Factor Analysis of Effective Factors on the Improvement of Medical Tourism in Shiraz Megalopolis

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Abstract

Medical tourism refers to an international phenomenon of an individual's travel in which most tourists travel long to access to treatment-therapeutic services who because of high cost, long waits, lacking in insurance, and use of services and lack of access to health services in the destination.

In terms of nature, the present study is qualitative, in terms of objective, it is applied and in terms of the way of controlling variables and collecting the data, it is experimental, which has been conducted in 2012-2013 in Shiraz Megalopolis. The population of the present study includes foreign and domestic medical tourists who travelled to Shiraz for their medical treatment. For foreign tourists, 400 samples and for domestic ones 400 samples were selected using the Cochran formula. The data collecting tools is researcher-made questionnaire with 109 questions which were scored Likert scale. The data were calculated using SPSS and through factor analysis.

The factors of "the price of treatment and tourist services", "the quality of treatment and tourist services", "treatment and tourist facilities, capabilities and equipment", "ICT" and "culture" which have the highest roles in improving medical tourism.

The high quality of treatment and tourist services, applying capabilities and modern equipment compatible with universal standards in treatment and tourist domain, applying ICT in the domains of advertisement and marketing and promoting the level of the culture of accepting tourism result in improvement medical tourism in Megalopolis Shiraz.

Keywords: medical tourism, quality, medical facilities and equipment, Shiraz Megalopolis

1. Introduction

Medical tourism refers to a kind of vacation which includes travelling to all over the international borders for achieving a vast realm of therapeutic services (Cooper and Cooper, 2009). Patients who pursue to reduce their treatment costs travel to healthcare centers in other countries to achieve dental, medical and surgical services whose costs are less than those of their own countries (Heung et al., 2010). Medical tourism can be defined as a form of providing affordable therapeutic services for the patients cooperating with tourism industry. This process is usually facilitated by private medical sector, while it is involved in both private and public sectors of tourism industry (Shetty, 2010). Medial tourists, by travelling abroad for surgery and other treatments, enjoy the opportunity of visiting interesting places as well. It means that healthcare is combined with taking vacation (Yu and Ko, 2012: 81). Medical tourism can also be considered as founding a popular form of culture whereby people can travel long distance to receive medical, dental and surgical services; while generally they are considered as tourists (Crooks et al., 2012). Treatment processes not only include elective surgery such as cosmetic surgery and dental surgery, but it also include complicated surgeries such as heart surgery, knee and pelvis joints replacement and so on (Warf, 2010). Preventive therapeutic services like medical examination and healthcare can also be considered to be in the realm of medical tourism (Smith and Puczko, 2011). Medical tourism includes all cases mentioned above, but advanced gradually, its subsets were formed and continued to its own development. Subsets of medical tourism include pregnancy tourism, dental tourism and detoxification tourism and many other kinds (Lunt and Carrera, 2011). Medical tourism has been considered as important because of many reasons: disappointment of being cured in the source country (Runnels and Turner, 2011); no access to treatment services with reasonable cost and time or lack of an environment where patients' relatives sympathize with him or her (Smith and Martínez Álvarez, 2011); inadequate income or insurance for paying healthcare costs in the source country (Gan and Frederick, 2011); high quality of therapeutic services in developing countries (Glinos et al., 2010: 104); heterogeneous view to the legal and ethical issues in complex treatment issues (Rogers, 2008: 61); possibility of easier movement (Aizura, 2009: 305); and maybe the most important reason, increasing demand for cosmetic surgeries which is interwoven to many factors (Wilson, 2010). Development of this sector of medical tourism has resulted in new specialist markets; in such a way that different countries have been specialized in a special kind of treatments like dental surgeries, heart surgery and cosmetic surgeries (Bundhun, 2010). Nowadays, medical tourism has been considered as one of the most developing sectors of

