OkMedicalTourism 2011).

Medical Tourism in Singapore

Singapore is frequently cited as one of the top medical tourism destinations in Asia (Connell, 2006; Ernst, 2006; Healy, 2009; Alleman et al., 2010; Crooks et al., 2010; Lunt and Carrera 2010; Heung et al. 2011). Singapore Tourism Board (2010) itself claimed Singapore as the Asia's leading medical hub in 2009. As stated above, there are 18 hospitals and medical centers in Singapore that have obtained JCI accreditation (JCI 2011). The country is also the main direct competitor to both Malaysia and Thailand.

Singapore is targeting to attract one million patients by 2012 (Ai-Lien 2005; Connell 2006; Heung et al. 2011), with expected revenue between US\$ 1.6 to US\$ 1.8 billion (Ai-Lien 2005; Heung et al. 2011). It has been receiving medical tourists from different nationalities with major markets being Indonesia, Malaysis, China, the Middle East and Japan. The majority of its European and American patients are residents who live in Asia (Connell 2006).

Singapore prefers to compete on high quality medical services instead of price (Connell 2006). Heung et al. (2011) stated that the country's key competitive advantages are excellence in quality, trustworthiness, safety, and international accreditation. It is well known for offering high quality and complex medical treatments (Yap 2007; IMTJ 2010a), such as neurosurgical procedures and liver

and heart transplants. Promotion is given to the application of superior technology by medical doctors who created a number of the "firsts" in Asian medical history, such as, the separation of the Nepalese twins, the first South East Asian heart and liver transplant, the first percutaneous aortic valve replacement, and the world's first operation for a rare ectopic pregnancy with a single incision exclusively through the belly button (Connell 2006; Singapore Tourism Board 2010).

Although Singapore has put much effort in promoting itself as a world-class medical tourism destination, due to the competitive nature of medical tourism industry in the region, Singapore is also seeking to satisfy the demand for more affordable treatments (IMTJ 2010b). The only drawback of Singapore compared with other countries discussed in this chapter is that its medical services are the most expensive. As the quality of the hospitals in Malaysia, India and Thailand are improving and of similar standards to Singapore, medical tourists may eventually choose these countries over Singapore for their medical treatment. Connell (2006) reported that Singapore has considered setting its price rates on par or slightly below Thailand.

The unique aspect of medical tourism development in Singapore is that the industry is developed not only for the economic benefit but also to support the sustainability of expensive medical services in the country. Yap (2007) pointed out that the small population of Singapore will not be able to sustain the maintenance cost of high quality medical facilities solely by local demand. Therefore, it is essential for the country to attract international medical tourists so that revenue gained from it can be channeled into providing health services to Singaporean citizens. The government and private sector work closely to identify demand for medical services and offer attractive prices, while maintaining sufficient profitability for the private investors.

Singapore's medical facilities are primarily privately owned. About 66 per cent of the total expenditure on health per capita in 2008 was from the private sector, a higher ratio compared to Malaysia (56 per cent) and Thailand (26 per cent) but slightly lower than India at 68 per cent (World Health Organization 2011). Parkway, Singapore's premier medical provider and the largest private medical group in Southeast Asia, runs some of the well-known hospitals in the region, such as Mount Elizabeth, Gleneagles, and East Shore hospitals. As medical tourism flourished in Asia, the group also ventured into Brunei, China, India, Indonesia, Malaysia, Sri Lanka, and United Arab Emirates (Chanda 2002; IMTJ 2010b), establishing its own hospitals or forming joint ventures with partners. Raffles Medical Group, another prominent medical provider in Singapore, also increased its overseas presence through global strategic alliances and integrated networks with medical organizations from developed countries (Chanda 2002). To further attract additional medical tourists and investors into Singapore, the government is involved in signing agreements with some Middle Eastern nations in order to offer medical services (Heung et al. 2011).

