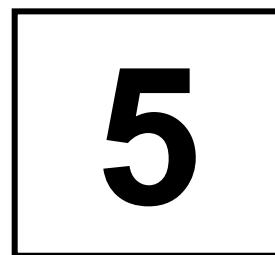


MEDICAL-RELATED FACTORS AND PERCEIVED IMAGE OF MEDICAL TOURISM IN THAILAND: CASE STUDY OF MIDDLE-EAST TOURISTS



Rosechongporn Komolsevin*

Sarika Khasuwan**

ABSTRACT

This research aims specifically to explore the medical-related factors that affect the image of medical services in Thailand, as perceived by the Middle-east tourists, and their medical service seeking behaviors. The researchers collected data from 204 Middle-east tourists selected purposively from 14 countries who had attended a kind of medical services in Thailand. Data were collected from September – December, 2012 mainly in hospitals, and analyzed using descriptive analysis and hierarchical multiple regression analysis. The Middle-east tourists' main travelling purpose is to get medical treatments, mostly for general health examination; while a few for special treatments (e.g. heart surgery). Most of them have come to Thailand two times or more, and would stay for more than one week up to one month. A hierarchical multiple regression analysis revealed the two most important factors that influenced the Middle-east tourists' perceived image of Thai medical tourism: the tourists' positive past experience with medical treatments in that particular hospital and reputation of physicians & hospitals (knowledge, expertise, and high technology equipments).

Keywords: Middle-east tourists, Thai medical tourism, Thai medical services, Medical tourism factors.

INTRODUCTION

Thailand announced a strategic policy to be the “Medical Hub of Asia” in 2004 and was listed among the top 10 medical tourism destinations as a quality destination for medical tourism (Thailand Board of Investment, 2012 & 2014). In 2012, Thailand received more than 2.5 million international patients, a 14% increase from 2011 (Wilson, 2011; and Fernquest, 2012), generating approximately US\$ 4.0 billion (Thailand Board of Investment, 2014), and rose to US\$ 4.1 billion in 2013 (ASEAN Information Center; and Kasikornthai Research Center, 2012b). In 2015, Thailand is expected to remain a top medical tourism hub despite competitive challenges from Singapore and Malaysia (Gupta, 2014).

The “Patients Beyond Borders” website (2015) listed Thailand as one of the top medical tourism market, due to the variety of cost-effective medical services. In addition to high quality and safety of Thai hospitals, Thailand is also

* Graduate School, Bangkok University

** School of Communication Arts, Bangkok University

well-known for a variety of natural and man-made tourist attractions, friendly people, service mind, and great food (NomadicMatt, 2011).

The Middle-east tourists regularly come to Thailand for medical services. It was revealed that 40.3% of them come to Thailand mainly for the medical services, while 31.6 % for vacation tours (Khasuwan & Komolsevin, 2012). Although the number of medical tourists from Middle-east dropped significantly in 2010 onwards (see Table: 1), the Tourism Authority of Thailand (TAT) expected them to come back more in 2015 due to domestic political stability. This is because the “medical tourism in Thailand is very popular among Middle-east tourists,” said Mr. Abdul Rahim Alawadhi, the managing director of Al Awadhi Travels in Dubai (Bangkok Post Business, May, 8, 2015).

Although the Middle-east tourists accounted for only 2.5% of all international tourists visiting Thailand (Department of Tourism, 2015), their visits for medical purposes in Thailand are estimated as high as 10% of all medical tourists. According to Mr. Chalernsak Suranant, director of the TAT’s Dubai and Middle-east office, Arab travellers spend per head in third after Europeans and Americans, and 70% of them are repeat tourists to Thailand (Bangkok Post Business, May, 8, 2015). A study by Khasuwan and Komolsevin (2012) also confirmed that approximately 74% of the Middle-east tourists came to Thailand two times or more, and stayed in Thailand 2–4 weeks (32.5%) or longer than one month (7.2%). In this case, those receiving medical services reported staying in Thailand longer than the general tourists.