tourism industry in the world, which has caused that involved organizations and countries interested in developing tourism focus their attentions on this sector of the industry and plan for it. Nowadays, the relationship of economic growth with health and treatment development has been clearly observed (Kittikanya, 2008). In new approaches, not only it is the health section which enjoys economic growth, but also it can provide many commercial advantages for countries and in addition to creating new financial resources for developing infrastructures and technology, takes an important role in cross-sectorial strategies for sustainable development (Barre and Christie Mill, 2005). Medical tourism market has been improving and it enjoys variety of kinds and medical tourists pursue healthcare services with high quality and affordable prices (Urkett, 2007: 225). The number of individuals who use healthcare services is growing significantly and the export of this services in the world has been able to be doubled between the years of 1997 to 2003. This process of world increasing is ten times faster than the tourism foreign earnings and five times faster than world exports of services (Harryono et al., 2006). Healthcare services in 2003 was about 0.73 percent of the world commerce and this figure in 1997 was 0.38 percent which in 2003 the proportion of this market in developing countries was 40 percent (Lautier, 2008: 103). Annually, we have about 4 million patients in all over the world whose value is probably about 60 billion dollars (Smith et al., 2009: 594). About 7 billion dollars of this business is devoted to Asia (Crooks and Snyder, 2011: 528). It is imagined that medical tourism constitutes 5 percent of the total world tourism. Overall this market is great and developed (Johnston et al., 2011: 416). This business is a 60 billion dollar one which annually enjoys a 20 percent growth. "By each name you call it, this is an economic activity which has been adopted for healthcare affairs for the first time during recent 50 years" (Bina, 2007: 49). Iran shall have provided 30 percent of its healthcare requirements through exporting goods, medical tourism and tourist treatment by the end of Fourth Development Plan. In addition to the requirement of exporting goods and medical services, the income of medical tourism can be effective for countries especially Asian ones which imagine the movement in development process. (Faramarzi, 2011). This income has caused that some Asian countries such as Singapore, Thailand and India significantly are advertising their own medical services among the world patients. But the low price of medical services in Iran compared with in other countries of the world, its appropriate quality and equality with the newest methods in medicine in the world are among the most important reasons which can promote medical tourism in Iran. In a research conducted in India, important dissuasive factors of developing medical tourism are considered as a bit of the government's creativity, shortcomings in the coordination of industry elements, the lack of mechanisms for accrediting hospitals, the lack of a unitary policy of pricing and standard in hospitals (Nagarajan, 2004: 4). In another research conducted in India, it is confirmed that annual growth in India's medical tourism market (about 2.2 billion dollars in 2012) and the government commitment cause the creation of motivations for private investors (Kalshrtti and Pillai, 2008: 15). The findings of another indicate that cost, practitioners, the credibility and facilities levels of hospitals are considered as the most important factors in patients' decision makings for travelling to other countries (Alsharif et al., 2010: 321). In another research, developing public infrastructures, developing human resources, developing of information systems and marketing and developing products

are among the most important factors affecting in developing medical tourism industry from the point of view of hospital managers (Sadermomtaz and Agha rahimi, 2010: 518).

Because of the important place of medical tourism industry in world economy and also the capabilities of Megalopolis Shiraz in this industry, the present study is conducted with the objective of investigating and evaluating factors effective on developing medical tourism in megalopolis Shiraz.

