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Noor Hazilah Abd Manaf Husnayati Hussin Puteri Nemie Jahn Kassim Rokiah Alavi Zainurin Dahari

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Country perspective on medical tourism: the Malaysian experience

Noor Hazilah Abd Manaf
Department of Business Administration, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Husnayati Hussin
Department of Information System, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Puteri Nemie Jahn Kassim
Department of Civil Law, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Rokiah Alavi
Department of Economics, International Islamic University Malaysia, Kuala Lumpur, Malaysia, and

Zainurin Dahari
Department of Business Administration, International Islamic University Malaysia, Kuala Lumpur, Malaysia

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Abstract

Purpose – The study seeks to explore the perception of international patients on Malaysia as a medical tourism destination country, as well as overall patient satisfaction, perceived value and future intention for repeat treatment and services.

Design/methodology/approach – Self-administered questionnaire was the main method of data collection. The survey covered major private hospitals in medical tourists' states in the country, namely, Penang, Melaka, Selangor and Kuala Lumpur. Convenience sampling was used due to the condition of patients as respondents.

Findings – Indonesian patients formed the largest majority of international patients in the country. Five dimensions of medical tourism in Malaysia was identified, namely, hospital and staff, country factor, combining tourism and health services, cost saving and insurance and unavailability of treatment. Of these, hospital and staff was found to be the most important factor for the patients. Perception of value, overall satisfaction and intention for future treatment was also found to be high. This indicates that Malaysia is on the right footing in this burgeoning industry.

Practical implications – Findings from the study will enable policy-makers to better position Malaysia as a medical tourist destination country.

Originality/value – Medical tourism is a recent phenomenon and very little empirical research has been carried out at the patient level. This study is one of the first few studies which seek to explore medical tourism from the perspective of the patients themselves.

Keywords Public health, Health care, Health services

Paper type Research paper

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Introduction

The purpose of this paper is to explore dimensions of medical tourism in a destination country with actual patient data, and perception of the medical tourists on overall satisfaction, perceived value and future intention for repeat treatment and services. This paper also explores the predictors of overall satisfaction and future intention, and also the relationship between overall satisfaction and future intention.

Medical tourism has taken both policy-makers and researchers by surprise, an industry that was never comprehended to be as vibrant as it is today, for the simple reason that almost always, patients would rush to the nearest medical facility for treatment. Health care has often been regarded as the most "local" of the service sector. But medical tourism, which is the practice of patients seeking medical treatment in another country, may not necessarily be termed "tourism" altogether, for the health travellers of today are not merely going abroad for health resorts and wellness spas, but are travelling thousands of miles away from home seeking the whole range of medical treatment and services, including invasive treatment such as hip replacement surgery, coronary bypass or even organ transplant such as liver transplant (Vijaya, 2010). Estimates of the economic potential of the industry indicate that it is a phenomenon not to be ignored. The oft-quoted Deloitte (2008) Report on medical tourism in Asia estimates the industry to grow by more than 20 per cent annually, and would be worth about USD4 billion for the Asian chapter by 2012. Leahy (2008) estimates the industry to be worth USD60 billion worldwide.

Riding on the medical tourism wave, the Malaysian government has identified the health travel industry as one of the strategic opportunities under the Healthcare NKEA (new key economic areas). This will see medical tourism as a key driver of economic activity that has the potential to contribute significantly to the country's economic transformation plan. The country already has the right infrastructure due to its strong health-care delivery system, and tight control over quality assurance of its medical services. Health-care strategies adopted by the country since independence have been successful in raising the health status of the Malaysian population. The country also has a high number of Western-trained physicians and Malaysian nurses are highly regarded and well-sought after particularly in the Middle East. Medical education and practise is well-regulated, and the Ministry of Health closely supervises both public and private health-care services in the country. Malaysia's health indicators such as infant mortality rate and life expectancy are also at par with most developed countries. This has built up the reputation of the country as a credible health-care provider.