The medical-related factors attracting tourists to a medical destination are various. The selective factors include service quality, cutting-edge medical equipment, affordable prices, pre- and post-treatment quality, and easy access to medical services (Al-Amin, Makarem, & Pradham, 2011). The availability of beauty and healthcare services (skin care, spa, & massage), attractive travelling packages, nature beauty, and food are also drawing the medical tourists to a destination country (Yu & Ko, 2012).

Another factor is convenience in receiving pre- and post-treatment care and information about insurance (Al-Amin, Makarem, & Pradham, 2011). Other factors concern a hospital’s expertise in performing major surgeries (cancer, high-risk surgeries) and minor surgeries (plastic surgery, dental care, eye care, women’s specific diseases) (Yu & Ko, 2012), quality of physicians and staff concerning attitude, hospitality, and friendliness, hospital’s reputation, location, and personal advice from family, friends and other physicians (Khasuwan & Komolsevin, 2012).

This research, therefore, categorized the medical-related factors as deemed significant by the medical tourists into five groups: reputation of physicians & hospitals (knowledge, expertise, and high technology equipments); medical service availability (before, during, and after treatments); religious and general facilities (halal food, accommodation, praying room); service quality of physicians, nurses, and other staff; and the tourists’ past experience with medical treatments in Thai hospitals.

The tourists’ positive perception of exceptional service quality and affordable price will definitely build up favorable image of Thai medical tourism. It will also serve as an effective buffer against periodical negative incidents occurring in Thailand (e.g. political unrest, epidemic diseases, and natural disasters) (Khasuwan & Komolsevin, 2012). The positive tourism image will definitely affect tourists’ decision to travel and repeat visits (Della Corte & Micera,

2007). Likewise, the positive image of Thai medical tourism is playing a significant role in stimulating the Middle-east tourists to repeatedly come to Thailand, and vice versa (Crooks, Turner, Snyder, Johnston, & Kingsbury, 2011). According to Khasuwan and Komolsevin (2012), word-of-mouth communication via interpersonal communication or the Internet plays a major role in convincing the Middle-east people to seek for further medical services in Thailand. Hence, to boost up the competitive edge of Thai medical tourism, positive image of the medical services of Thailand needs to be strengthened and maintained.

So far, a thorough investigation of Thai medical services image is limited, let alone exploring this concept in relating with the medical-related factors, particularly from the Middle-east medical tourists' perception. Hence, this research aims at generating findings to fulfill the following objectives.

OBJECTIVES OF STUDY

1. To investigate the Middle-east tourists' seeking behavior of medical services in Thailand
2. To explore the medical-related factors that affect the image of medical services in Thailand, as perceived by the Middle-east tourists
3. To explore the relationship between the medical-related factors and the perceived image of medical services in Thailand
4. To investigate the priority of medical-related factors deemed important to affect the perceived image of Thai medical tourism

LITERATURE REVIEW

Medical Tourism Behavior of Middle-east Tourists

Using the cultural framework initiated by Hofstede (1984) to study the Muslim tourists from Malaysia, Indonesia, and Turkey, Sangchoey (2011) found that they have a high level of power distance and uncertainty avoidance. That means they will go back to the places from which they got impressive services. The research by Khasuwan and Komolsevin (2012) revealed that they prefer going back to the hospital where they got positive experiences.

In addition, the Muslim tourists reportedly have a low level of individualism, and a moderate level of masculinity. Hence, they assumedly have a different travelling behavior from their Western counterparts. In this case, Ladki, Mikdashi, Fahed, and Abbas (2002) found that the Arab tourists generally travel with their big family (from 14–21 persons), or within their male groups (8–12 persons). As a result, they preferred staying not in a hotel, but in a spacious residence where they can live together, especially those who stay long for medical services (Khasuwan & Komolsevin, 2012).