The Singapore government has put substantial effort into collaboration with industry actors, forming SingaporeMedicine in 2003, with the aim of promoting the country as a world-class destination in medical tourism and strengthening its image as the leading medical hub in Asia. Led by its Ministry of Health, SingaporeMedicine provides information including guides to available treatment facilities, treatment costs, and tourism activities to the international patients (SingaporeMedicine 2007). Other promotional efforts made include organizing international symposiums, conferences, and courses in the medical field, and attracting not only medical tourists, but also potential investors and international scholars in the area. Further efforts by both private and public hospitals also can be seen as well through collaboration with western hospitals such as John Hopkins University Hospital, Pennsylvania University Medical Center, Massachusetts General Hospital, and Kaiser Permanente in order to keep up to date with the latest medical trends (Health Tourism in Asia 2009). Efforts have also been made to set up an information counter at Changi airport with promotional materials and advice in order to lure international patients.

Medical Tourism in Malaysia

The Malaysian government introduced the concept of medical tourism after 1998, after the wake of the Asian financial crisis (Altes 2005; Connell 2006) and realizing the need for economic diversification (Connell 2006) in order to spread its economic risks. Chee (2007) reported that the Ministry of Health had set up the National Committee for the Promotion of Medical and Health Tourism in January 1998 in an effort to develop medical tourism in Malaysia. The agency was later renamed to Malaysia Healthcare Travel Council. Although Malaysia started late in the medical tourism sector in the region, it is catching up fast, becoming one of the top destinations (Frost & Sullivan 2010).

A total of 425,500 medical tourists visited Malaysia in 2009 and 519,000 medical tourists were expected to visit Malaysia in 2010 (IMTJ 2011b; Frost & Sullivan 2010). The impressive development of medical tourism in Malaysia is the result of

excellent medical infrastructure, professional medical personnel, and backed up by strong government support and promotional activities. According to RNCOS (2011) Malaysian medical tourism is expected to grow at an average rate of 16 per cent from 2011 to 2014, and it is estimated that Malaysia will receive about 689,000 medical tourists by 2012 (IMTJ 2011b).

The Ministry of Health reported that Malaysia has achieved US\$ 101.65 million from the medical tourism sector in 2010. The revenue is expected to grow further to about US\$ 116.5 million in 2011 (IMTJ 2011a). Heung et al. (2011) forecasted that Malaysia will achieve US\$590 million of revenue by 2016. Even though the number of medical tourists is comparable to Singapore, the value generated in Malaysia is much lower. This may be explained by the relatively lower medical fees, as well as limited demand for high yield advanced medical procedures that are performed in the country. Although medical tourism's value in Malaysia is considered small compared to the key players in the region, it remains an important economic area for the Malaysian government (IMTJ 2011a).

Among the major treatments offered to foreign patients are curative medical treatments, plastic surgery, cardiac procedures, fertility treatment, general screening and wellness, and orthopedics surgery (Ministry of Health Malaysia 2010). In addition, as a multicultural society, Malaysia also offers alternative medical treatments, such as traditional Chinese medicine that may include acupuncture and Indian ayurveda treatments (The Economic Times 2011).

According to Chaynee (2003), the Malaysian strategies are in accordance with its competitive advantages. It focuses on high quality yet low price offerings in order

to compete with other medical tourism destinations. The waiting period is also short, which is an important element for many foreign patients. Malaysia also offers well-trained and highly qualified medical personnel, world-class hospitals equipped with state-of-the-art medical equipments, and excellent English proficient staff (Chaynee 2003; Heung et al. 2011). There are a total of eight JCI accredited hospitals in the country (JCI 2011), located mainly in Kuala Lumpur (six) along with one each in the island city of Penang and Kuching. Although the number of JCI accredited hospitals is small compared to Thailand, India, and Singapore, most of its private hospitals have also obtained the International Organization for Standardization (ISO) certification (Heung et al. 2011). Besides, medical facilities, physical attractions such as attractive beaches and resorts are among the key attractions to lure foreign patients to choose Malaysia as their medical tourism destination (Heung et al. 2011).

