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Original Article

The Capabilities of Iranian Hospitals in Attracting Medical Tourists; Based on Joint Commission International: A Case Study of Shiraz Hospitals

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Abstract

Introduction: Medical tourism is one of the competitive and income industries in world and has the ability to attract tourists in the health sector and international markets are totally dependent on international accreditation. This study has been done to evaluate the capabilities of active public and private hospitals in Shiraz regarding attraction of tourists' base on accreditation standards.

Methods: This is a descriptive-analytic and cross-sectional study which performed on four hospitals which were active in medical tourism in 2012. A checklist of international accreditation standards based on Joint Commission International (JCI) was applied for collecting data. Data were analyzed using descriptive analytic statistical tests. In descriptive statistics, frequency tables and standard deviation were used for scoring the hospitals. Independent student (T-test) was used to compare the mean of public and private hospitals in attracting medical tourists.

Results: Hospital No.3 in the Patient-Centered Standards and Health Care Organization Management Standards was in the best position whilst hospital No.2 in the Patient-Centered Standards was in the worst state and hospital no.1 in Health Care Organization Management was in the worst position. Also there was a significant difference between public and private hospitals in attracting medical tourists according to Joint Commission International (sig=0.01).

Conclusion: Shiraz hospitals have good ability to attract medical tourists; these abilities are very good in most cases and in some cases there is a need to improve. Having recognized the strengths and weaknesses of these hospitals can use SWOT analysis model, which is used in medical tourism program of some countries, for improving their abilities in attracting medical tourists.

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Introduction

Iran is dependent on oil for foreign exchange, and therefore needs to make investments in other industries to make alternative incomes and overcome this problem. This country has potentials in some trades that can be flourished by proper investments. Medical tourism is one of these industries [1]. Medical tourism is one of the most important and profitable industries that is nowadays responsible for a big measure of national income in some countries. According to the assertion of world trade center, medical tourism was the third profitable industry after oil and car industries in 2000 [2].

Health tourism is an alternative for people who care more about their health and welfare and are longing to flee from their daily stressful life. For this purpose these people usually travel [3, 4]. Medical tourism is a branch of health tourism, a rapid developing industry which allows the patients to travel beyond the borders to reach desirable or low priced medical care. These include selected surgeries such as cosmetic surgery, hip replacement and bariatric surgery, or essential and special treatments such as chemotherapy for cancer, major and minor surgeries and dental cares [5,6]. Iran, having the potentials including low medical expenses, high quality medical services, skillful doctors and natural tourist attractions is eager to join this industry. But to gain this goal it has to face the challenges [7,8].

Health and cure industry is facing a world competition nowadays. The number of patients traveling from developed countries to developing ones for medical causes is increasing. These patients are not rich, but they are seeking high quality and low price treatments. It is estimated that Bumrungrad hospital in Thailand and Apollo hospital in India will earn over 2.3 billion dollars each year, and Singapore is hoping to host 1 million patients till the end 2012 [3,9].

Medical tourism industry with 5 billion dollars income worldwide in 2005 is one of the biggest world industries. 10% of European patients are seeking treatment across the borders and is estimated that they will spend about 12 billion Euros for this cause [10]. Based on these facts Iran should become the regional medical tourism center and gain 15 million dollars from 20 million medical tourists till 2025.

Mentioned facts express the importance of medical tourism; but what are the challenges that avoid benefiting an

international market? Assessments show that patients are highly concerned about the quality of services and looking for services in accordance to world standards. To overcome these uncertainties, international accreditation agencies have been developed and are insuring the qualities of the cure processes. There are four main accreditation and assessment models accepted globally. These four models are the following: 1. American accreditation association model, 2. International Organization for Standardization model, 3, European Foundation for Quality Management model, 4.Visit due to organization study model (visitatie). Betweenthese models, International health providers usually refer to JCAHO or ISO standards. JCI presents standards for outside of America, which have been tested by methods of assessment in many countries [11, 12].

A research in Canada in 2011 that was performed about medical tourism, including patients that travel for non-emergency medical care to outside Canada, showed that the number of these patients have increased over the past few years [13]. Birch et al in 2010 in a study showed that the number of Canadians referring to other countries or private clinics for bariatric surgery is unknown, whereas the outcomes of these surgeries have not been assessed in the past [14].