2. Materials and Methods

The present study, in terms of nature is a quantitative research and in terms of research type it is applied and in terms of the method of control of the variables and data collection procedure it is non-experimental which is conducted in 2012-2013 in megalopolis Shiraz. The data required for doing the research were collected using library, documentary and survey methods and interviewing people and experts. The employed questionnaire is a researcher-made one including 2 parts: the first one included 17 questions regarding general features of tourists and the second part included 92 questions (based on Likert scale) consisted of 5 factors: 1. the price of medical and tourist services; 2. The quality of medical and tourist services; 3. Culture; 4. Medical and tourist facilities, equipment; 5. ICT. To evaluate the validity and reliability of the questions of the questionnaire in the present study, the questionnaires were submitted to some of the professors and experts and their ideas were applied to the questionnaire. Some of questions were deleted and some others were added by recommendation of the professors. In some questions some modifications were applied. To measure the reliability of the questionnaire, a number of 40 questionnaires were distributed among 40 participants (medical tourists) randomly. After collecting the mentioned questionnaire, the data were entered a computer and using SPSS software program version 16 and Chronbach's alpha, the validity of different parts of questionnaire were obtained equal 0.85, 0.90, 0.87, 0.88, 0.86 respectively for the factors of the price of medical and tourist services, the quality of medical and tourist services, culture, medical and tourist facilities and equipment and ICT, which tell this fact that questions of questionnaires enjoys an appropriate internal coherence. The population of the present study includes: 1. foreign medical tourists who have traveled to Shiraz in 2012 to do their medical treatments. According to the Ministry of Health and Medical Education, annually more than 20 to 25 thousand tourists of other countries come to some cities of Iran for their treatments, which indeed the statistics indicate this fact that at least 70 percent of this number entered Shiraz for treatment (Iranian Statistics Center, 2013). Therefore, a number of 17500 people was considered as the population; 2. Domestic medical tourists (from other provinces) who have traveled to Shiraz for their treatments in the year 2012 which according to Statistical Center, Shiraz University of Medical Sciences, the size of this population was 70000 patients (Shiraz University of Medical Sciences, 2012). In the present study, to measure the sample size, Cochrane's method was employed. Regarding the population, the sample size which using Cochrane formula was calculated, for foreign tourists was equal 378 and for domestic ones it was equal 382 participants, which for reducing research errors, this amount for foreign tourists increased to 400 participants for domestic tourists and to 400 participants for domestic ones. In this research, to select the sample in population of tourists, the method of available samples and

random sampling were employed.

To describe and analyze the data obtained from this study, the descriptive statistics such as frequency and percentage and also inferential statistics such as factor analysis were employed. Factor analysis is the general name for some of the multivariate statistical methods whose main objective is summarizing data. This method investigate the internal correlation of many variables and at last, it categorizes and elaborates them in the form of limited factors. Factor analysis has different applications and functions in analyzing data and mainly has two types R and Q (Talebi and Zangiabadi, 2001). in the type R (R-Type Factor Analysis) many variables in a limited number of factors are summarized and its objective is to access dimensions which is available in a hidden form in a vast set of variables, but they are not easily observable. In the second type Q (Q-Type Factor Analysis) individuals or cases are categorized in some groups and its objective is to combine and summarize many individuals in different groups within a big society (Kalantari, 2003). In the present study, the factor analysis of type R was employed.

3. Findings

Descriptive statistics related to the characteristics of the sample of this research (the participants of this research) to this account: foreign tourists: the frequency distribution based on the gender of the participants indicate that men are 307 individuals (equal 76.8 percent) and women are 93 (23.3 percent). The visitors were from Oman were 103 individuals (equal 25.8); Bahrain 74 individuals (equal 18.5 percent); Emirates 63 individuals (equal 15.8 percent); Kuwait 51 individuals (12.8 percent); Iraq were 42 individuals (equal 10.5 percent); Canada 16 individuals (equal 4 percent); France 11 individuals (equal 2.8 percent); USA were 9 individuals (equal 2.3 percent); England 7 individuals (equal 1.8 percent), Germany 6 individuals (equal 1.5 percent); Afghanistan 12 individuals (equal 3 percent) and Malaysia 6 individuals (equal 1.5 percent). The statistical distribution of the participants in different age groups is as follows: less than 20 years old, were 21 individuals (5.3 percent); 20 to 25 years old, 30 individuals (7.5 percent); 26 to 31 years old, 49 individuals (12.3 percent); 32 to 37 years old, 66 individuals (16.5 percent); 38 to 43 years old, 87 individuals (21.8 percent); 44 to 49 years old, 105 individuals (26.3 percent) and 50 years old and higher, 41 individuals (10.3 percent). The education of the participants is as follows: under diploma were 18 individuals (4.5 percent); diploma 31 individuals (7.8 percent); associate diploma 38 individuals (9.5 percent); BA 162 individuals (40.5 percent) and MA and higher 151 individuals (37.8 percent). People with government jobs were 39 individuals (9.8 percent); private jobs 195 individuals (48.8 percent); housekeepers 56 individuals (14 percent); students 111 individuals (2.8 percent); the retired 76 individuals (19 percent) and the unemployed 23 individuals (5.8 percent). The married were 304 individuals (76 percent) and the single were 96 individuals (24 percent). Domestic tourists: frequency distribution based on the participants' sex indicate that men are 234 individuals (58.5 percent) and women 166 individuals (41.5 percent). The visitors are from the provinces of Bushehr 81 individuals (20.3 percent); Hormozgan 58 individuals (14.5 percent); Kogiluyeh and Buyer Ahmad 67 individuals (16.8 percent); Yazd 39 individuals (9.8 percent); Sistan and Baluchestan 23 individuals (5.8 percent); Kerman 37 individuals (9.3 percent); Khuzestan 48 individuals (12