The shortage of specialists in the tourists' home country, long waiting list for treatment, and high medical costs, are major reasons for patients seeking medical service in other countries (Alleman, Luger, Reisinger, Martin, Horowitz, & Cram, 2011). In the United States, for example, the insurance companies urged their insured clients to

seek medical treatments overseas (Cohen, 2010) to reduce medical costs. The medical cost paid by the Americans to overseas hospitals is seven times lesser than the amount paid by foreign patients seeking medical services in America (Johnson & Garman, 2010).

As for Thailand, the tourists from Japan, the United States, United Kingdom, and the United Arab Emirates are major groups of international medical tourists visiting Thailand. The Japanese, for example, prefer a long stay in Thailand particularly for medical and health services (Fukahori, Baba, Hioki, Monkong, Intrasonbat & Malathum, 2011), while the Americans seek for dental care, annual check-ups, plastic surgery, laser eye surgeries, and hips & knee transplants, respectively. The American medical tourists also reported having an opportunity to spend leisure time in Thailand (Hirunkitti, Meejinda, Hirunkitti, Maenjing, & Sayaphan, 2009).

In summary, better quality and lower price are two motives for a patient seeking medical services overseas (Jacek, 2012). The advanced medical technology was occasionally found to be more important than prices (Ehrbeck, Guevara, & Mango, 2008). The motives for the Middle-east people to get medical treatments in other countries are somewhat similar. It was found that affordable prices, expertise of physicians and staff, tourist attraction, and religious-related contexts are their motivating factors.

Image on Tourism and Medical Services of Thailand

Tourism image is generally created via a tourist's perception of a particular tourist destination (Trakansiriwanich, 2009). The aftermath interpretation of that perception which varies according to individual conditions, leads to a particular tourism image. That is, if the interpretation turns positive, positive image will follow, and vice versa. The tourist's image of a particular place basically begins with an individual's initial exposure to information about that place before, during, or after visit (Chon, 1990).

Image is significantly related to an individual's buying process of products and services (Cretu & Broodie, 2007). Hence, a favorable image of a tourist destination will definitely determine his/her decision to visit that place (Sooksri, 2006). According to Rittichaiuwat, Qu, and Brown (2001), the positive image of a tourist attraction site significantly affected the tourists' choice of destination and repeat visitation.

The tourism image of Thailand perceived positively by international tourists primarily concerns cultural dimension (habitats, rituals & festivals, and historical & cultural sites), followed by price, hospitality of Thai people, travel convenience, nature beauty, and food diversity. Negative Images were also reported, e.g. crowdedness in big cities, traffic jams, pollutions, and night-life entertainments (Rittichaiuwat, Qu, and Brown, 2001).

The image of Thai medical tourism is generally positive, due to high quality medical services of expert physicians and modern equipments, cheaper prices, and better quality of before-and-after medical services (Thailand Board of Investment, 2014). The medical tourists ranked the treatment quality of Thai hospitals as the highest quality, followed by physicians' knowledge and expertise, safety, service quality, easy access to information, affordable price, fast treatments, fair charges, and travel convenience (Hirunkitti, Meejinda, Hirunkitti, Maenjing, & Sayaphan, 2009).

A report by King Mongkut's University of Technology Thonburi (n.d.) stated some advantages of Thai medical services over her regional peers such as Malaysia and Singapore. That is, the advance of medical services in Thailand has been initiated and operated by individual private hospitals under a loose supervision by the government. Hence, those private hospitals compete for and penetrate the markets in accordance with their own expertise, e.g. Bangkok Hospital for heart surgeries, Vejthani Hospital for bone surgeries, and Bamrungrad Hospital for diabetes (Personal interview, September, 2012). As a result, unlike India, Thai medical services aim at non-mass markets, and, unlike Singapore, do not charge patients at the similar high price.

