



Cross-border medical tourism of tourists in Thailand's border provinces: A case study of Laotian tourists in Nongkhai and Udon Thani

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Abstract

The objectives of this research article were to study: (1) trends in medical tourism in Thailand; (2) medical tourism in border provinces (Laotians in Nongkhai and Udon Thani); and, (3) address issues related to medical tourism. 400 questionnaires were administered to Laotian tourists using health business services in Nongkhai and Udon. Independent variables included characteristics and six factors related to decision-making about using Thai services. Dependent variables were expectations and satisfaction. First Order Confirmatory Factor Analysis indicated that 3 significant factors influenced decision-making: marketing promotion, need and service quality and price. Implications in the area of medical tourism and directions for future research are discussed.

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Introduction

Background and Significance of the Study

The tourism plays a vital role in the global economy. The World Tourism Organization (UNWTO) has revealed that there were 1.4 billion tourists in 2020 and projected the number will reach 1.8 billion in 2030. The Asia and Pacific region has become a major tourist destination and will see tourist growth by 30 percent. Thailand is major destination in this region due to potential tourism resources and diversified tourism activities. One of tourism's globally acclaimed and extensively growing areas is medical and healthcare tourism. Thailand is ranked sixth in the world and produces 1 of 7 global healthcare tourism values. (Global Wellness Summit, 2016). The Thai government has set up the national development strategy for

international healthcare hub (2016–2025) with strong aims to become a medical hub to drive the new engine of growth and propel tourism to reach the revenue target of 2.71 trillion Baht. In the past decade, Thailand has seen constant growth of medical tourists as the number expanded from 137,000 persons in 2007 to 444,000 persons in 2017, worth approximately 70 billion Baht (Naranong, A. & Naranong, V., 2011), increasing by 20 percent per annum. It is anticipated that medical and healthcare tourism will generate revenues of at least 140 billion Baht in the next few years. The major target for tourists is from Europe, Japan, the Middle East and Southeast Asian countries such as Cambodia, Laos, Malaysia and Vietnam (CLMV). Statistics show that medical tourists are growing by 18.68 percent per annum, compared to the past five years. This is a result of domestic population growth, human development and domestic economy growth as GDP increases by 6.5–7 percent per annum. The number of Myanmar tourists accounts for most while Laotian tourists are growing most.

Meantime, ASEAN nations jointly entered a cooperation agreement on tourism to enhance cooperation and move forward to a seamless ASEAN to promote

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equality, reduce the development gap and create a sustainable economy through border trade and investment. To achieve this goal, ASEAN tourism strategy 2016–2025 has been implemented as the main driving tool, resulting in constant growth of the relevant economy in border provinces and new entrepreneurs such as transportation, hotels, restaurants, souvenir business and local attractions. (Arellano, 2007) The Thai government has thus determined strategic goals to accommodate CLMV medical tourists as a specific tourism market to drive S-curve economy in the future. Therefore, the study on the trend of cross-border CLMV medical tourists in border provinces is significant to development planning and promotes benefit from tourism in border provinces in accordance with a seamless ASEAN. Studies on cross-border healthcare services in border provinces are not comprehensive. The researchers, thus, consider the benefits in this study for further planning of relevant authorities.

Objectives of Research

(1) To study situations and trends of medical tourism in Thailand; (2) To study medical tourism behaviors in Thailand's border provinces, a case study of Laotian tourists in Nongkhai and Udon Thani; and (3) To study problems, obstacles and propose suggestions accommodating medical tourists in Thailand's border provinces.

Scope of Research

This mixed methodology research studies situations/trends of medical tourism behaviour of Laotian tourist in Nongkhai and Udon Thani as well as problems and obstacles and proposes suggestions for accommodating medical tourists. The scope of research is Nongkhai and Udon Thani because they are high potential provinces as medical tourism hub, and there are several healthcare service providers. Infirmaries certified under JCI are widely accepted by Laotian tourists, accounting for 6.4 percent of all foreign medical tourists and the first among CLMV tourists. Meantime, the questionnaire was used for gathering primary data from foreign tourists using the healthcare services in Nongkhai and Udon Thani for a period of 6 months (July–November 2019).

