



Surveying the Factors Affecting the Selection of Hospitals by Medical Tourists

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Abstract

Introduction: Medical tourism is one of the branches of health tourism and has been an important issue in many developed countries during the past few years. This research has aimed to study the factors affecting the selection of the hospitals of Tehran by the medical tourists who had chosen Iran's capital city for their treatment.

Methods: The present study is a descriptive inferential cross sectional study which was conducted in the summer season of 2014 in the Tehran's hospitals. The study population included all the reachable medical tourists who had come to the hospitals of Tehran for their treatment during the summer season of 2014. The sample of the interview section included 10-15 experts who were randomly chosen to be interviewed. The sample of the questionnaire section included 50 medical tourists who had come to Tehran's hospitals for their treatment during the summer season of 2014 (reachable sample). The data of the present study was analyzed by the SPSS software version 20.

Results: According to the results of this study it is clear that famous and reliable physicians and also low health service costs are the two most important factors attracting medical tourists to the hospitals of Tehran. Also, the location of the hospitals have proven to be acceptable for the patients. On the other hand, factors which are related to promotion and the physical evidence of hospitals were not in an acceptable condition.

Conclusion: Despite having famous and reliable physicians and low health service costs in Iran, it can be said that there are still many factors such as better marketing and advertisement, international standardizations and developing recreational centers that need to be focused on, in order to gain the well-earned international position in the medical tourism industry.

Keywords: Travel, Medical Tourism, Hospitals

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1. Introduction

Medical tourism which is one of the branches of health tourism has been an important issue in many developed countries during the past few years [1, 2]. Medical tourism is not a new event. It can be said that even in ancient times, people traveled to other countries for health-related purposes [3]. Today, people from different parts of the world travel across international boundaries for their medical treatments. Patients from developing countries tend to travel to top-notch medical centers in developed countries for medical care. However, in today's medical tourism industry, patients travel in both directions, especially from developed countries to developing countries.

Nowadays, medical tourism is one of the fastest growing tourism sectors with many countries planning for their economic expansions [4, 5]. Some researchers believe that medical tourism is traveling for treatment and recovery. Medical tourism, which is also known as health tourism and wellness tourism, refers to those traveling all around the world to receive medical, dental and surgical care. As these people travel to gain their health again, they also benefit and enjoy the tourism attractions of the visited country [6]. During the past decade the number of people traveling for their treatment has rapidly risen. Many factors have caused

this growth, such as: high costs of health services in industrialized countries, increasing ease of international travels, rapid advances in medical technology and standards of care in most countries and of course extensive Internet access [7]. Statistics by the World Tourism Organization reveal that the number of individuals taking part in the healthcare tourism industry have increased by 32% between 2005 and 2010 by increasing the revenue by 42% which contributes US\$728.7b to the industry in 2010. Asia countries received 4.3 million medical tourists in 2010 generating revenue over US\$6.7 billion and has become among the most preferred destinations for medical treatment. As proven in Ramirez de Arellano [8] study, investing in the medical industry sector is a means of increasing income for the country, improving services, generating foreign exchange earnings, creating more favorable balance of trade, and boosting tourism industry generally. Jenner [9] believes that medical tourism will play a tremendous role in shaping the future of medical care, as it sits at the growing intersections of technology, economy, cultural and other global relations.

At present, with respect to the low cost and high income of this industry, many countries all around the world are very keen in the development of the tourism industry, have

focused their attention on this section of the tourism industry and are planning in this regard. Iran will also be, in 1400 perspective, one of the main places for health tourism in the region and by doing so, not only does Iran prevent the outflow of foreign currency, but also it will benefit from a huge foreign currency income.

This research has aimed to study the factors affecting the selection of the hospitals of Tehran by the medical tourists who had chosen Iran's capital city for their treatment.

2. Methods

The present study is a descriptive inferential cross sectional study which was conducted in the summer season of 2014 in the Tehran's hospitals. The chosen hospitals were the ones which were legally nominated to be welcome to medical tourists from the Iranian Ministry of Health.

The study population included all the reachable medical tourists who had come to the hospitals of Tehran for their treatment during the summer season of 2014. The sample of the interview section included 10-15 experts who were randomly chosen to be interviewed. The sample of the questionnaire section included 50 medical tourists who had come to Tehran's hospitals for their treatment during the summer season of 2014 (reachable sample).