percent); Isfahan 28 individuals (7 percent) and other include 18 individuals (4.5 percent). In addition, one othe participants has not mentioned his or her province of residence. The frequency distribution of the participants in different age groups is as follows: less than 20 years old, were 9 individuals (2.3 percent); 20 to 25 years old, 42 individuals (10.5 percent); 26 to 31 years old, 27 individuals (6.8 percent); 32 to 37 years old, 62 individuals (15.5 percent); 38 to 43 years old, 48 individuals (12 percent); 44 to 49 years old, 117 individuals (29.3 percent) and 50 years old and higher, 95 individuals (23.8 percent). The education of the participants is as follows: under diploma were 75 individuals (18.8 percent); diploma 39 individuals (9.8 percent); associate diploma 64 individuals (16 percent); BA 164 individuals (41 percent) and MA and higher 58 individuals (16.3 percent). People with government jobs were 96 individuals (24 percent); private jobs 65 individuals (16.3 percent); housekeepers 78 individuals (19.5 percent); students 35 individuals (8.8 percent); the retired 55 individuals (13.8 percent) and the unemployed 71 individuals (17.8 percent). The married were 298 individuals (74.5 percent) and the single were 102 individuals (25.5 percent).

In order to reduce the number of variables to fewer factors and determine the proportion of each of them in improving medical tourism, the factor analysis was employed. From the sum of 92 studied variables, 82 variables were analyzed, which the done measurements showed that the amount of KMO equals 0.925 and the amount of Bartlett (18352.275) at the level of 99 percent is significant, which indicates the suitability of entered variables for factor analysis.

Here we start extracting the factors. In this section, the correlation between indices (variables) and factors are investigated and using correlation matrix, the main factors will be extracted; therefore, the correlation will be measured and the factors will be extracted. To create a logical and appropriate relationship between indices (variables) and factors, indices are used whose correlation coefficient is higher than 5 percent (Taghvaei and Shafiee, 2009). Accordingly, in the present study, 82 indices are reduced to 5 super factors which in sum, explicate 73.327 percent of the variance and indicate the satisfaction of factor analysis and studied variables.

Table 1. Final extracted factors and special amounts related to them

Row	Indices of factors	Special amount	Variance percent	Density percent
1	First factor	15.987	34.616	34.616
2	Second factor	5.345	11.756	46.372
3	Third factor	4.309	10.820	57.192
4	Fourth factor	3.662	8.364	65.556
5	Fifth factor	3.514	7.681	73.237

After extracting factors, the rotation of matrix is done. Interpreting variables of factor loadings without rotation is not easy and therefore the factors are rotated in order that the capability of their interpretation increases (Momeni, 2007). In the rotation of the matrix, factors are rotated continuously around fixed points to cover the indices (variables). This method is called "the rotated factor matrix". In this research, a simple structure is attained

that a lot of indices are gathered around a factor which according to the table 2, the extracted factors explicate 73.327 percent of the changes are due to previous variables (KazemNejad, 2001). As observed in table 2, and regarding the table 3 which is related to naming the factors, it can be said that concerning the special amount of extracted factors, the factor "the price of medical and tourist services with special amount of 12.731 has the most proportion in explicating variables. After that, the factor "the quality of medical and tourist services" with special amount of 6.683, factor "the medical and tourist facilities and equipment" with special amount of 4.899, factor "ICT" with special amount of 3.397 and factor "culture" with special amount of 2.623 are present.