According to the mentioned advantages, and knowing that ministry of health have plans to improve the medical tourism industry in Iran, identifying the strengths and weaknesses of hospitals that are active in this field seems to be of importance. Therefore this study is aimed to evaluate qualification of four referral hospitals in Shiraz in attracting medical tourists according to the accreditation standards.

Methods

This was a descriptive-analytic and cross-sectional study performed in 2012 evaluating selected active public and private Shiraz hospitals in the field of medical tourism and their abilities to attract international patients referring to standards of Joint Commission International (JCI).

The study population included all Shiraz hospitals. The public and private hospitals that were rated first degree in national hospitals' assessment and were also active in the field of medical tourism chose as samples. Among public and private hospitals, only two public and two private hospitals had above features. So they chose as the samples.

Data was collected using a two parts verified international standard checklist of JCI (latest version, published in 2012). The first part contains three questions pertinent to hospitals general information (type of hospital, evaluation grade of hospital and general profile of hospital). The second part includes 14 titles (8 patient-center standards and 6 health care organization management standards). Each of these standards contains sub-stratum standards.

Patient-center standards are as followed:

"International Patient Safety Goals" including 6 main standard points, "Access to Care and Continuity of Care" including 5 main standard points, "Patient and Family Rights" including 11 main standards points, "Assessment of Patients" including 6 main standard points, "Care of Patients" including 7 main standard points, "Anesthesia and Surgical Care" including 7 main standards points, "Medication Management and Use" including 7 main standards points and "Patient and Family Education" including 6 main standards points.

Health care organization management standards were:

"Quality Improvement and Patient Safety" including 11 main standards points "Prevention and Control of Infections" including 11 main standards points, "Governance, Leadership and Direction" including 6 main standards points, "Management of Communication and Information" including 21 main standards points, "Facility Management and Safety" including 11 main standards points, "Staff Qualifications and Education" including 17 main standards points.

Table 1. Standards and method of data collection

Row	Standard	Total sore	Data collection method
1	International Patient Safety Goals	72	Interviewing with management and clinical departments
2	Access to Care and Continuity of Care	84	Observation and interviewing with management, clinical and medical records departments
3	Patient and Family Rights	120	Observation and interviewing with management, medical records, clinical, laboratory and radiology units
4	Assessment of Patients	168	Observation and interviewing with clinical ward
5	Care of Patients	92	Observation and interviewing with clinical ward
6	Anesthesia and Surgical Care	56	Observation and interviewing with anesthesia team of operating room
7	Medication Management and Use	80	Observation and interviewing with clinical and pharmacy personnel
8	Patient and Family Education	28	Observation and interviewing with clinical personnel and patients
9	Quality Improvement and Patient Safety	152	Interviewing with management department
10	Prevention and control of Infections	92	Interviewing with infection control nurse and hospital infection committee president
11	Governance, Leadership and Direction	104	Observation and interviewing with management department
12	Facility Management and Safety	108	Observation and interviewing with management, nursing and hospital facility departments
13	Staff Qualification and Education	92	Interviewing with staffing department
14	Management of Communication and Information	112	Interviewing with management and medical records departments

The assessment of each standard was scored "completely observed", "relatively observed" and "not observed". All referred standards and assessment scales were approved by JCI.

The researchers have filled the checklists by inspection and interview depending on the subjective standard (Table 1). Also the total score for each standard was shown in table 1.Data were analyzed using SPSS version 16. In mentioned analysis, descriptive and analytic statistics were used. In descriptive statistics, frequency tables and standard deviation were used for scoring the hospitals. Independent student (T-test) was used to compare the mean of public and private hospitals in attracting medical tourists.

Results

Among the reviewed hospitals, hospital No.1 had the highest number of beds (756), and hospital No.3 had the best evaluation position (Excellent A degree) (Table 2).