Variables

Independent variables consist of demographic characteristics including gender, age, occupation, status, education, income and domicile. Factors influencing decision to use medical tourism services in Thailand's border provinces include: (1) medical service quality, price and product; (2) place and access; (3) facilities; (4) marketing promotion; (5) tourism resources and attractions; and (6) personal needs of tourists.

Dependent variables

These comprise of: (1) behaviours of tourists using medical tourism services in Nongkhai and Udon Thani; (2) opinions toward factors influencing decision to use medical tourism services in border provinces of Thailand; and (3) expectation and satisfaction of tourists using medical tourism services in border provinces of Thailand.

Literature Review

Concepts, Theories and Relevant Research Papers

Medical tourism means a person travels across a border to a foreign country to receive medical services with standards equivalent to or better than their home country. (Heung, Kucukusta & Song, 2010) According to Gan and Frederuck (2011), there are four types of medical tourism which are; a foreign tourist directly contacts a foreign hospital; a foreign tourist contacts a hospital through agencies; a foreign tourist is dispatched by an insurance company or employer because the medical expenses in the home country are relatively high; and a hospital sends a patient to its network hospital in a foreign country. The behaviours of medical tourism in Thailand are divided into following categories: (1) leisure tourists do not have initial intention to receive medical service but have an illness while travelling needing medical service at a hospital; (2) wellness tourists purchase a package from a travel agency which combines travelling and medical service; (3) expatriates designated by a government or a company to work in Thailand have an illness and receive medical service in Thailand; (4) expatriates residing in Asian countries have an illness and decide to receive medical service in Thailand; and (5) medical travellers having intention to receive medical service and make an appointment with a hospital or physician in advance. For this case, the hospital may provide a tour package during treatment or rehabilitation or service users contact a travel agency to prepare the entire package.

Regarding to the concept of health market demand, medical treatment currently is a transnational product or service as there are manufacturers, sellers and buyers supported by marketing and commerce, and prices are established in accordance with marketing mechanism. However, the marketing mechanism of healthcare service is incomplete, and it constitutes humanity and ethics factors leading to artificial demand. Normally, demand to products and services has contrary relationship with product and service price. Demand to medical service, however, has derived demand, which means satisfaction will increase when consumers have good health. It is supply induced demand where the supply controller has

power to determine consumption level because consumers do not have knowledge about health or actual treatment and costs, and have uncertainty and unpredictable illness. The medical service need is a mixture of consumption and investment because healthcare must come from intention to enable satisfaction to health leading to other works efficiently. (Khasuwan, 2017) Horowitz and Resensweig (2008) proposed that factors influencing a person to travel to a foreign country for medical service are more affordable treatment expenses, longer treatment in home country, limited service due to social, cultural and legal factors such as assisted reproductive technology, organ transportation, stem cell and personal satisfaction to hospital and country.

The analysis of the behaviour of tourists aims to estimate number, expenditure value, excursion time and other issues during each season. The factors of travelling behaviour are personal factors including health, income, attitude, experience, and external factors including politics, economy and society. (Tae, 2005) Cohen (2008) explains that the principles to achieve goals of tourists are needs in new experiences, needs in impression and safe with familiar things. Moreover, Khasuwan (2017) suggests that the decision process comprises of 5 steps as follows: (1) need recognition; (2) information search; (3) evaluation of alternatives; (4) decision making; and (5) post-purchase behaviour. Tourists will assess the results from gained experiences which affects satisfaction or dissatisfaction.

Methodology

The data used in this research has been derived from two sources:

1. Primary data were compiled from a questionnaire about behaviors of Laotian medical tourists in Nongkhai and Udon Thani. The qualitative data were collected from purposively selected 25 key informants of medical tourism key persons and specialists in border provinces and focus group with 25 representatives of government authorities and private sector.