Accreditation of hospitals is also well structured in the country, which is carried out by the Malaysian Society for Quality in Health (MSQH). The MSQH standards also addresses strategies identified under the WHO World Alliance on Patient Safety, and the MSQH Hospital Accreditation Standards has also been certified by ISQua Accreditation Council, which also certifies the Joint Commission International (JCI) accreditation standards. Thus, Malaysia already has a strong footing in the accreditation of its hospitals through MSQH.

The government has also established the Malaysian Healthcare Travel Council (MHTC), which is a one-stop centre to promote the country's medical services abroad. Although a relative newcomer to the industry, the intensification of the industry can already be seen from the increasing number of international patients into the country. In 2002, the number of health tourists was 84,585 with a revenue of RM35.9 million; but by

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2011, the number of international patients had reached 581,308 with a total revenue of more than RM500 million (MHTC, 2012). The target set for medical tourism under the Ninth Malaysia Plan is for the country to gain a total of RM2 billion in foreign exchange from this sector (Economic Planning Unit, 2006). The following table reflects the growth of the industry, which shows that the industry has been growing at an impressive rate of 30 per cent annually after the global economic slowdown of 2008/2009 (Table I).

Literature review

A review of the literature indicates that medical tourism is not a new concept borne out of the forces of globalisation. In fact, travelling abroad for health has had a long history where the wealthier social classes would seek spas, mineral baths and innovative treatment in favoured destinations such as Switzerland and Austria. Apart from the spas and health resorts, the tendency then was for patients from less developed countries to seek medical treatment in Europe or the USA, where the health facilities are better-equipped and technologically more advanced. (Manaf *et al.*, 2011). However, of late, there has been a reversal in the trend whereby patients from developed countries such as USA and Britain are travelling to developing countries such as Thailand and India for their medical needs (Volz, 2008). A convergence in a global standard of health care has facilitated the movement of patients. To that extent, Rick Wade, the Senior Vice President of the American Hospital Association has been quoted as saying that "he has no doubt that some international hospitals are just as high-quality as their USA counterparts" (Fried and Harris, 2007).

The recent phenomenon in the crisscrossing and globe-trotting behaviour of patients is unfathomable. For example, Thailand, a strong contender in the industry, has received more than one million foreign patients who sought treatment ranging from executive health tests to invasive surgeries (Connell, 2006). In 2008, Thailand generated USD1.5 billion from its medical tourism industry (NaRanong and NaRanong, 2011). Apart from Thailand, other countries which are reaping the benefit of the fallout of the health travellers are Malaysia, Singapore and India for Asia; Hungary and Poland for Eastern Europe; Malta and Cyprus for the Mediterranean; South Africa for Africa; Costa Rica, Brazil, Mexico and Cuba for Central America; and Dubai and Jordan for the Middle East (Lunt *et al.*, 2010).

To assure potential patients on the standard of quality of care, medical tourism hospitals in this region leverage on their outcome measures. Singapore's National Healthcare Group, for example, which is a conglomerate of acute care and specialist hospitals, regularly publishes results on outcome measures which are of international standards. Among others, it reports a 100 per cent rate for dispensing aspirin at discharge for acute myocardial infarction and 0.6-2.2 per cent 30-day mortality rate for heart failure (Dunn, 2007). In India, the Apollo Group also liberally publicise milestones of their hospitals. Apollo hospitals perform 537 liver, kidney and heart transplant in

Year	2007	2008	2009	2010	2011
Total revenue (RM million)	253.8	299.1	288.2	378.9	511.2
Increment from previous year (%)	24.6	17.5	−3.6	31.5	34.9

Source: MHTC (2012)

Table I. Comparison of revenue from medical tourism (2007-2011)