Frost & Sullivan (2010) and UNESCAP (2007) reported that the majority of the foreign patients seeking medical treatments in Malaysia are from Indonesia, Singapore, Japan, and West Asia. Sumatrans from Indonesia are the most likely (Connell 2006; Ormond 2011) to visit the States of Malacca and Penang for medical treatments due to their close proximity and easy accessibility via ferry or airplane to Malaysia. Penang is the main medical tourism destination in Malaysia (Ormond 2011) hosting about two thirds of medical tourists, most of whom are Indonesians. Malaysia's strong Islamic credentials (Henderson 2003), where hospitals are serving halal food and practicing Islamic protocols, is an attractive element in attracting Middle Eastern patients (Connell 2006). Similar to Singapore, most of its European and American patients are residents in Asia (Connell 2006).

The Malaysian government has made several efforts to promote Malaysia abroad as a medical tourism destination well as attracting local and foreign investments (Chaynee 2003; Heung et al. 2011). Generally, most of the private hospitals in the country are participating in the medical tourism programme organized by the government (Altes 2005). Tax incentives have been offered to investors in order to spur the medical tourism sector (Leng 2007), and maintain competitive pricing. For example, the government is offering 100 per cent tax exemption to private hospitals that are willing to construct new hospitals or expand, modernize, and refurbish their existing ones (IMTJ 2011c). According to Yanos (2008), Malaysia is ranked first in Asia and third in the world as a top medical tourism destination in providing attractive opportunities for both medical tourists and foreign investors.

A key issue in Malaysia in terms of the long term sustainability of medical tourism as a product is the brain drain of its medical professionals. There is a need to lure back doctors and other medical professionals who work overseas to return by providing attractive offers as well as making Malaysia a desirable country in which to live. This move is essential in assisting the country to develop its medical tourism sector and enhance its image as a quality healthcare destination (Chong et al. 2005; Connell 2006). The private sector also plays an important role. For example, IMTJ (2010c) reported that in an effort to boost the medical tourism sector, a Malaysian company is in arrangement with the well-known Johns Hopkins University in setting up a medical science teaching facility as well as a new hospital within a new medical city in Selangor State. Among other positive steps taken by private hospitals are the establishment of international customer departments, in-house travel agencies, and links with several external travel agencies and hotels for the convenience of foreign medical tourists (Ormond 2011).

Medical Tourism in India

Medical tourism in India started in the mid-1990s following greater economic liberalization. This has spurred the expansion of private hospitals that are equipped with higher technological and quality medical facilities, on par to those found in the western countries (Vijaya 2010). India has been known for its successful IT industry, particularly in software sector and call centres. Moving along the expansion path, medical tourism sees itself as the next highly growing service sector in India.

Chacko (2006) and Confederation of India Industries (CII) and Mckinsey & Company (2002) estimated that about 150,000 patients would have traveled to India for medical treatment in 2004 with an annual growth rate of about 30 per cent. Bookman & Bookman (2007), CII and Mckinsey & Company (2002), Singh (2008), and Yanos (2008) further forecast that the value of medical tourism in India may reach US\$2 billion by 2012.

Similar to the other countries discussed above, India also highlights the low cost of its medical services. Woodman (2007) presented an example of a bypass operation in India that would costs only about half of what a patient may need to pay in Singapore. However, Crooks et al. (2011) noted during the first medical tourism trade show in Toronto, Canada in November 2009, India highlighted very little about low cost message in its promotional materials. The top three promotional messages that India stressed were credentials or accreditations, list of services, and specializations. Similarly, Heung et al. (2011) suggested that India's key competitive advantage in medical tourism sector is the highly trained and qualified medical personnel.

In India a large majority of medical doctors are attached to private hospitals. Vijaya (2010) recorded that only ten per cent of doctors are servicing the public health sector. According to the World Health Organization (2011), the Indian government only contributed about 32 per cent to health expenditures per capita in 2008, while the remaining 68 per cent is private expenditure. Private investment in hospitals has continued to expand since 1990s and shows no sign of abating (Bhatt and Jain 2006; Mullan, 2006). Yanos (2008) also reported that India ranks the fifth most attractive medical tourism destination globally for foreign direct investment, behind Panama, Brazil, Malaysia, and Costa Rica.