Conceptual Framework

Since the medical factors in Thailand are various, it is therefore noTable: to investigate the relationship between those factors and Thai medical image as perceived by the Middle-east tourists. The result of this research may shed some lights on their perception, which may differ from that of the tourists from other regions. In Figure1, the medical-related factors consist of a) reputation of physicians & hospitals (knowledge, expertise, and high technology equipments), b) medical service availability (before, during, and after treatments), c) religious and general facilities, d) service quality of physicians, nurses, and other staff, and e) the tourists' past experience with medical treatments in Thai hospitals. Therefore, the present study addressed one research question: To what extent does each dimension of medical-related factors predict the variation of the perceived image of Thai medical services.

METHODS

The population of this research comprises the tourists and their companions (family & friends) from 14 countries in the Middle-east region, excluding Israel. They are 20–65 years old and travelled to Thailand with a purpose of seeking medical services in Thailand of any kind. In 2013, it was reported that 630,243 Middle-east tourists travelled to Thailand (Department of Tourism, 2015).

The sample consisted of 204 Muslim medical tourists from the Middle-east region and their companions, categorized into 3 groups:

- a) Those with medical services as primary purpose (93 persons).
- b) Those with medical services as secondary purpose (73 persons).
- c) Their companions (38 persons).

The researcher employed the G*Power version 3.12 and got the sample size of 118 subjects (effect size = .015, alpha=.05, power = 0.80, and 5 predictors). The researchers, however, collected data from 204 subjects in order to avoid Type II error that might occur due to a too small sample size (Stevens, 2012). The subjects were selected purposively to recruit only those whose qualifications meet the research objectives, and who are willing to participate in this study. Interpreters of Arabic language were also employed periodically to facilitate communication between the researchers and the subjects.

The questionnaire consisted of 4 sections: demographic information, types of medical services sought by the tourists, perceived importance of medical-related factors, and perceived image towards medical service in Thailand. An

open-ended section was also included to generate free flow of information about Thai tourism in general and medical services in particular.

The questionnaire was tested for content validity using Index of Item-object Congruency: IOC) from three experts. Only items with IOC value higher than 0.5 were included in the instrument. The questionnaire try-out with 30 participants revealed the Cronbach alpha coefficient of 0.89 that signifies the high reliability of this questionnaire. The data were analyzed using descriptive statistics, Pearson's correlation, and the hierarchical multiple regression.

FINDINGS

The descriptive analysis revealed that two-third of the Middle-east tourists is males (66.2%), aging between 26–45 years old (59.3%), married (69.6%), and having 4–6 family members (34.8%) or 7–9 members (31.4%). These tourists came from 14 countries in the Middle-east region: 35.2% from the United Arab Emirate, 19.6% from Oman, 14.7% from Qatar, and 12.3% from Kuwait, and so on. They got a vocational certificate or a bachelor's degree (58.8%), working with the government (44.1%) or with a private company (23.0%)

Medical Tourism Behavior of the Middle-east Tourists

The Middle-east tourists reportedly sought medical services from Vejthani Hospital, Bangkok Hospital, Barmrungrad Hospital, Smitivej Hospital (Srinakarin), and others. Their main travelling purpose is to get medical treatments, mostly for general check-ups; while a few for special treatments (e.g. heart surgery). Most of them (70%) have come to Thailand twice or more, and would stay 1–2 weeks (34.3%), more than 2–4 weeks (25.3%), or more than one month (7.2%). Word-of-mouth communication from friends and physicians in their country are the two highest motivating factors for their decision to get medical treatments in Thailand.

Perceived Importance of Medical-related Factors

The Middle-east tourists perceived almost all of the medical-related factors as highly important (mean=4.683–4.277), except for availability of in-house Halal food (mean=4.099) & residence (mean=4.063), and affordable medical prices (mean=3.984) that were ranked as high important (Table: 2).