2. Secondary data were compiled from various sources of government authorities and private companies including textbooks, domestic and international journals, thesis papers, books, seminars, statistics, articles, analysis, news and public relations, printed media, advertisement for findings analysis and synthesis.

Sample Group/ Key Informants

The quantitative data were derived from questionnaires about behaviors of medical tourists. The 400 cases of Laotian medical tourists were randomly selected from medical tourists who crossed the border to receive

medical services in Nongkhai and Udon Thani. The sample size was determined in accordance with the calculation formula by Yamane (1973). The number of foreign tourists in Nongkhai and Udon Thani was 6,493,896 in 2018. The proportion of the sample was 230 cases in Udon Thani and 170 cases in Nongkhai. The total of the sample group, therefore, was 400 cases.

The qualitative data were gathered from 25 key informants selected from key persons and specialists in medical tourism in border provinces and focus group with 25 representatives from government agencies and private companies.

The research tools made by the researchers consisted of three types:

1. The questionnaire for gathering behavior data of medical tourists was developed in accordance with quantitative research, and its validity and reliability were verified. The questionnaire was used to collect tourist behavior data relevant to the following issues: (1) Laotian tourist behaviors travelling cross border to use medical service in Thailand's border provinces; (2) Expectation of Laotian tourists travelling cross border to use medical service in Thailand's border provinces; (3) Satisfaction of Laotian tourists travelling cross border to use medical service in Thailand's border provinces; and (4) Factors influencing the decision to use medical service in Thailand's border provinces.

2. The in-depth interview form was developed and three specialists verified the content accuracy. The in-depth interview aimed to compile trends of medical tourism, problems, obstacles and suggestions for accommodating the medical tourism market in Thailand's border provinces.

3. A set of questions for focus group. Three specialists verified content accuracy of the research tool.

Data Compilation

The procedures for collecting quantitative data from 400 cases of Laotian medical tourists in Nongkhai and Udon Thani were as follows:

1. The complete 230 sets of questionnaires were used in the target area – Udon Thani and 170 sets in Nongkhai. The researchers read the questionnaire for respondents and helped them fill in the form.

2. The in-dept interview with key persons and representatives of entrepreneurs. The key informants were determined and appointed for interview. The researchers recorded the interview, made notes and transcribe such. The data were verified with triangulation.

Data Analysis

1. Descriptive statistics were used for explaining general characteristics of the sample group and describing behavior, expectation and satisfaction of tourists. The statistics

included frequency, percentage, mean and standard deviation. The mean criteria were determined as five levels: 4.50–5.00 = very high, 3.50–4.49 = high, 2.50–3.49 = moderate, 1.50–2.49 = low and 1.00–1.49 = very low.

2. Inferential statistics were used to test the hypothesis. They were applied to study factors influencing the decision to use medical service in border provinces and also analyze first order using Confirmatory Factor Analysis (CFA). The descriptive statistics included mean, standard deviation, skewness, kurtosis and one-way ANOVA for comparison of population mean. The criteria were employed for verifying model congruence with empirical data. In case of model modification, the consideration criteria were: (1) possibility in terms of relevant theories and research papers; (2) modification indices. Subsequently, the data analysis commenced from the first step. If the verification proves that the model is congruent with data, it will be interpreted by explaining correlation of variable with the last model (Hair, 2010).

The indices used for verifying model congruence with empirical data comprised of Chi-square (the value should be close to zero) Fit Index ($0.09 \leq \text{Fit Index}$; Hair, 2010) CFI ($0.09 \leq \text{Fit Index}$; Hair, 2010) RMSEA ($\text{RMSEA} \leq 0.08$; Hair, 2010) SRMR ($\text{SRMR} \leq 0.08$; Hair, 2010) and AIC (the value should be close to zero).

3. Data were derived from in-depth interview and focus group meeting. The data from in-depth interview were analyzed in accordance with the objectives of the research. The data were grouped and then content analysis technique was implemented for data analysis.