However, India's positioning in medical tourism is also unique as it offers a wide variety of alternative medical treatments such as unani, ayurveda, and homeopathic treatments. Traditional healthcare centers are mushrooming in many parts of India such as the ayurvedic school in Kottakkal, Kerala (Chanda 2002).

India has 17 JCI accredited hospitals (JCI 2011) spread across the vast geographical area of the nation. The majority of the JCI accredited hospitals are located within the capital city of New Delhi and in Mumbai. Other cities with JCI accredited hospitals are Bangalore, Kolkata, Chennai, Hyderabad, Kerala, Chandigarh, and Punjab areas. Perhaps among the greatest advantages of India, is the ability of staff to converse in English (Heung et al. 2011) and its adoption of western technology and medical protocols.

A unique aspect of India compared with the other three countries discussed in this chapter is the fact that the country is also world-renowned for medical studies. There were 229 recognized medical colleges in 2010, producing almost 34,000 medical graduates every year (Medical Council of India 2010). The number of registered medical doctors have risen from about 660,801 on average between the year 2000 to 2010 (World Health Organization 2011) to about 800,000 in 2010 (Medical Council of India 2010). The average number of registered doctors between the year 2000 to 2010 in India is much higher than in Thailand (18,918), Malaysia (25,102), and Singapore (8,323) combined, putting it on par with other countries such as the United States and the Russian Federation. Although, the doctor density per 10,000 population in India (6.0) is higher than Thailand (3.0), it is much lower than Malaysia (9.4) and Singapore (18.3) (World Health Organization 2011).

Realizing the promising future of the medical tourism sector in India, the Indian government has taken numerous steps to welcome foreign direct investment. For example, Chanda (2002) reported that the government has given an approval to a German-owned company to set up a 200-bed hospital in Delhi with a high foreign equity ownership of 90 per cent. The Indian government also introduced several incentives, such as easier obtainment of long-term capital for new establishment or expansion of medical facilities, higher allowable depreciation rate for old equipment to encourage earlier replacement by new and more advanced equipment, and reduction of importation tax on life saving equipment (UNESCAP 2007). Among the leading players in the private medical sector are Apollo Hospitals, Fortis Healthcare, and Wockhardt Hospitals (Brotman 2010). As the medical tourism grows globally, Apollo group plans to set up another 32 new hospitals in India by

2012, on top of their current 30 hospital fleets and venture overseas in establishing its chain of hospitals in Nigeria, Shanghai, and Vienna (Agarwal and Bhagrath 2010).

Similar to Malaysia, India also faces the issue of medical personnel brain drain. India needs to enhance its image as a medical service provider and also attract the medical personnel themselves to work and not leave the country. Connell (2006) pointed out that private hospitals have improved and adjusted salaries offered. The annual Medical Tourism Expo is said to be able to attract an international audience and capture the attention of the Indian medical personnel who are residing overseas. In addressing medical travel issues, such as treatment and care standards, insurance coverage, and general infrastructure, the government is working closely with industry players in both medical and tourism sectors (UNESCAP 2007) in order to set up a health policy that can promote medical tourism effectively. In terms of promotion, India attended the first medical tourism trade show in Toronto, Canada in November 2009, named the "Medical Tourism Destination 2009". Brochures, flyers, and booklets were widely disseminated during the trade show (Crooks et al. 2011), providing substantial and relevant information on medical tourism in India to the potential tourists and investors. The Indian government also extended the market development assistance (MDA) scheme for JCI and National Accreditation Board (NABH) certified medical facilities, where financial assistance is provided for printing promotional materials, attending trade exhibitions or study tours in relations to medical tourism (Ministry of Tourism India 2011).