Table 3. Rotated factors

Row	Indices of factors	Special amount	Variance percent	Density percent
1	First factor	12.731	27.362	27.362
2	Second factor	6.683	21.073	48.435
3	Third factor	4.899	12.307	60.742
4	Fourth factor	3.397	7.287	68.029
5	Fifth factor	2.623	5.208	73.237

Table 3. Variables related to each factors and the amount of the coefficient obtained from rotated matrix

Factor	Variables	Correlation coefficients
Factor of the price of medical and tourist services	Treatment cost	0/95
	Medicine and equipment cost	0/91
	Accommodation cost	0/84
	Food and drink cost	0/69
	Transportation cost	0/75
	Entrance costs	0/71
	True estimation of costs	0/80
Factor of the quality of medical and tourist services	Treatment quality	0/97
	Therapists' efficiency	0/93
	Experience and consistency in the treatment	0/94
	Low rates of treatment failure	0/96
	Quality of care before treatment	0/83
	Quality of care after treatment	0/86
	Quality of medical equipment	0/92
	Quality treatment centers	0/89
	Quality standards for health	0/91
	High rate of variety in different health care	0/89
	Qualified approval of a physician or surgeon	0/85
	Quality of food during treatment at the medical center	0/87
	Quality of informing	0/76
	Service quality in hotels, restaurants and agencies	0/73
	Quality accommodation after treatment	0/65
	Quality of Food and drinks at the residence after treatment	0/72
	Cleanness of treatment environment	0/79
	Transparency of pricing schemes	0/74
Factor of medical and tourist	Minimum waiting time for medical service	0/84
	Prior consultation with a physician	0/63
	Providing health insurance	0/66

facilities and equipment	Determining the appropriate tariff of health insurance services to individuals	0/69
	Collaboration between healthcare facilities (such as hospitals) and tourism facilities (such as hotels, travel agencies)	0/61
	The presence of medical and nursing professionals	0/89
	Modern medical equipment	0/87
	Oral and written communication with patients, hospital staff	0/73
	Appropriate transportation facilities in the medical center	0/62
	Providing patient's medical packages	0/65
	Cooperation between the Office of Performance Measurement and resolve complaints and medical centers and tourist	0/69
	Determination of the tariff in the case of health services, rooms and meals and other recreational activities	0/71
	Offering accommodation, catering and entertainment for patients before and after treatment	0/72
	Providing accommodation, catering and entertainment to accompany the patient	0/57
	Prepare a short history of the treatment methods used for the patients and their relatives .	0/54
	Medical centers equipped with dining food list	0/74
	Accepting medical insurance	0/71
ICT	Having a website for publishing and advertising brochures .	0/53
	The possibility of prior consultation with physicians or surgeons through websites owned medical centers	0/51
	Gaining information about medical services and geographical conditions using internet advertising	0/63
	The medical center's receipting electronically	0/66
	Electronically booking tickets	0/75
	Electronically booking accommodation in Hotel	0/71
	The possibility of follow-up treatment after discharge from hospital through websites owned medical centers	0/56
	Satisfaction with provided e-services	0/68
	Introducing and defining the exact geographic location and Internet address to Hospital	0/72
	Access to communication services (telephone, Internet, etc.)	0/85
	Access to travel information about the characteristics of the electronic	0/69
	informing about the therapeutic potential of tourism in Shiraz	0/59
Culture	Physician's treating with patients .	0/89
	Hospital personnel's treating with patients	0/75
	Hospitality (good-heartedness) of doctors and nurses with patients	0/74
	Hospitality (good-heartedness) of doctors and nurses with patients' relatives	0/79
	Consideration of ethical issues	0/91
	Appropriate communication with patients, doctors and nurses	0/88
	Appropriate communication with the patient's relatives, physicians and nurses	0/76
	Responsibility of doctors and nurses	0/69
	People of Shiraz's treating with patients and their relatives	0/86
	Doctors' treating with patients' relatives	0/82
	Hospital personnel's treating with patients' relatives	0/68
	People of Shiraz's hospitality	0/71
	Legal compliance	0/67
	Security and Safety	0/75

4. Conclusions

The results obtained from factor analysis of the influencing variables in improving medical tourism were categorized into five factors of the price of medical and tourist services; the quality of medical and tourist services; medical and tourist facilities and equipment; ICT and culture, which this four factors explicated in sum 73.372 of total variance.