Results

It was found that the trend of medical and healthcare service is constantly growing and accounts for 62.7 percent of global medical tourism. South Asia and Southeast Asia sees the strongest growth at the rate of 28 percent per annum. The services mostly used by tourists are health checkup, cardiology, eye treatment, surgery, obstetrics, gynecology and delivery and specialty. Meantime, Thailand's medical tourism trend is in line with the global trend with a growth rate at 20 percent per annum as a total value of direct economy and indirect economy worth at least 140 billion Baht per year. The factors supporting constant growth are affordable medical expenses, advanced medical technology, hospitality and quality service. Apart from quality tourists from Europe, the Middle East and East Asia, cross-border tourists from neighboring countries comprise of high potential tourists and lower-class patients. Due to healthcare gaps between Thailand and CLMV, such is a factor driving needs to access quality healthcare and specialty service, together with positive attitude towards Thai public health.

Nongkhai is a border province in the northeastern region, where cross-border medical tourism is found. The Mekong River is natural border between Thailand and Laos with a length of approximately 210 kilometers. NongKhai is opposite Vientiane and Bolikhamsai Province. There are six checkpoints, of which two are permanent checkpoints including the Thai-Lao Friendship Bridge checkpoint and Nongkhai port checkpoint, and four temporary checkpoints comprising Ban Muang, Sangkhom district, Ban Mo, Si Chiang Mai district, Ban Chumphon, Phon Phisai district and Baan Pengchan, Rattanawapi district. As the healthcare quality in Thailand is far different from neighboring countries, more people cross the border to receive medical services in Thailand. Another factor is that CLMV economies are substantially growing, resulting in people seeking healthcare in two aspects: needs to access to quality services and specialty medical services in public and private hospitals or specialty clinics in Thailand. If they need more complicated treatment, they will choose better hospitals or specialty clinics in the cities of Nongkhai and Udon Thani, which also offer several attractions and shopping activities. According to interviews with medical tourists at a clinic in Udon Thani, they got to know physicians from close friends prior to the treatment with the clinic. They mostly travel by private cars passing the Thai-Lao Friendship Bridge. In case that they cross the border through a temporary checkpoint, they will go to clinics in Tabor district or other districts. If they have to stay overnight at a hospital, relatives will rent rooms or hotels 3–4 days per time on average and often buy necessary things.

The analysis of results of the behavior of Laotian tourist who travel through the border to receive medical services in Thailand's border provinces shows that the majority of respondents are business owner, female and aged between 40 and 49 years. They receive treatment as follows: specialty disease treatment, health checkup, eye treatment, obstetrics, gynecology and delivery, cardiology, dentistry, surgery and health promotion and rehabilitation. The expectation level and satisfaction level towards Thai medical services are high in all aspects. In addition, factors influencing the decision to use medical services are described in [Table 1](#).

The results of Pearson correlation coefficient of factors influencing the decision to use medical services in Nongkhai and Udon Thani reveal that all factors have correlation significantly (** $p < .01$ and * $p < .5$). The Bartlett's Test of Sphericity = 459.332 ($p < .000$.) is interpreted that correlation between factors is different from identity matrix significantly. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KOM) is close to 1 (0.783), which means that factors are correlated enough to be used for factor analysis as described in [Table 2](#).

Table 1 Factors Influencing Decision to Use Services in Thailand's Border provinces

Factors	Max	Min	SK	KU	\bar{X}	SD
Service quality and price	5.00	4.25	-1.065	3.056	4.40	0.620
Place and access	5.00	4.33	-0.461	-0.106	4.33	0.592
Facilities	5.00	3.64	-0.867	1.307	4.17	0.480
Tourism resources/attractions	5.00	4.21	-0.886	-0.467	4.21	0.329
Marketing promotion	5.00	4.45	-0.501	0.224	4.66	0.882
Personal need responsiveness	5.00	4.39	-0.219	-0.363	4.50	0.482