Between Patient-centered standards in every 4 hospitals had the lowest compliance in "International Patient Safety Goals" (30.6%, 19.4%, 30.6% and 43.1%), but they had the highest compliance in different dimensions, so as hospital No.1 in "Anesthesia and Surgical Care" hospital No.2 in "Assessment of Patients" (82.7%), hospital No.3, in "care of patient" and hospital No.4 in "care of Patients" (89.1%) had the highest compliance. Also between health care organization management standards, "Prevention and Control of Infections" had the highest compliance (79.3%, 84.8%, 91.3% and 89.1%) in 4 hospitals. However "quality Improvement and Patient Safety" had the lowest compliance (69.1%) in 3 hospitals: hospital No.1, No.3 and No.4, hospital No.2 had the lowest compliance in "Staff Qualifications and Education" (67.4%).

The findings showed that Hospital No.3 in the Patient-Centered Standards and Health Care Organization Management Standards was in the best position whilst hospital No.2 in the Patient-Centered Standards was in the worst state and hospital No.1 in Health Care Organization Management was in the worst position (Table 3).

Also there was a significant difference between public and private hospitals in attracting medical tourists according to Joint Commission International (sig=0.01). Results showed that private hospitals with the mean of 83.23% in following standards have a better condition comparing with public hospitals with the mean of 76.12% in following standards (Table 4).

Discussion

Between the reviewed standards, ".Anesthesia and Surgical Care" with compliance rate of 83.5% had the highest follow rate, which was in similar to a recent study assessing hospitals of Tehran University of Medical Sciences [15]. "Anesthesia and Surgical Care" has been reviewed in some recent studies about prerequisites of medical tourism services in hospitals and health centers [16, 17].

"International patient safety goals" standard with mean follow rate of 30.9% had a bad condition. Since this standard has low scores in all 4 reviewed hospitals, improvement of this standard seems essential. Results showed that "Access to care and continuity of care" standard had a desirable condition in reviewed hospitals, which was in similar to Zahmatkesh study [15]. Accreditation standards guarantee patients post discharge follow up and hospital's responsibility about patient in case of mal treating [18]. It has also been shown that continuity of care is very important in medical tourism [19]. "Patient and family rights" had a good compliance rate (83.3%) which was in contrast with Zahmatkesh study in which the compliance rate of this standard was estimated 49% [15]. In multiple studies it has been emphasized that patients and their families should not only be aware of their treatment and care, but also actively participates in this process [20, 21]. About "assessment of patients", studied hospitals had an acceptable state showing compliance rate of 83.3%, which was in similar to Zahmatkesh study with the rate of 72%. This could be due to application of highly trained and experienced doctors and skilled health personnel [15]. "Care of patients" standard was also relatively desirable (compliance measure = 82.6%), which was in contrast with Zahmatkesh study with the compliance rate of 60% [15]. This seems to be due to existence of a Comprehensive program for the care of patients, which is one of the requirements for JCI certification [17]. "Anesthesia and surgery care" standard was also good condition with the rate of 75.83.5%, similar to Zahmatkesh study [15]. "Medication Management and Use" standard was in favorite estate with the compliance rate of 74.7%. "Quality improvement and patient safety" standard was relatively desirable, similar to the previous study in Tehran [15]. Implementation of Quality improvement models such as EFQM and clinical governance has had greatest impact on this mean. This standard is a major issue that has drawn attention in many medical tourism studies [22]. "Prevention and control of infections" standard with compliance of nearly 86 % was in a good condition in contrast to Zahmatkesh study with the rate of 60% [15]. One of the problems limiting medical tourism is the probability of nosocomial infections [16], which was in a good state in the studied hospitals. "Governance, leadership and direction" standard with compliance rate of 86.1% was in a good state in contrast to Zahmatkesh study [15]. One of the major Requirements of JCI in this field is existence of board of directors which leads to full awareness of general and current issues [23]. "Facility Management and Safety" standard was in good condition (81%). The reason might be that the buildings of hospitals were new. This was in similar to Zahmatkesh study [15]. "Staff qualifications and education" with follow rate of 77.2% was desirable similar to Zahmatkesh study [15]. A recent study calls medical training one of the basis of medical tourism [24]. Follow rate of "management of communication and information" was nearly 81 % in Contrast to Zahmatkesh study. Afshani state's that one of the reasons that domestic and foreign medical tourists don't use actual capabilities of existing hospitals and health centers is the lack of information [25].