CHALLENGES AND OPPORTUNITIES OF MEDICAL TOURISM IN THAILAND, SINGAPORE, MALAYSIA, AND INDIA

Medical tourism is on the rise globally and the future looks promising. However, there are several issues which need serious attention from both the government and private sectors across the region. Connell (2006) indicated that while India's medical tourism booms, its population still lives with 40 per cent poverty rate and high infant and maternity mortality rates. Basic health facilities seem to be out of reach to the large majority of the population. India's government only spent about 32 per cent of total health expenditure per capita in 2008 (World Health Organization 2011) while the low income population just could not afford to visit the private medical facilities. Vijaya (2010) criticized that India, on one hand, provides excellent world class medical facilities to international medical tourists; on the other hand, the country appears relatively oblivious to the basic medical needs of the low income population. More emphasis has been given to private sector health development at the expense of public health provision, which at the moment is far below the desirable standards. However, it is also argued that the development of medical tourism is expected to eventually improve the medical services of a nation and at the same time this improvement will eventually benefit local population.

The growth of medical tourism has caused privatization and commoditization of many medical facilities across Asia. Saniotis (2007) suggested that the privatization of many hospitals in Thailand has resulted in high medical expenses to the locals, thus making it beyond their financial capability, a situation similarly observed in India as well. The commoditization of medical facilities (Keaney 2002; Turner 2007b; Hall 2011), as has been warned by Chanda (2002), might cause an imbalance in treatment between the locals and foreign patients. The high fees

charged by private hospitals may also discourage or to a certain extent prevent easy access of local residents to health services (Heung et al. 2011), a phenomenon that is particularly of concern in India and Thailand. This, according to Hall (2011a), Borman (2004), and Lunt and Carrera (2010), is an ethical issue for medical professionals that needs to be resolved.

In addressing the issue of privatization and commoditization of medical facilities, both government and private sectors need to seriously consider their domestic medical services policies through better working linkages between them (Chanda 2002; Vijaya 2010). India could probably learn from Singapore in addressing this issue as both the private and public sector are well connected and of similar quality. The Singapore government realizes that the foreign patient market is essential to support its domestic medical care as the domestic population is small in the country. Therefore, medical tourism is being developed as part of Singapore's social requirement towards its domestic healthcare services. On the other hand, Thailand deploys high government spending on health facilities in addressing its citizen's medical requirements, with 9.9 per cent of total government expenditure being spent on health in 2008 (World Health Organization 2011).

In addition, there is also a disproportionate concentration between the development of advanced technologies and specializations in a country's medical system, where in most cases the development would be based on the interest of foreign patients rather than the locals. Vijaya (2010) commented that this is a serious issue in India, particularly in the primary care, family and community medicine. Another adverse effect may be observed when funds from some other areas of the economy are diverted to medical tourism (Awadzi and Panda 2006). For example, the Malaysian government has been actively promoting medical tourism through tax exemption to private hospitals (IMTJ 2011c), implicating a reduction in the possible revenue generated through tax collection which is an essential element in providing sufficient public services to its citizens.

Risk is another issue which is frequently discussed by researchers. The risk faced by medical tourists may be in the forms of adverse impacts on their health instead of curing or rejuvenating. Hall (2011; Hall and James 2011) warned that medical tourism may pose biosecurity and nosocomial risks to both the patient's home country and the medical tourism destination. These include higher rates of cross infections, spread of pandemics, transplant failures, and social issue where medical tourists seek assisted suicide. There is also risk of insufficient supply of blood in the medical destination to meet the patients' needs (Forgione and Smith 2007). Nevertheless, Alleman et al. (2010) and Lunt and Carrera (2010) suggested that even though such adverse implications have been reported before (e.g. Newman et al. 2005), the empirical evidence is still lacking in terms of quality and safety, overseas medical facilities' infection ratios, and negative events reports. Better evidence and reliable empirical data are required to better justify the issue of risk in medical tourism.