Table 2 Factors Influencing Decision to Use Medical Services in Border provinces

Factors Influencing Decision	Factor Loading b (SE)	t	R ²
Marketing promotion	0.76** (0.08)	8.44	0.83
Personal need responsiveness	0.49** (0.06)	6.12	0.74
Service quality and price	0.37** (0.05)	6.06	0.69
Location and access	0.23** (0.05)	4.84	0.58
Facilities	0.20** (0.05)	4.02	0.53
Tourism resources / attractions	0.15** (0.05)	3.98	0.41

Note: Chi-Square = 11.42; df = 8, $p = .11$; GFI = 0.82; AGFI = 0.89; RMR = 0.0025; RMSEA = 0.0034.

According to the table of first order confirmatory factor analysis, it is found that all six aspects of factor loading are positive, ranging from 0.41 to 0.83 with statistical significance at level of 0.001. The factors are ranked in accordance with loading from the highest to the lowest as follows: promotion, personal need responsiveness, service quality and price, place, facilities and tourism resources/ attractions, respectively. Furthermore, from the results of focus group regarding problems, obstacles and suggestions for accommodating medical tourist market in border provinces, there are significant issues as follows: (1) complaints about service quality, service rate and medicine price; (2) uncollectable expenses become burden of public hospital since alien patients are not entitled to social security system; (3) brain drain to private hospitals, inadequate physicians and medical personnel and concentration of personnel in major cities; (4) intense competition among private businesses affecting small and medium enterprises; and (5) lack of integration of supply chain management in medical tourism.

Discussion

Thailand's medical tourism is expanding at a fast pace thanks to the government policies to develop Thailand as a medical hub. Additionally, the strong demand growth of foreign patients is a result of service quality and worthiness compared to competitors. Likewise, Sujarinpong and Manirochana (2019) explained that the government policy and position to make Thailand a medical hub was concretely driving medical tourism. More than 256 private hospitals have the potential to accommodate foreign patients. The

factors supporting business growth consist of population, lifespan, market development and medical technology advancement. Also, Pattharapinyophong (2019) stated that the market value of medical tourism of South Asia and Southeast Asia was worth around USD45.5–72.0 billion. Health technology will be a significant push factor in the future. According to Ehrbeck, Guevara, and Mango (2008), medical tourism leads to growing investment in medical technology and reducing health inequality in all regions. Kieanwatana, (2018) stated that Thailand's medical tourism has advantage in terms of medical personnel as they are specialists in diseases, average expenses are lower than the global level and there are diversified tourist attractions. Marketing promotion is a major mechanism of private hospital expansion leading to intense competition, especially service standard improvement to impress customers and respond to personal needs among tourists e.g. an environment similar to a hotel, Thainess. Todd (2012) remarked that medical tourism marketing focused on integrated services in four product groups comprising main products, basic products, unexpected products and other products. The unexpected products are a key part to impress service users such as convenience, service beyond expectation and international language communication. Likewise, Kanittinsuttitong (2016) proposed that apart from treatment, tourists needed, for example, beautiful tourist attractions, convenience, package attractiveness, diversified service and foreign language proficiency. The study by Kasornbonnak and Nuritmon, (2019) indicated that the majority of tourists who received medical services in Thai hospitals were high quality tourists from Japan, the Middle East, Europe and

the USA as they tend to focus on service quality and standard with fair price as first priority. On the contrary, cross-border patients from neighboring countries rather focus on marketing promotion and personal need responsiveness. It can be implied that the influence of marketing strategies affects quality awareness. As a result, competition in product and service among private hospitals is intensified. Small and medium hospitals therefore have to adapt. Moreover, cross-border patients tend to focus on quality and standard when compared to hospitals in their country because of the health service gap. They need quality service from specialists that is unavailable in their country. Similarly, Bochaton (2013) and other studies in European countries stated that emerging countries have less medical service capabilities and people are unable to reach medical services, especially in remote areas. They have to rely on better medical services in a foreign country. The most popular Thai medical services include health checkup, surgery, dentistry, orthopedics and heart surgery. Lajevardi (2016) also described that the most popular medical services were beauty surgery, dentistry, orthopedics, obesity, sex reassignment surgery, organ transplantation, eye surgery and health checkup. Presently, the hospital business tends to register as a joint partnership with foreign corporates. The top three nations are Britain, Hong Kong and the USA. The hospitals are mostly concentrated in urban areas having economic significance and tourist attractions because convenience is very important to users.