In this research besides studying documents, the needed information in order to design the questionnaire was gathered through interviews from managers and policymakers in medical tourism. The interviews were semi-structured ones. After this stage, a questionnaire was designed in two sections. The first section of the questionnaire included questions in regards to the variables of the type of hospital, the origin country of the patient and the type of treatment. The second section of the questionnaire included six different scopes. These scopes are as followed: the presented services, place (hospital), promotion, price of services, personnel and physical evidence. The amount of the realization of each questionnaire was ranked by the scales of yes, no and to some extent.

The validity of the questionnaire was approved by the experts of medical tourism. The reliability of the questionnaire was

obtained by the Cronbach's alpha method which ended up to 0.85.

The data of the present study was analyzed by the SPSS software version 20. For analyzing, descriptive and inferential statistics was used. In the descriptive statistics frequency table and SD were used, and in the inferential statistics the Kruskal-Wallis and Mann-Whitney test was used.

3. Results

Results show that 54% of the medical tourists were women and 46% were men. The frequency of the studied medical tourists in regards to the treatment they received are: eye surgery 54%, heart surgery 12% and cosmetic surgery 8%. The reasons of which these tourists chose Tehran's hospitals are famous and reliable physicians and high technology equipment 70%, affordable and suitable prices for health services 26% and other tourist attractions in Iran with 4%.

As shown in table 1, the highest satisfaction of the medical tourists of 96.95% and 95.58% were related to famous physicians and the location of the hospital. The lowest amount of satisfaction of 59.1% and 64.72% were related to the promotion and physical evidence.

Regarding the results shown in table 2, there isn't any meaningful relationship in between different genders and the average satisfaction rate of the dimensions of the health service quality.

Table 1. The satisfaction of the medical tourists from different dimensions of the health service quality in the studied hospitals

Dimension	Average	SD
product	76.53	8.60
place	95.58	8.85
promotion	59.10	7.44
Price	66.16	8.05
People	81.75	6.42
Process	70.52	9.77
Physical evidence	64.72	6.59
Physician	96.95	3.03
Total Quality	76.38	3.23

Table 2. A comparison of the satisfaction between genders

Dimension	Average (women)	SD (women)	Average (men)	SD (men)	P Value
Product	75.00	7.67	78.40	9.5	0.101
Place	93.83	10.49	97.73	5.85	0.162
Promotion	59.80	7.73	59.13	7.26	0.704
Price	64.51	6.78	68.18	9.14	0.166
People	82.51	6.84	80.81	5.87	0.434
Process	69.96	10.13	71.21	9.49	0.560
Physical Evidence	64.81	5.21	64.60	8.04	0.444
Physician	96.65	3.18	97.52	2.82	0.340
Total Quality	75.79	3.14	77.08	3.26	0.134

Table 3. A comparison of the amount of satisfaction of the studied medical tourists in regards to their home country

Dimension	Average (India)	SD (India)	Average (Iraq)	SD (Iraq)	Average (Azerbaijan)	SD (Azerbaijan)	Average (others)	SD (others)	P Value
Product	71.67	9.5	75.00	9.32	79.86	6.61	79.76	6.56	0.186
Place	96.67	7.45	97.33	7.88	93.06	8.58	92.86	13.11	0.290
Promotion	54.29	4.26	60.55	7.18	57.14	8.12	60.54	8.12	0.104
Price	58.33	2.22	70.33	7.64	62.50	6.65	63.10	6.56	0.001
People	83.33	8.78	80.89	6.02	82.41	6.63	82.54	6.75	0.749
Process	71.11	6.09	70.67	9.56	65.74	7.43	77.78	12.83	0.125
Physical Evidence	65.71	4.33	63.19	7.83	66.09	4.99	67.35	4.28	0.121
Physician	95.24	1.84	97.99	2.75	96.03	2.75	96.60	4.53	0.075
Total Quality	74.54	3.74	76.90	3.49	75.35	1.58	77.57	4.64	0.108

Table 4. A comparison of the amount of satisfaction of the studied medical tourists in regards to the type of treatment