Perceived Image of Thai Medical Tourism

The image of Thai medical tourism as perceived by the Middle-east tourists is exceptionally high. They perceived that Thai medical tourism is excellent in almost all aspect (mean=4.369–4.244), except for medical costs (mean=3.699). However, the relatively high standard deviation (s.d.=1.055) on medical costs indicted their scattering opinion in this issue (Table: 3).

Relationship between the medical-related factors and the perceived image of medical services in Thailand

Pearson's correlation was conducted to investigate the relationship between the medical-related factors and the perceived image of medical services in Thailand. The results indicated significantly low and positive relationships

between the perceived image of medical services in Thailand and reputation of physicians & hospitals ($r=.250$, $p<.05$), medical service availability ($r=.277$, $p<.05$), service quality ($r=.217$, $p<.05$), and tourists' past experience with medical treatments in Thai hospitals ($r=.321$, $p<.05$). The availability of religious & general facilities was found to exert no significant relationship with the tourists' perceived image of medical services in Thailand ($r=.146$, $p>.05$) (Table: 4).

Variation of the perceived image of Thai medical tourism as perceived by the Middle-east medical tourists

A hierarchical multiple regressions was employed to establish whether the addition of predicting variables provided improvement in the prediction of perceived image of Thai medical services. The assumption of multicollinearity was not violated, since no correlation coefficients among all five predictors exceeding .80 (Table: 4), and the tolerance values (.327–.711) and Variance Inflation Factor (VIF) (1.407–3.064) are in the acceptable threshold (Stevens, 2012). The positive correlations between the predictors and the dependent variables (Table: 4) confirmed the linear relationships. Hence, the hierarchical multiple regression was performed with confidence.

To perform the hierarchical regression, the order of independent variables entering the equation has to be justified (Stevens, 2012). In this research, the reputation of physicians & hospitals is considered the most important as mentioned in a number of previous researches, therefore being entered into the equation first. Furthermore, since the Middle-east tourists keeps coming back to the places from which they received positive impression, past experience with Thai hospitals should be entered in second. The service availability and quality provided by the hospital and its physicians and staffs came in the third and fourth order, while the religious and general facilities should be considered the least important, and being entered last into the equation.

At step 1, reputation of physicians & hospitals was found to be a significant predictor of the perceived image of Thai medical tourism, $R = .250$, $R^2 = .062$, $F(1,165) = 10.983$, $p<.01$. When 'past experience' was added in step 2 as a predictor with 'reputation of physicians & hospitals', a significant improvement in prediction emerged, $R = .334$, $R^2 = .111$, $F(2,164) = 10.289$, $p<.001$, and the addition of 'service availability' as another predictor in step 3 also resulted in a significant improvement in prediction, $R = .340$, $R^2 = .116$, $F(3,163) = 7.125$, $p<.001$.

With the addition of 'service quality' in step 4, although a significant prediction was found, $F(4,162) = 5.311$, $p<.001$, this predictor did not contribute to the additional prediction of the perceived image of Thai medical tourism, $R = .340$, $R^2 = .116$. However, when adding 'religious and general facilities' to the equation, it was found to result in a significant improvement in prediction, $R = .364$, $R^2 = .132$, $F(5,161) = 4.908$, $p<.001$ (Table: 5).

CONCLUSION AND DISCUSSION

This study is investigating the relationship between medical-related factors and the image of Thai medical tourism as perceived by the medical tourists from the Middle-east region. The findings revealed that they came to Thailand repeatedly for physical check-ups or major surgeries, and stay longer than one week up to several months. In accordance with relevant literature (see, for example, Yu & Ko, 2012; and Wilson, 2011), these medical tourists ranked as top priority the expertise and reputation of physicians & hospitals, followed by other factors, e.g. service and quality,

religious-related & general facilities, and so on. They also indicated the positive image of Thai medical tourism in all aspects. This issue is in line with the report by BOI (2012 & 2014) stating that Thailand was ranked as one of the top medical tourism destination by international patients.