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238 days, making it the second busiest transplant programme in the world. They have performed over 500 liver transplants with a success rate of 90 per cent. They also publicised their success rate of hip replacement surgery at more than 98 per cent. Other health outcomes were also liberally publicised by Apollo, as well as the credentials of their specialist doctors (www.apollohospitals.com). In Thailand, the Spine Institute at Bumrungrad Hospital, also publicised on their Web site that they have performed spinal endoscopic surgery on more than 600 patients with a success rate of 95 per cent (www.bumrungrad.com). While respective hospitals may publish health outcome for marketing purposes, however, research has also highlighted positive outcome from the patient experience. Eissler and Casken (2013) from their qualitative study on medical tourists who had treatment in Thailand, Mexico, Eastern Europe, Costa Rica and India for a variety of health services: orthopaedic surgery, dermatology consults, bariatric procedures, cardiac care, assistive reproductive procedures, otolaryngologic procedures, dental care and hygiene, colonoscopies, mammograms, screening laboratories and diagnostic imaging, eye care and complimentary medical care – reported resoundingly positive experiences from their participant exemplars.

For the patients, the motivation for medical tourism is multi-faceted. In the case of American health travellers, getting medical treatment in another country is a viable option for the uninsured or underinsured American patient. While Americans enjoy the highest standard of care, the country's health-care delivery system is flawed by excessive costs and issues of inequity and access. The recent Obamacare debacle that led to the shutdown of US federal government attests to this. The US health-care system is the costliest in the world (Marlowe and Sullivan, 2007), and it now stands at a staggering USD2 trillion a year. Reports of individual patients from the USA going abroad for medical treatment grace the literature (Turner, 2007; York, 2007; Cuddehe, 2009; Gray and Poland, 2008; Milstein and Smith, 2006; Connell, 2006). According to Enderwick and Nagar (2011), a large portion of the American population, i.e. around 46 million, are either uninsured or underinsured. Thus, given the excessive health care costs and inadequate insurance coverage, American patients are flocking to other parts of the world in search of affordable health-care services with the same, if not better, standard of care. For countries where the health-care systems are publicly financed, as in the case of the UK or Canada, the motivation for patients from such countries to seek medical treatment abroad is the long surgical wait list (Johnston *et al.*, 2010). On the other hand, patients from less developed countries seek health treatment abroad for better quality of care. Thus, patients from countries such as Vietnam and Indonesia, flock to neighbouring countries with better health-care delivery system such as Malaysia and Singapore.

While cost, long wait list and better quality of care maybe the motivating factors for health tourists to travel abroad for medical treatment, other push factor factors have also been cited. Crooks *et al.* (2010) quoted patients wanting access to procedures that are illegal or unavailable in the home country such as stem cell or surrogacy, and the ease of air travel, as other motivating factors. The impact of marketing, particularly Web-based marketing has also been cited by Sarwar *et al.* (2012) as factors which influenced patients in selecting their medical tourism destination.

A review of the literature also indicates that medical tourism is a widely researched topic at the conceptual level (Arellano and Annette, 2007; Connell, 2006; Cuddehe, 2009; Douglas, 2007; Leahy, 2008; York, 2008; Schroth and Khawaja, 2007). This is understood

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since medical tourism is a recent phenomenon and not much field work has been carried out in the area, although there has been some published empirical work. For example, Chen *et al.* (2012) studied the willingness and barriers of potential medical tourists from China to seek treatment in Taiwan. Martin *et al.* (2011), developed MEDTOUR, which is a scale for measuring medical tourism intention. However, in developing the scale, the respondents comprised a convenience sample of undergraduate students enrolled in a four-year state university programme. Rad *et al.* (2010) explored service quality and patient satisfaction among medical tourists in Malaysia. Apart from these, literature based on empirical fieldwork has not been observed in the literature. The dearth of data and empirical analysis on medical tourism have also been observed by Pocock and Phua (2011). This is understandable because getting response from medical tourists to survey questionnaires is a daunting task. The authors faced major challenges in data collection in the course of conducting this research. The hospitals are concerned about patient privacy, and patients, on the other hand, are not in the best of health and would not be interested in any form of surveys. Manaf (2012) cautioned the reluctance of patients to cooperate due to their fears in giving feedback on their service providers, as well as the psychological burden encountered in being ill. Given the mammoth task in getting patient response, it is comprehensible that empirical data on medical tourism is almost non-existent from the patient perspective. Thus, it is timely for this study to be carried out to fill the lacuna.