- In the first factor (healthcare and tourism costs), treatment, medicine and equipments, and accommodation cost variables with correlation coefficients, respectively, 0.84, 0.91 and 0.95 had the highest impact, and food and drink, entrance, and transportation cost variables with correlation coefficients, respectively, 0.75, 0.71, and 0.69 had the lowest impact on medical tourism development.

- In the second factor (healthcare and tourism quality), variables of treatment, low treatment error and experience and cooperation in treatments with correlation coefficients, respectively, 0.97, 0.96 and 0.94 had the highest impact, and variables of transparency in pricing, food and drink quality in the post-treatment accommodation and hotels, restaurants and agencies service quality with correlation coefficients, respectively, 0.65, 0.72 and 0.72 had the lowest impact on medical tourism development.

- In the third factor (treatment and tourism facilities and equipments), variables of medical staff and specialist and professional nursing, modern medical equipments, and minimum waiting time for receiving treatments with correlation coefficients, respectively, 0.89, 0.87 and 0.84, had the highest impact, and variables of providing a brief history of treatment and employed methods for patients and their relatives, providing accommodation, catering and recreational facilities to the patients' relatives and cooperation between healthcare centers (such as hospitals) and tourism centers (such as hotels and travel agencies) with correlation coefficients, respectively, 0.54, 0.57 and 0.61 had the lowest impact on medical tourism development.

- In the fourth factor (ICT), variables of access to communication services (such as telephone, internet, etc), electronic reservation of travel tickets and hotel accommodation with correlation coefficients, respectively, 0.85, 0.75 and 0.72 had the highest impact, and variables of pre-counseling sessions with general physicians and surgeons through websites belonging to medical centers, having a website, distributing special brochures and the possibility of post-treatment follow-ups after discharge through websites belonging to medical centers with correlation coefficients, respectively, 0.51, 0.53 and 0.56 had the lowest impact on medical tourism development.

- And in the fifth factor (culture), variables of observing morals, physicians' behavior toward the patient and establishment of appropriate relationship between the patient and physicians and nurses with correlation coefficients, respectively, 0.91, 0.89 and 0.88 had the highest impact and the variables of observing legalities, hospital personnel's attitude toward the patient's relatives and physicians' and nurses' accountability with the correlation coefficients, respectively, 0.67, 0.68 and 0.69 had the lowest impact on medical tourism development.

Regarding the obtained results, the low price of medical and tourist services and their

compatibility with those of other countries, increase in the quality of these services, application of modern facilities and equipment and consistent with world standards, application of ICT in the fields of advertising and marketing and increase in the level of culture of attracting and accepting tourists result in improving medical tourism in megalopolis Shiraz.

5. Suggestions

Regarding the results obtained from the present study, the researcher suggests some strategies which can result in improving medical tourism in megalopolis Shiraz:

- Investigating and comparing strengths and weaknesses of issues of medical tourism in medical centers of Shiraz with medical centers of successful countries in this field such as India, Thailand, Malaysia, and Singapore and then analyzing the experiences of these centers for enhancing this industry in medical centers of Shiraz.
- Creating websites related to medical tourism in international languages for the patients to access information, because most of medical tourists search their needs through the Internet.
- Using modern and advanced facilities and equipment according to international standards.
- Periodical training of professional human forces in the field of using and maintaining medical equipment optimally.
- Applying mechanisms in line with preventing the migration of skilled doctors, because in recent years, many famous doctors of Shiraz emigrated abroad.
- Providing the latest and best advanced treatment methods of the world.
- Clarifying the costs of medical and tourism services in order to provide the possibility of its comparison with other countries for patients.
- Supervising the prices and quality of medical and tourist services provided for patients.
- Contracting internationally active insurance contracts regarding payment of medical and tourism facilities regarding the way of the payment of medical and tourist costs according to other countries through travel, traveler's checks, credit cards, wire transfers and money in today's world.
- Providing national and international service training courses to improve the professional skills of scientific human forces in the world.
- Hiring interpreters in international languages, especially English and Arabic in hospitals.
- Utilizing expatriate Iranian physicians with expertise and experience in international boards high-level human resources professional and fluent in English having strong public relations.
- Special and sub-special medical services such as organ transplantation, stem cells, infertility treatment, cosmetic, joint replacements, dental procedures and CAM and traditional services.
- Integrating hospitals information system and enhancing it and amending methods for collecting, recording and reporting information to foreign patients.
- Enhancing rapid access to networks and databases strong line of communication with the patient, physician, and implementation of technologies such as telemedicine remote, remote consultation, remote education.