The hierarchical regression analysis yielded nevertheless an interesting finding. When the factor of ‘expertise & reputation of physicians and hospitals’ stood alone, it exerted a significant prediction to the perceived image of Thai medical tourism. However, the tourists’ past experiences with medical services in a particular hospital, when entered into the equation, came out distinctively as the top priority of medical-related factors contributing to the perceived image of medical tourism in Thailand.

This finding is in line with the cultural dimension of the Middle-east people who possess a high level of uncertainty avoidance (Hofstede, 1984). That is, they will keep using the products and services from which they received positive experiences. In a personal interview, a tour agent reported that a group of Middle-east tourists who visited Thailand many times kept asking for the same van driver, going to the same tourist sites, eating in the same restaurant, and shopping in the same shopping mall. In other words, they’d love to avoid uncertainty that may occur out of unfamiliarity with new places and people.

The same could be said to their medical-seeking behaviors. Most of the tourists in this study are repeat visitors to the same hospital; therefore, they may no longer raise questions about physicians’ expertise and reputation of the hospital. Even the availability of service quality and religious-related facilities, as well as medical costs, were not considered much important, since, with their previously positive experiences, they are confident to receive quality services at fair prices from the physicians, staff, and the hospital.

To boost up the popularity of the medical tourism in Thailand among the Middle-east patients, the hospital, physicians, and medical staff should attempt to generate positive experiences with the newcomers, who will, consequently, disseminate their favorable impression to their family and friends via both word-of-mouth communication and/or new media (e.g. Facebook). According the the study by Khasuwan and Komolsevin (2012), the most important information sources for the Middle-east patients to seek medical services in other countries are advices from friends and respected persons via pep talks or Internet. Mass media were ranked as exerting a minimal role as an information source for their decision making.

REFERENCES

- Al-Amin M., Makaren S. and Pradhan R. “Hospital ability to attract international patients: A conceptual framework,”. International Journal of Pharmaceutical and Healthcare Marketing. 5(3) : 205–221 : 2011.
- Alleman B.W., Luger T., Reisinger H. S., Martin R., Horowitz M.D., and Cram P. “Medical tourism services available to residents of the United States,”. Journal of general internal medicine. 26(5) : 492–497 : 2011.
- ASEAN Information Center. Thailand: ASEAN’s medical hub. Available from: www.asean thai.net. (10 January 2015)
- Bangkok Post Business. Middle east travellers return: Medicare, halal options big draws. Available from: www.bangkokpost.com. (8 May 2015).

- Chon K.S. "The role of destination image in tourism: A review and discussion,". The tourist review. 45(2) : 2–9 : 1990.
- Cohen I.G. "Protecting patients with passports: Medical tourism and the patient protective–argument,". Iowa Law Reviews. 95(5) : 1467–1567 : 2010.
- Cretu A.E., and Brodie R.J. "The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective,". Industrial Marketing Management. 36(2) : 230–240 : 2007.
- Crooks V.A., Turner L., Snyder J., Johnston R., and Kingsbury P. "Promoting medical tourism to India: Messages, images, and the marketing of international patient travel,". Social Science & Medicine. 72(5) : 726–732 : 2011.
- Della C.V., and Micera R. "Destination image analysis and management: Results of an empirical research on the case of Naples,". In proceedings of the 6th International congress Marketing Trends. France, Paris, 2007.
- Department of Tourism. Number of middle–east tourists to Thailand (2009–2011). Report. Bangkok. [in Thai]. (2012).
- Ehrbeck T., Guevara C., and Mango P.D. "Mapping the market for medical tourism,". McKinsey Quarterly. May : 1–11 : 2008.
- Fernquest J. Medical tourism: Looking ahead to 2015. [Online]. Available from: www.bangkokpost.com. (9 July, 2015)
- Fukahori H., Baba Y., Hioki F., Monkong S., Intarasombat P., and Malathum P. "Healthcare services for Japanese elderly long–staying in Thailand from the perspective of the patient and healthcare providers: A survey study,". Archives of Gerontology and Geriatrics. 53(2) : 168–173 : 2011.
- Gupta A. Thailand remains top medical tourism hub, but faces new challenges, [online]. Available from: www.Thailand-business-news.com. (9 July, 2015)
- Hirunkitti P., Meejinda P., Hirunkitti S., Maenjing S., and Sayaphan U. "Study of medical tourism behavior of International tourists,". (Research report), Phatumthani. Rajamangala University of Technology Thanyaburi. [in Thai]. 2009.
- Hofstede G. "Cultural dimensions in management and planning,". Asia Pacific journal of management. 1(2) : 81–99 : 1984.
- Jacek K. "Global medical tourism management: A needed research agenda,". Advances in Management. 5(1) : 5–7 : 2012.
- Johnson T.J., and Garman A.N. "Impact of medical travel on imports and exports of medical services,". Health Policy. 98(2–3) : 171–177 : 2010.
- Kasikornthai Research Center. Medical tourism business opportunity of Thailand to penetrate ASEAN markets. [online] Available from: <http://www.ksmcare.com/Article/82/28465>. (10 October 2012)
- Khasuwan S., and Komolsevin R. Image of Thai medical tourism as perceived by Middle–east tourists. Research funded by Thailand Research Fund. 2012.
- King Mongkut's University of Technology Thonburi. (n.d.). Research strategies on being medical hub. [online] Available from: <http://kmutt.ac.th>. (9 July 2015)