Methodology

Given the large geographical area to be covered, self-administered questionnaire was the main method of data collection. Because empirical data on medical tourism is not widely published, development of items relied heavily on the work of Saiprasert (2011) on medical tourism in Thailand. Saiprasert's instrument with constructs covering perceived quality, value, overall satisfaction, destination image and repurchase intention with Cronbach's alpha values between 0.70 and 0.90 was deemed appropriate for the study. Altogether, 26 items relating to Malaysia as a medical tourist destination country and items specific to hospital service and standard of care were posed to the respondents. Items on overall satisfaction (three items), perceived value (three items) and future intention (seven items) were also posed to the respondents to obtain a more comprehensive view on medical tourism in the country. The items were presented in a Likert-scale format response ranging from 1 (strongly disagree) to 5 (strongly agree).

The questionnaire was also translated into Arabic and Indonesian Malay from the original English. Native speakers of Arabic and Indonesian Malay were requested to translate the questionnaire and the translated version was then translated again into English to ensure that the message and intention in each item was not lost in translation. The Ministry of Health identified 41 hospitals as medical tourism hospitals, and of these, 20 hospitals covering the main medical tourism states of Selangor, Penang, Melaka, Johor and the capital city of Kuala Lumpur were randomly selected. Respondents of the survey comprised international patients who come to Malaysia specifically for medical treatment and other health services. International patients who are residing in Malaysia were excluded from the survey. As with any survey involving patients, the recommendation by Manaf (2012) for convenience sampling to be used was heeded. Three sets of questionnaires in English, Arabic and Indonesian Malay were sent to the

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hospitals. Altogether, 1,000 questionnaires were sent out, and of these, 173 responses were received and analysed. This gave a response rate of 17.3 per cent.

The mean of the variables was worked out by averaging all the responses for a single variable. A mean less than 3.0 was classified as being negative perception, while a mean greater than 3.0 as being positive perception. Data were analysed by SPSS 17 and data collection was made possible through the cooperation of participating hospitals to gain access to international patients.

Validity and reliability

In establishing the validity of the instrument, factor analysis was carried out. All 26 items on perception of medical tourists on Malaysia and medical tourism in Malaysia was factor analysed by Varimax rotation. The factor analysis resulted in five factors and the Cronbach's alpha of all the five factors exceeded the recommended cut-off value of 0.70 (Nunnally, 1978). Accordingly, the factors were labelled as hospital and staff; country factor; combining tourism and health services; cost-saving; and insurance and unavailability of treatment. For reliability analysis, the aggregate Cronbach's alpha for all 26 items was 0.943. This indicated a good internal consistency among the items in the instrument. Table II shows the extracted factors and the corresponding alpha coefficient value.

In addition, the corrected item-to-total correlation was computed to measure the correlation between each item in each factor with the total factor score. In ensuring reliability, each item in every factor should correlate with the total with a value higher than 0.3. Items with value lower than 0.3 will have to be dropped, as it may be measuring something different than the scale as a whole. All the items were found to have item-to-total correlation greater than 0.3, and were, therefore, retained for further analysis. Table III shows the item-to-total correlation value for each factor.

Demography

Almost half of the respondents (45 per cent) travelled to Malaysia for the first time for medical services, and another 24 per cent were here for a second time. Almost 53 per cent were male, while the remaining 47 per cent were female. More than half (55 per cent) are aged between 26 and 45 years old, and another 33 per cent are aged between 46 and 65 years old. Distribution by occupation showed that 34 per cent are self-employed, executive 10 per cent, education 8 per cent, professional/technical 6.5 per cent and retired 10 per cent. Although the majority of respondents are Indonesians (61 per cent), however, the country profile is very diverse with patients from Libya, Somalia, South Korea, China, Cambodia, Djibouti, Bangladesh, Japan, Pakistan, Australia, Yemen,