Jutaviriya, Sannhavong, & Inthiphon (2011) found that border trade GDP accounts for 15 percent of the nation's GDP. It is an activity promoting people and product flows. It drives the economy, not only the extent of border economy but also connecting others including medical treatment. Sathapongpakdee, (2016) explained that there are demands in cross-border medical tourism because comprehensive healthcare in CLMV is far lower than Thailand. Besides, the convenient cross-border travelling enables CLMV patients to receive medical treatment in Thailand. Crossing the border to receive medical services in public hospitals and private hospitals is widely seen. However, some medical tourists are unable to cover all expenses, while hospitals have to consider the humanity factor and are unable to refuse them. A study by Strategy and Planning Division, Ministry of Public Health (2017) revealed that health expenses of the alien population in Thai border provinces tended to grow constantly because the expenses, including medical expenses, health promotion and prevention expenses for alien inpatients and outpatients are uncollectable. This inevitably affects border hospitals, especially in financial burden, Thai health resources allocation for alien workers and epidemics.

The behaviors of those seeking cross-border medical services in the northeastern border provinces show that the majority of respondents are middle-class and lower-class who need specialty medical treatment, so they have to go to large hospitals. If they need more complicated treatment, they will go to Udon Thani city. The majority of them know physicians from recommendations of someone close.

The behavior analysis results of neighboring medical tourists in Udon Thani and Nongkhai prove that the majority of middle-aged female entrepreneurs with high income are high quality tourists and potential market. Correspondingly, a survey by the Department of Tourism (2019) reported that Laos had 18,323 potential tourists, the majority of them entrepreneurs, looking for preventive medical service and advanced treatment in foreign countries and interested in comprehensive healthcare. Thus, the Thai government should promote investment in hospital and healthcare service in border provinces to address tourist demands and resolve the concentration of medical staff in major cities. For lower-class patients who cross the border for medical services in public hospitals, especially community hospitals, Gan and Frederuck (2011, pp. 1–19) explained that patients tended to be familiar with the hospital and asked their friends or relatives in that country to contact the hospital. Patients may have to undertake medical expenses covered by health insurance or not. Likewise, Yu and Ko (2012) summarized that medical tourists can be divided into three groups: maximum effectiveness group, cost effectiveness group and a non-participating group. From the data, it can be implied that medical service behaviors tend to correlate with psychological factors. The majority of them focus on experiences and word-of-mouth from someone close e.g. friends, family/ relatives. (Mona, Suzanne, & Rohit, 2011). In the meantime, Bochaton (2015) found that Laotians who have middle to high incomes desire to use medical services in Thailand at both public hospitals and private hospitals. They choose major border cities rather than going to Bangkok, are satisfied with services of private hospitals in terms of hospitality, manners and politeness at high level. Some issues however should be improved such as medical expenses, information access, visa convenience and domestic security. Lertputtharak (2013) summarized that Thai medical tourism was widely popular because of health professional and competency and public relations.