-
- Ladki S.M., Mikdashi T.S., Fahed W., and Abbas H. "Arab tourists and the Lebanese vacation ownership industry: A quality of life perspective,". International Journal of Hospitality Management. 21(3) : 257–265 : 2002.
- Nomadic Matt. 11 reasons why I love Thailand. [online]. Available from: from www.nomadicmatt.com. (9 July, 2015)
- Office of Health Business Promotion, Department of Export Promotion, Ministry of Commerce. Number of foreigners receiving medical services in Thailand (2003–2011), 2012.
- Patients Beyond Borders. Medical tourism facts and figures. [online]. Available from: www.patientsbeyondborders.com. (9 July, 2015)
- Rittichainuwat B., Qu H., and Brown T. "The image of Thailand as an international travel destination,". Cornell Hotel and Restaurant Quarterly. 42(2) : 82–95 : 2001.
- Sangchoey T. Differences regarding cultural dimensions and tourism behavior. [online]. Available from: <http://www.etatjournal.com/web/etat-tourism-journal/311-cross-cultural-differences-tourist-behavior>. (April, 2, 2011)
- Sevens J.P. Applied multivariate statistics for the social sciences. New York: Routledge, 2012.
- Sooksri H. Image of Koh Samui as perceived by international tourists. [online]. Available from: <http://e-research.sru.ac.th/?q=node/147> ASTV. (9 July, 2015)
- Thailand Board of Investment. Thailand: Medical hub of Asia. [online]. Available from: www.boi.go.th. (9 July, 2015)
- Thailand Board of Investment. Thailand's medical industry. [online]. Available from: www.boi.go.th. (9 July, 2015)
- Tourism Authority of Thailand. Number of international tourists to Thailand: Yearly comparison. [online]. Available from: http://marketingdb.tat.or.th/marketingdatabase/index.php?option=com_content&view=article&id=208&Itemid=152. (2011b). (9 July, 2015)
- Trakarnsirivanich K. "Significance of positive image on Thai tourism and market expansion to quality tourists from China,". Journal of International and Thai Tourism. 5(1) : 54–63 : 2009.
- Wilson A.R.A. "Foreign bodies and national scales: Medical tourism in Thailand,". Body & Society. 17(2/3) : 121–137 : 2011.
- Yu J.Y., and Ko T.G. "A cross-cultural study of perceptions of medical tourism among Chinese, Japanese and Korean tourists in Korea,". Tourism Management. 33 : 80–88 : 2012.