- Introducing medical tourism potentials of Shiraz through electronic and non-electronic advertising (Medical Tourism in International Trade, embassies, tourist guidebooks, specialized magazines, brochures and satellite networks).
- Customer retention and market penetration, identification of target markets in the region with common cultural, religious, linguistic, geographical proximity.
- Contracts with other countries, especially Islamic countries, referral partners and the countries of medical tourism.
- Trying to recruit Iranians abroad for healthcare and tourism issues.
- Giving facilities and concessions to patients and their relatives.
- Using marketing consultants, contracting medical tourism companies or creating medical tourism companies, creating agencies in other countries, using hotel representative in Staff Board of Directors of hospitals.
- Providing hotel-apartments in the hospital premises for accommodating patients and their relatives or for recovery period and providing facilities of transportation of patients and their relatives.
- Providing facilities accordance with the national and cultural facilities an interpreter for the comfort of patients and their relatives and communications.
- Organizing tours before and after treatment according to patients' condition.
- Building a health city in a good climate zones of Shiraz or near it.
- Providing Shiraz comprehensive medical tourism plan.
- Creating an independent and active unit in the field of medical tourism in hospitals. Investigating and studying advances of successful hospitals of other countries in this filed and using their experiences.
- Tax and customs rebates for entering medical equipment standard.
- Offering facilities for convenient entry of foreigners such as medical visa for medical tourists from other countries and elimination of visa problems.
- The possibility of the extension medical visa in order that the patients do not have to return to their countries before completing their process of treatments.
- It is necessary for Ministry of Health and Medical Education to perform standards of hospital services in the world level and provide conditions for receiving international credits such as receiving a confirmation from JCI.

References

Aizura, A. Z. (2009). Where Health and Beauty Meet: Femininity and Racialisation in Thai Cosmetic Surgery Clinics. *Asian Studies Review, 33*(3), 303–317.

Alsharif, M., Labonte, R., & Zuxun, L. (2010). Patients beyond borders: A study of medical tourists in four countries. *Global Social Policy,* 315-336.

Barre, P., & Christie Mill, R. (2005). Intagrated Tourism Planning For Sustainable Development, Elsevier Ltd. All Rights Reserved.

Bina, M. (2007). Unaff ordability Ebola. *Medical Tourism, 1*, 48–49.

Bundhun, R. (2010). Thailand Right Medicine for Tourists, The National (United Arab Emirates) 25 November.

Crooks, V. A, Kingsbury, P., Snyder, J., & Johnston, R. (2010). What is known about the patient's experience of medical tourism? A scoping review, BMC Health Services Research, 10, 266.

Crooks, V., & Snyder, J. (2011). Medical tourism: What Canadian family physicians need to know. *Canadian Family Physician, 57*, 527-529.

Crooks, V. A., Turner, L., Snyder, J., Johnston, R., & Kingsbury, P. (2011). Promoting medical tourism to India: Messages, images, and the marketing of international patient travel, Social Science & Medicine, journal homepage: www.elsevier.com/locate/socscimed: 726-732.

Erfurt-Cooper, P., & Cooper, M. (2009). Health and wellness tourism: Spas and hot springs, Bristol: Channel View Publications.

Faramarzi, A. (2011). Treatment tourism. Website of management articles. "www. System.Parsiblog.com".

Gan, L., & Frederick, J. (2011). Consumers' attitudes toward medical tourism, Available at http://papers. ssrn.com/sol3/papers.cfm?abstract_id=1837062.

Glinos, I. A., Baeten, R., & Maarse, H. (2010). Purchasing health services abroad: practices of cross-border contracting and patient mobility in six European countries. *Health Policy, 95*(2–3), 103–112.

Harryono, M., Huang, Y. F., Myazawa, K., & Sethaput, V. (2006). Microeconomics of Competitiveness, Thailand Medical Tourism Cluster, Harvard Business School.