Tabibi states as well, that advertising and informing in international media can lead to attraction of medical tourists [26].

Table 2. The global characteristics of reviewed hospitals

Type of hospitals	Number of hospitals	Number of hospital's beds	Evaluation degree	Existence of medical tourism committee
Public	1	756	Usual A degree	✓
	2	100	Usual A degree	✓
private	3	300	Excellent A degree	✓
	4	200	Usual A degree	✓

Table 3. The scores of JCI Standards in hospitals

Standards \ Hospitals		Hospital No.1		Hospital No.2		Hospital No.3		Hospital No.4		Average
		score	%	score	%	score	%	score	%	
Patient-Centered Standards	1.International Patient Safety Goals	22	30.6	14	19.4	22	30.6	31	43.1	30.9
	2.Access to Care and Continuity of Care	69	82.1	64	76.2	71	84.5	69	82.1	81.3
	3.Patient and Family Rights	97	80.8	93	77.5	108	90.0	102	85.0	83.3
	4.Assessment of Patients	132	78.6	139	82.7	149	88.7	140	83.3	83.3
	5.Care of Patients	71	77.2	67	72.8	84	91.3	82	89.1	82.6
	6.Anesthesia and Surgical Care	48	85.7	46	82.1	49	87.5	44	78.6	83.5
	7.Medication Management and Use	55	68.8	58	72.5	65	81.3	61	76.3	74.7
	8.Patient and Family Education	14	50.0	12	42.9	22	78.6	18	64.3	58.9
	Total score	508	72.6	493	70.4	570	81.4	547	78.1	75.6
Health Care Organization Management Standards	1.Quality Improvement and Patient Safety	105	69.1	113	74.3	115	75.7	121	79.6	74.7
	2.Prevention and Control of Infections	73	79.3	78	84.8	84	91.3	82	89.1	86.1
	3.Governance, Leadership and Direction	78	75.0	84	80.8	89	85.6	87	83.7	81.3
	4.Facility Management and Safety	80	74.1	85	78.7	95	88.0	90	83.3	81.0
	5.Staff Qualifications and Education	67	72.8	62	67.4	81	88.0	74	80.4	77.2
	6.Management of Communication and Information	87	77.7	88	78.6	95	84.8	92	82.1	80.8
	Total score	490	74.2	510	77.3	559	84.7	546	82.7	79.7
	Total Score of Hospitals	998	73.4	1,003	73.8	1,129	83.0	1,093	80.4	77.6

Table 4. Total scores of JCI standards in the studied hospitals

Hospitals	Patient-Centered Standards	Health Care Organization Management Standards	Total	P-value
Public	68.92±38.51	83.33±14.91	76.12±28.35	0.01
Private	85.85±15.36	80.61±48.56	83.23±31.16	

Rana in a study in India showed that accreditation of hospitals will have a positive effect on increasing the patients' satisfaction, increase quality of health care services, decrease medical errors, decrease waiting time for charge payments, increase patients' rights respecting by reception, decrease waiting time in drugstores, creation of controlled access to patients information and increase the motivation of nurses in providing health services [27].

The findings the present research showed that Shiraz hospitals for attracting medical tourists were at the moderate status, which was in similar to a recent study assessing hospitals of Shiraz University of Medical Sciences [28]. Also this study showed that there is a significant difference between public and private hospitals in attracting medical tourists according to Joint Commission International (sig=0.01) which is in contrast with Jabbari study that no

significant difference was found between public and private hospitals [28].

Conclusion

The results of this study show that studied hospitals are in a good estate for most of the accreditation standards except "international patient safety goals" and "patient and family education". By efforts to improve these standards, the mentioned hospitals can be more successful in attracting medical tourists internationally. Following the determination of the strengths and amendable points of these centers, and by giving special attention to improving them, and by advertisement and introduction of these abilities, these hospitals would be able to make their role more prominent in this market. These weaknesses can be improved through comprehensive planning, instruction of staff, and correction of some processes. Following the determination of the strengths and weaknesses of these hospitals, they can benefit from the structured planning method of SWOT (Strengths, Weaknesses, Opportunities, and Threats) that is being used in medical tourism industry in some countries.

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