Another issue that has been widely discussed globally over the years pertaining to medical tourism is on obtaining organs for transplant procedures. Illegal organ trades have been reported in India where transplant treatment for foreign patients is widely demanded, especially kidney. According to Discover Medical Tourism (2008b), as the Indian Ocean tsunami in 2004 affected terribly the living conditions of the poor fishermen families in Chennai, they were forced to sell off their kidneys in order to sustain their lives. Poor immigrant laborers in India were also forced or being cheated to sell one of their kidneys to wealthy patients, for lack of a job opportunity (AlJazeera English 2008). Although human organ trade is banned in India, such unethical acts remain and occur at large. The voluntary Health Association in India estimated about 2,000 kidneys were traded each year (AlJazeera English 2008), making India one of the top five nations in human organ trade (Ben 2008). This issue is not just an unethical business transaction issue but to a greater scale, a serious humanity discomfort issue that should be dealt with if medical tourism were to continue its acceptance globally.

Government regulation is paramount as it may determine the direction of a particular nation in developing medical tourism and at the same time address the domestic medical requirements. A well-regulated medical tourism policy will ensure the growth of the sector in the proper direction. According to Bookman and Bookman (2007), a regulated-driven medical tourism may enhance the viability of developed countries in reducing government's burden to support its top notch domestic medical care facilities (e.g. Singapore). While, developing countries may be able to gain substantial revenue to improve their health systems in accordance with the world standard, revenue gained from medical tourism could contribute to social facilities enhancement that will benefit the citizens.

As in many developing countries experience (e.g. Malaysia and India) a wellregulated medical tourism sector with the provision of advanced and high technology work environments may be viewed as an attractive element to local talents to remain working in the country. This, together with establishing the country as an attractive place to live may be the key to reduce the international brain drain, particularly among professional medical personnel (Ramirez de Arellano 2007).

The development of medical tourism is very much dependent not only on the government but also the private sector. The aggressive and committed private sector may determine the effort level required by the government. For example, Teh and Chu (2005) mentioned that Australia, Thailand, the United States, and the United Kingdom are among the countries where the private sector plays a prominent and leading role in medical tourism development, from analyzing possible opportunities to strategies formulation. As the government may depend on the private sector to develop medical tourism, more time and effort could be spent on the public hospitals and doctors, which are essential to meet the domestic medical care requirements. However, the excessive involvement level of the private sector in developing medical tourism may also bring some negative impact into the national healthcare systems. Thus, a well-regulated health policy system is expected to be able to balance the responsibilities of both public and private sectors in developing medical tourism in the four countries.

Conclusions

Thailand, Singapore, Malaysia, and India have developed medical tourism mainly for economic reasons. Singapore uniquely however, has also developed the industry to support the sustainability of its hospitals which operate on a small population base. Much of the lure for foreign tourists to visit these countries is based on cheaper costs offered for medical treatment compared with their own countries. However, cheaper costs alone will not attract medical tourists, unless the provision of health services is at least at par with the tourist generating countries. This is perhaps a major factor inducing medical tourists to seek their medical treatment in Thailand, Singapore, Malaysia and India with a growing number of hospitals in these countries being accredited by JCI.

The development of medical tourism in Thailand and even more so, India, has to reconciled with the quandary of whether to focus more on providing medical services to international medical tourists or on poor local residents. All these four countries have their own competitive strength. Singapore is perhaps still the premier medical tourist destination and also has the reputation of performing groundbreaking medical treatment and procedures. India is the cheapest destination which offers excellent medical facilities and services, together with the increasing popularity of contemporary medical treatment. India also produces medical doctors from its many internationally accredited medical schools. Thailand is an already established holiday destination among westerners. This augurs well for medical tourism (especially cosmetic surgery) which requires a period of recuperation which could be carried out in resorts in Thailand. Malaysia remains competitive as value for money destination, not only for medical tourists but also mainstream tourists. With greater awareness of halal tourism, Malaysia could well positioned itself as medical providers for Muslim patients, by introducing the concept of halal medical tourism.

From the detailed descriptions of the medical tourism industry in these four countries, it is evident that all of them are, in different ways, unique in providing

medical services to the global market. By continuous emphasis on providing quality healthcare through accreditation and general improvement of technology as well as the quality of their medical professionals, Thailand, Singapore, Malaysia, and India may be expected to maintain or expand their significance as major international medical tourism destinations.

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