Table II.
Factor analysis and reliability scores

Factor	No. of items	Alpha coefficient
Hospital and staff	9	0.913
Country factor	6	0.895
Combining tourism and health services	6	0.844
Cost saving	3	0.708
Insurance and unavailability of treatment	2	0.718

Source: Survey data

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Item	Factor	Corrected item-total correlation
International hospital accreditation	Hospital and staff	0.803
Recognized hospital reputation	Hospital and staff	0.771
High-standard level of medical staff	Hospital and staff	0.764
Ease of medical treatment arrangements	Hospital and staff	0.756
High-standard level of medical facilities	Hospital and staff	0.749
Recognized reputation of physicians	Hospital and staff	0.741
Western experienced/trained physicians	Hospital and staff	0.658
Tourists safety from crime and terrorist attack	Hospital and staff	0.595
Shorter waiting time for medical service than in your country	Hospital and staff	0.567
Ease of travel arrangements	Country factor	0.859
Ease of visa and immigration procedures	Country factor	0.771
Ease of accessibility from your country	Country factor	0.738
Friendliness and helpfulness of the local people	Country factor	0.706
No language barriers in traveling in Malaysia	Country factor	0.648
Political stability	Country factor	0.598
Great place for relaxation after medical treatment	Combining tourism and health services	0.788
Availability of many tourist attraction	Combining tourism and health services	0.724
Preference of privacy and confidentiality	Combining tourism and health services	0.603
Well-reputed as a tourist destination	Combining tourism and health services	0.591
Opportunity to combine medical service with a vacation	Combining tourism and health services	0.534
Various type and availability of medical services	Combining tourism and health services	0.521
Reasonable price and significant amount of money savings	Cost saving	0.603
Opportunity for person who has no or limited medical insurance in his/her country	Cost saving	0.537
Less expensive medical treatment than in your country	Cost saving	0.449
Type of medical treatments that are not allowed in your country	Insurance and unavailability of treatment	0.506
Type of medical treatments not covered by medical insurance in your country	Insurance and unavailability of treatment	0.506

Source: Survey data

Table III.
Reliability analysis of items

Thailand, New Zealand, Romania, Iraq, USA, Singapore, Iran, Maldives and Mongolia. As for types of services, 31.2 per cent came for comprehensive medical check-up, 14 per cent for heart surgery, 8 per cent for cosmetic surgery, 5 per cent for LASIK and sight treatment and another 5 per cent for dental surgery and treatment. There were also those

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who came for IVF treatment, cancer, kidney, nerve and intestinal ailments. Almost half (48 per cent) made their decision based on word-of-mouth information and 17 per cent on the advice of their doctors. Most of the respondents (66 per cent) made their own arrangement directly with the hospitals.

Data analyses

Mean analysis for each dimension of medical tourism, as shown in Table IV, indicates that hospital and staff is the most important dimension (3.78), followed by combining tourism and health services (3.69), country factor (3.64), cost saving (3.19) and least for insurance and unavailability of treatment (2.91). One sample *t*-test conducted with a test value of 3.00 and 2.00, respectively, indicates significant difference between the mean score and the test value. Thus, factors such as hospital accreditation and reputation, standard of care, reputation of physicians and ease of medical treatment arrangements are important to the medical tourist. Accreditation is often a motivating factor in the selection of medical tourist destination, particularly from JCI (Carrera and Bridges, 2006; Manaf *et al.*, 2011; Peters and Sauer, 2011). To potential medical tourists, an international accreditation gives the assurance of an internationally accepted level of technical standard of care, and major destination hospitals leverage on this fact for market positioning. However, the cost in acquiring accreditation can be quite substantial. Thus, to offset this, the Malaysian government has allowed for expenses borne by hospitals in acquiring accreditation to be given double tax exemption (Manaf *et al.*, 2011). Apart from accreditation, reputation of physicians are also often widely publicised by destination hospitals, especially on hospital Web sites. This would cover their academic qualifications, medical affiliations, experience and expertise. Most would have had some form of training in the West. Bumrungrad Hospital in Bangkok, for example, boasts of having more than 200 US board-certified physicians (Burkett, 2007).