Heung, K., Song, V., & Deniz, H. (2010). A Conceptual Model of Medical Tourism: Implications for Future Research, Journal of Travel & Tourism Marketing, School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hung Hom, Kowloon, China.

Johnston, R., Crooks, V. A., Adams, K., Snyder, J., & Kingsbury, P. (2011). An industry perspective on Canadian patients' involvement in Medical Tourism: implications for public health. *BMC Public Health, 11*, 416-417

Kalantari, K. H. (2003). Data processing and analysis of Social and Economic Research using SPSS software, 1st edition, Tehran: Sharif publication.

Kalshrtti, P., & Pillai, D. (2008). Tourism products development and management medical tourism, A Shifting Paradigm. *Proceedings of the 1st Conference on tourism in India -Challenges Ahead,* 15-17.

KazemNejad, A. (2001). Test with SPSS software manuals, Dibagaran Tehran Cultural & Art institute publication.

Kittikanya, C. (2008). Health, Bangkok Post Economic Year End Review 2004. Bangkok Post Website. Accessed 14 March 2008.

Lautier, M. (2008). Export of health services from developing countries: the case of Tunisia. *Social Science & Medicine, 67*, 101–110.

Lunt, N., & Carrera, P. (2011). Advice for prospective medical tourists: systematic review of consumer sites. *Tourism Review, 66*(1/2), 57–67.

Momeni, M. (2007). Statistical analysis using SPSS. Tehran: Ketab Now, 2007.

Monica, H., & Yu-Feng, H. (2006). Thailand medical tourism cluster [Online] Available from: www.isc.hbs.edu/pdf/student-project/ Thailand-medical-tourism/LKJL.

Nagarajan, G. S. (2004). Medical Tourism In India: Strategy For Its Development Crisil Young Thought Leader Series, Dissertation, G- 216, IIM-B Hostels, Indian: Institute of Management- Bangalore: 1-17.

Rogers, M. (2008). Medical tourism: agents have a potential gold mine in booking U.S. citizens into hospitals abroad, Travel Agent, 18 August, p. 61.

Runnels, V., & Turner, L. (2011). Bioethics and transnational medical travel: India, "medical tourism" and the globalisation of healthcare. *Indian Journal of Medical Ethics, 8*(1), 42–4.

Sadermomtaz, N., & Agha Rahimi, Z. (2010). Medical tourism industry in Iran: strategies for development, journal of health information management. *Espicial Issue,* 516-524.

Shetty, P. (2010). Medical tourism booms in India, but at what cost?, *The Lancet, 376*, 671e672.

Shiraz University of Medical Sciences, Statistical Center. (2012).

Smith, M., & Puczko, L. (2011). Health and wellness tourism, Elsevier, Oxford.

Smith, R., & Mart ńez Álvarez, M. (2011). Chanda, R. Medical tourism: a review of the literature and analysis of a role for bi-lateral trade. *Health Policy, 103*(2–3), 276–82.

Smith, R. D., & Chanda, R. (2009). Tangcharoensathien, V. Trade in health- related services. *The Lancet, 373,* 593-601.

Statistics Center, Ministry of Health and Medical Education. (2013).

Taghvaei, M., & Shafiee, P. (2009). Applying factor and cluster analyses in spatial-local evaluation of rural areas in Isfahan. *Journal of Agricultural and Development Economics, 17*(68), winter 2009.

Talebi, H., Zangiabadi, A. (2001). Analyzing indices and determining factors influencing human development methodology of the country's large cities. Geographical Studies Quarterly 6.

Urkett, L. (2007). Medical tourism: concerns, benefits, and the American legal perspective. *Journal of Legal Medicine, 28*, 223-245.

Warf, B. (2010). Do you know the way to San Jos é? Medical tourism in Costa Rica. *Journal of Latin American Geography, 9*(1), 51e66.

Wilson, A. (2010). Medical Tourism in Thailand, in A. Ong and N. Chen (eds) Asian Biotech. Durham, NC: Duke University Press.

Yu, J., & Ko, T. A. (2012). Cross-cultural study of perceptions of medical tourism among Chinese, Japanese and Korean tourists in Korea, Tourism Management, journal homepage: www.elsevier.com/locate/tourman: 80-88.

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