Main factors influencing the decision to use medical tourism in border provinces are public relations and promotion while personal need responsiveness and selective factor are supporting factors. This result is different to other studies. Mona, Suzanne, & Rohit (2011) stated that quality service, advanced devices, medical expenses and transportation, communication and services

before and after treatment were main factors while tourism activities such as travelling package and natural beauty are supporting factors. Lam, Cros, and Vong (2011) indicated from a study in Macau, that destination selection factors are price, cleanliness, medical device quality, medical staff proficiency and safety standard. The findings are similar to the study by Lertputtharak (2013), which that found factors influencing the decision to select treatment place depended on diseases, health checkup need, need to temporarily change accommodation to experience new atmosphere as recommended by doctor/specialist. It can be explained that factors influencing the decision to use medical services in border provinces are a result of healthcare gaps in the area, so those seeking such have to cross the border to receive better quality medical services in the destination country. The behaviors can be divided into two types: (1) crossing the border to receive medical services in the country with higher health gap and better quality. The medical tourists focus on need responsiveness rather than quality and price. This study indicates that cross-border medical tourist behavior is determined by health gap in the opposite way as the destination country has higher health development index, which is different from general cross-border travelling whereby the destination must be cheap and good enough or better than their own country; and (2) crossing the border to receive medical services in the country with similar or lower health gap. The medical tourists focus on quality and price and are aware of safety and worthiness. This can be found in general medical travelling behavior, and they are quality tourists from Europe, the Middle East or emerging countries. The behavior of cross-border medical tourists from neighboring countries can be divided into two groups as follows: potential medical tourists who have high expenditure capacity. They undertake all expenses and do not cause financial burden on hospitals. Meanwhile, the lower class or middle class who cross a border with personal need responsiveness factor do not have the ability to handle all expenses and eventually cause a financial burden on the government. Khasuwan, (2017) explained that hospital selection was based on hospital fame, hospital specialty, professionals and suitable medical expenses. Correspondingly, the International Trade and Department of Health Service Support, Ministry of Public Health (2016) discovered that the supporting factors consisted of friendliness and several tourist attractions in Thailand. Tourists therefore travel for treatment and vacation with their family at the same time. In addition, Horowitz and Resensweig (2008) concluded that price factor affected the decision to receive medical service abroad because the medical tourists mostly do not have medical coverage and travel

to receive surgery, dentistry, sex reassignment surgery and IVF, so they have to focus on affordable expenses.

Despite hardship with some problems and obstacles that likely affect medical tourism in border provinces, there is growing demand in cross-border medical services due to positive attitude towards quality of Thai public health. Dongbang, Manokuljit, Suphapitiporn, Manatwanich, and Korkaewwichian, (2019) stated that the main factors affecting the decision of Laotian patients to use medical services in Thailand are acknowledging different service quality between Thailand and Laos, expenses payment capability and distance to use service. Additionally, Suwicha, Puchamchote, and Yurachai (2014) described that policies on healthcare for non-resident workers in border provinces are not clear and have been changed by each cabinet. The problem of brain drain / inadequate physicians and medical staff arises out of the government policy to promote the medical hub concept, so they resign from public hospitals to work for private hospitals. Additionally, Kulkalyuenyong (2017) stated that medical tourism growth causes leading private hospitals to employ medical specialists for rendering medical services to tourists, physicians resign from public hospitals and cause medical resources gap between Bangkok and upcountry. For unintegrated medical tourism supply chain management, Manirochana and Nambuddee (2020) explained that medical tourism has hospitals as major service providers. Several relevant businesses, including health agency / consultation, tend to grow. Jagyasi (2010) proposed that tour agencies should develop communication channels among agencies, hotels and hospitals to make cooperation network for providing services and removing language barrier.

Conclusion and Recommendation

1. Suggestions to the public sector are: promote target market, build marketing cooperation with other businesses, support medical tourism, conduct database of specialists and establish one stop center for medical tourists. In addition, improve foreign language skills of medical staff, amend relevant laws to allow foreign physicians to work in Thailand, implement control measures together with participation of consumers to solve complaints

2. Suggestions on policies for relevant entrepreneurs are, for example, health business should build strong points of specialist services to be foremost in mind, focus on quality rather than profits, perform action rather than just words, systematically determine the supply chain model of medical tourism and improve business investment model connecting with tourist attractions.

Conflict of Interest

There is no conflict of interest.

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