The questionnaire also elucidated information on the medical tourists' perception on overall satisfaction, perceived value and future intention to seek treatment in Malaysia. All of these variables demonstrate high Cronbach's alpha, as shown in the Table V. Mean analysis as in Table VI indicates that of these three variables, the highest score is for overall satisfaction (3.85), followed by perceived value (3.61) and lastly future intention (mean 3.55). One-sample *t*-test with a test value of 3 provides statistical evidence of positive perception of medical tourists on these three variables.

Regression analysis between dimensions of medical tourism and overall satisfaction

Regression analysis was carried out between overall satisfaction and the five dimensions of medical tourism. Overall satisfaction was represented by items on

Dimension	Mean	SD	Significance
Hospital and staff	3.7789	0.6632	0.000
Country factor	3.6365	0.7784	0.000
Combining tourism and health services	3.6913	0.6508	0.000
Cost saving	3.1951	0.8350	0.000
Insurance and unavailability of treatment	2.9127	0.9244	0.000

Source: Survey data

Table IV. Dimension of perceptions of medical tourism in Malaysia

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satisfaction with medical treatment, hospital services and medical trip to Malaysia. The analysis shows that 47.7 per cent of variance in overall satisfaction can be explained by the five dimensions, as indicated by the R^2 value in Table VII. The F-test indicates statistical significance $F(5,159) = 29.96, p = 0.000$. Table VIII shows that of the five dimensions of medical tourism, hospital and staff, country factor, and insurance and unavailability of treatment have a p-value of 0.000, 0.008 and 0.029, respectively, which indicates that these three dimensions may predict overall patient satisfaction. Of these three dimensions, the strongest contribution to the model is from hospital and staff, as shown by the highest beta score of 0.403. This finding points to the fact that with respect to medical tourism, what is most important is the standard of care delivered by competent staff, as well as the reputation of physicians and the hospital.

Regression analysis between dimensions of medical tourism and future intention

Regression analysis was also carried out between the five dimensions of medical tourism and future intention of the patients to come back for medical treatment, as shown in Table IX. The model shows that 55.5 per cent of variance in future intention can be explained by the five dimensions of medical tourism as indicated by the R^2 value. The F-test indicates statistical significance $F(5,158) = 39.38, p = 0.000$. Future intention was represented by the patients' willingness to continue using the hospital service in the future, and would do so even if the cost increased; would say positive things about their medical treatment and recommend it to relatives and friends; and would be willing to spend more money for treatment in Malaysia even if the price increased. The coefficient

Variable	No. of items	Alpha coefficient
Perceived value	3	0.910
Overall satisfaction	3	0.929
Future intention	7	0.950

Source: Survey data

Table V. Reliability analysis

Dimension	Mean	SD	Significance
Perceived value	3.6101	0.8739	0.000
Overall satisfaction	3.8542	0.7386	0.000
Future intention	3.5570	0.8601	0.000

Source: Survey data

Table VI. Mean analysis on perceived value, overall satisfaction and future intention

Model	R	R^2	Adjusted R^2	SE of the estimate
1	0.690	0.477	0.460	0.53310

Source: Survey data

Table VII. Regression analysis between dimensions of medical tourism and overall satisfaction

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Model	Unstandardized coefficients B	SE	Standardized coefficients Beta	t	Significance
Hospital and staff	0.454	0.098	0.403	4.623	0.000
Country factor	0.225	0.083	0.240	2.692	0.008
Combining tourism and health services	0.105	0.088	0.089	1.184	0.238
Cost saving	0.070	0.070	0.078	1.000	0.319
Insurance and unavailability of treatment	−0.107	0.049	−0.137	−2.204	0.029

Table VIII. Coefficient-overall satisfaction

Source: Survey data

Model	R	R^2	Adjusted R^2	SE of the estimate
1	0.745	0.555	0.541	0.58196

Table IX. Regression analysis dimensions of medical tourism and future intention

Source: Survey data

table as in Table X indicates that of the five dimensions, hospital and staff, country factor, cost saving and insurance and unavailability of treatment can significantly predict the future intention of the patients. Of these four variables, the strongest contribution to the model is from hospital and staff as shown by the highest beta score 0.479.