Dimension	Average (Heart Surgery)	SD (Heart Surgery)	Average (Eye Surgery)	SD (Eye Surgery)	Average (Cosmetic Surgery)	SD (Cosmetic Surgery)	Average (Other Treatments)	SD (Others Treatments)	P Value
Product	79.17	4.56	75.32	9.27	79.17	10.76	76.92	8.44	0.726
Place	94.44	8.61	98.08	5.43	95.83	8.33	91.03	12.94	0.212
Promotion	57.14	9.52	6.77	7.84	54.76	4.76	57.88	5.78	0.171
Price	62.50	6.97	68.91	8.68	62.50	8.33	63.46	5.42	0.098
People	80.56	5.83	81.41	6.47	81.94	5.32	82.91	7.34	0.942
Process	66.67	0.93	72.22	10.54	69.44	13.98	69.23	9.25	0.557
Physical Evidence	67.16	5.45	62.35	5.68	65.98	3.17	64.13	7.99	0.049
Physician	96.03	1.94	97.88	2.74	94.05	2.38	96.70	3.58	0.067
Total Quality	75.46	1.84	77.02	3.52	75.46	3.13	75.78	3.3	0.329

Table 5. A comparison of the amount of satisfaction based on the reasons of choosing hospitals of Tehran in the medical tourists' point of view

Dimension	Average (Famous Physicians & Hospital Facilities)	SD (Famous Physicians & Hospital Facilities)	Average (Suitable Prices in Iran)	SD (Suitable Prices in Iran)	Average (Tourist Attractions)	SD (Tourist Attractions)	P Value
Product	77.86	7.81	74.31	9.7	66.67	11.79	0.243
Place	94.76	9.71	97.22	6.49	98.02	0.90	0.583
Promotion	58.78	7.21	59.46	8.59	62.50	5.89	0.570
Price	64.76	7.85	69.23	7.89	75.60	2.23	0.086
People	81.11	6.63	83.76	5.77	77.78	2.56	0.246
Process	69.52	9.84	72.65	9.75	76.77	1.74	0.379
Physical Evidence	65.18	7.15	64.65	4.65	57.14	3.37	0.174
Physician	96.73	3.22	97.44	2.47	97.86	1.42	0.285
Total Quality	76.09	3.27	77.05	3.36	77.25	1.52	0.561

The results of table 3 show that a meaningful statistical difference exists in between the average satisfaction of the price of treatment and the home country of the patients ($P=0.001$). To be clearer, this means that the amount of satisfaction of the Iraqi medical tourists in regards to the price of health services in Iran in compared to the Azerbaijani and Indian tourists was much higher.

The results of table 4 show that a meaningful statistical difference exists in between the average satisfaction of physical evidence and the type of treatment of the patients ($P=0.04$). To be clearer, this means that the amount of satisfaction of the patients who had had heart surgeries were much higher than the cosmetic and eye surgery patients.

The results of table 5 reveal that there isn't any meaningful relationship in between the average score of satisfaction in the dimensions of quality and the reasons of which have been mentioned for choosing the hospitals of Tehran.

4. Discussion

As seen in the results, 54% of the medical tourists were women and 46% were men. Regarding the amount of satisfaction of these medical tourists, the highest satisfaction of the medical tourists of 96.95% and 95.58% were related to famous physicians and the location of the hospital. The lowest amount of satisfaction of 59.1% and 64.72% were related to the promotion and physical evidence.

In accordance to the International Medical Travel Journal's report, the main sources to attract medical tourists are: high quality, low health service costs and short waiting lists [10]. Also, the ability to attract tourists in the international market of health is dependent to guaranteed qualities of health services and gaining international standards such as JCI [11, 12].

In Gholami's research six groups have been suggested as effective factors of medical tourism which include: policymaking & planning, advertisement, providing the

tourists' financial and social safety, running educational programs, welfare facilities and standardization [13]. Shalbfan mentioned in his study that in order to attract medical tourists, the following factors can be of great importance: facilitating issuing medical visas, the monitoring of the health ministry, accreditation of the health sectors, specifying tariffs for medical services, establishing recreational centers around medical centers and also holding training periods for the personnel who are in contact with medical tourists [14].

In a research which was conducted by Nasirpour and Salmani, the following factors were considered as factors attracting medical tourists: using advanced medical facilities, transparency and compatible health service prices, professional human capitals, developing hostelling facilities and also developing gathering information from international patients and IT [15].

5. Conclusion

According to the results of this study it is more than obvious that famous and reliable physicians and also low health service costs are the two most important factors attracting medical tourists to the hospitals of Tehran. Also, the locations of the hospitals have proven to be acceptable for the patients. On the other hand, factors which are related to promotion and the physical evidence of hospitals were not in an acceptable condition. It can be said that there are still many factors such as better marketing and advertisement, international standardizations and developing recreational centers that need to be focused on in Iran in order to gain the well-earned international position in the medical tourism industry.

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Authors' Contribution

All the authors were involved in the study design, data analysis and result interpretation.

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