Correlation between overall satisfaction and future intention

Correlation analysis between overall satisfaction and future intention, as shown in Table XI, indicates a strong positive correlation between these two variables with $r = 0.839$. This shows that patients who are satisfied with their experience are more likely to come back for future treatment.

Discussion and conclusion

The study sheds light on a number of issues. First and foremost is the profile of the patients whereby Indonesians make up the majority of medical tourists in the country. While this is a welcome feature as both countries share similar cultural traits, however, overdependence on a single market poses a risk exposure. The Malaysian government realises this and has called for a differentiated position for the industry to broaden its customer base beyond Indonesia (PEMANDU, 2010). The study also indicates that while the level of service experienced by the patients was high (mean 3.77 for hospital and staff dimension); however, it is still not reflective of service excellence, as it is less than a mean score of 4.00. Knowledge asymmetry in health-care service leads to a situation where patients as consumers are not in the position to evaluate the technical aspect of care, but are only limited to the functional aspect such as the hospital ambience or the customer service. Leading medical tourism hospitals leverage on this fact, and the authors' visit to leading destination hospitals in Bangkok attest to this where a blurring

Model	Unstandardized coefficients B	SE	Standardized coefficients Beta	*t*	Significance
Hospital and staff	0.635	0.107	0.479	5.927	0.000
Country factor	0.199	0.091	0.179	2.180	0.031
Combining tourism and health services	−0.002	0.098	−0.002	−0.022	0.982
Cost saving	0.221	0.78	0.207	2.840	0.005
Insurance and unavailability of treatment	−0.134	0.54	−0.143	−2.490	0.014

Source: Survey data

Table X.
Coefficient-future intention

	Overall satisfaction	Future intention
Overall satisfaction		
Pearson correlation	1	0.839*
Significance (two-tailed)	168	0.000
N		167
Future intention		
Pearson correlation	0.839*	1
Significance (two-tailed)	0.000	167
N	167	

Note: *Correlation is significant at the 0.01 level (2-tailed)
Source: Survey data

Table XI.
Correlation between overall satisfaction and future intention

of line between a five star hotel and a hospital was observed. Similarly, Malaysian hospitals need to rise to this level of service if they are to attract a more diverse patient base.

Five dimensions of perception of Malaysia and medical tourism in Malaysia was identified from the study, namely, hospital and staff; country factor; combining tourism and health services; cost-saving; and insurance and unavailability of treatment. Of these five dimensions, the most important is hospital and staff, and this dimension is also the strongest predictor for both overall satisfaction and future intention. Therefore, destination hospitals in the country need to realise the importance of this factor in their service delivery. The strong correlation between overall satisfaction and future intention should also be considered by destination hospitals so that greater emphasis is placed on customer satisfaction. It is interesting to note that most literature on medical tourism would point to cost saving as a significant push factor (Enderwick and Nagar, 2011; Sarwar *et al.*, 2012; Manaf *et al.*, 2011). However, finding from this study indicates that cost saving is not the main dimension, presumably because most of the patients are from Indonesia and therefore the main motivation is to seek better quality of care.

This study sheds light on dimensions of medical tourism in the country with actual patient data, and also the perception of the medical tourists on overall satisfaction, perceived value and future intention for repeat treatment and services. The relationship

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between these variables points to the importance of hospital reputation and staff competence to the patients. Thus, while Malaysia may be excited with new developments in this emergent industry, there is also a need for its service providers to address its limitations to appeal to a more global market.

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Corresponding author
Noor Hazilah Abd Manaf can be contacted at: hazilah@iium.edu.my

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