



The Inquiry of International Standards for Medical Tourism: A Case Study into Hospitals of Tehran University of Medical Sciences

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Abstract

Introduction: Medical tourism is a rapidly growing industry that has provided special opportunities to gain competitive advantage over international health organizations. This study aimed to investigate the quality requirements based on Joint Commission International (JCI) for medical tourism in selected hospitals of Tehran University of Medical Sciences.

Methods: This is a descriptive and cross-sectional study that was conducted at three educational hospitals operated by Tehran University of Medical Sciences in 2013. The data were collected through the last updated checklists (translation of the standards of JCI, comprising 13 axial) completed by the researcher. Data analysis was done using descriptive and analytical tests including frequency, standard deviation and T-Test by means of SPSS 19.0.

Results: Studied hospitals met 76.8% of organization-oriented standards plus 75.4% of patient-oriented standards. There were two patient-oriented standards, namely access to care and its continuity 87.2% alongside anesthesia and surgery care 86.6% which were met at the highest level. On the other side, organization-oriented standard of leadership and guidance 69.2% was the item met at the least.

Conclusion: It seems that studied hospitals are ready to attract medical tourists by the advantage of service quality. Moreover, it is necessary to give attention to the strengths and improve the weaknesses concerning quality of services. Criteria on service charges, waited time and etc, should be scientifically analyzed and reviewed as well.

Keywords: Quality of Health Care, Travel, Medical Tourism, JCI, Hospitals, Iran

Article History: Received: 28 Apr 2014 Revised: 24 May 2014 Accepted: 30 May 2014

Cite this article as: Jafari M, Sadeghifar J, Raadabadi M, Mosavi SM, Khodayari Zarnaq R, Bahadori M. The inquiry of international standards for medical tourism: a case study into hospitals of Tehran University of Medical Sciences. Int J Travel Med Glob Health. 2014;2(2):45-9.

1. Introduction

According to the statement of the World Trade Organization (WTO), tourism in the international business holds the third rank after oil and automotive industries in 2000 [1]. In general, tourism is classified into three major classes of cultural tourism, historical tourism and health tourism [2]. Newly emerged phenomenon of health tourism in Europe dates back to the time of Ancient Greece and Rome [3]. The term "health tourism" was presented by Goodrich in 1987 [4]. This multi-faceted subject has been discussed as an academic issue from the mid-1990s. Furthermore, several books and articles have examined health tourism and described different aspects of it [5-6]. Today, tourism can be divided into three types of health, Medical and Wellness Tourism [7].

Globalization and liberalization of the trade of health services, increasing ease of international travel, Internet

access, rising costs of medical care in developed countries and relatively low service charges in developing countries, technological progress and improved standards of care have sparked the idea of medical tourism in developing countries [8-9]. Medical Tourism as a branch of the Health Tourism is a growing worldwide industry that led to the creation of an environment in which patients travel to receive medical care beyond their national boundaries [10]. In recent decades, this field of tourism has dramatically developed. Many Asian countries, including Thailand, Singapore, South Korea, India and Malaysia are among the countries that are leading in this industry, since they approximately absorb 1.3 million medical tourists each year from around the world, which indicates such an upward trend [11]. The value of medical tourism market in Asia, was approximately 4 billion American dollars in 2012 [12]. Also our country with its attention to the advantages of medical tourism,

including geographical location, low cost of services, appropriate equipment and qualified doctors are trying to use health care opportunities available in the international market [13-14]. Also the Fourth Development Plan has emphasized on medical tourism developments a legal obligation [15].

Several studies have identified price, quality, availability and timely service delivery as four basic factors on the growth of medical tourism [16-17]. In this regard, quality has always been considered as one of the factors. International standards have provided the necessary tools for determining the quality of medical care [18]. American Accreditation Joint Commission is one of the institutions which its International branch, titled International Joint Commission, has provided International Accreditation Standards. These standards guarantee the quality of medical tourism. McCallum and Jacobi's study showed that major hospitals offered medical tourism services according to International Joint Commission [19].

Delgoshaei and colleagues' study as to the evaluation of the significance of medical tourism in Tehran also showed that the international hospital accreditation was one of the important factors that was taken into account by tourists and medical service providers [20]. The study of Kazemi also makes clear the importance of quality on the grounds of international medical tourists' views who traveled to Iran [21]. Besides, the research of Khodayari et al, on the evaluation of the ability of some Teaching-hospitals in Tehran in attracting medical tourists revealed that despite appropriate international standard met in these hospitals, their ability in certain areas such as patients' rights (medical tourism) and teaching patients were weak and strengthening in these areas was necessary [22]. So, it is quite evident that one of the major factors in the development of medical tourism is the internationally guaranteed quality. This study also attempts to use international standards of International Joint Commission as an internationally accepted tool to assess the readiness in service delivery of selected hospitals affiliated to Tehran University of Medical Sciences.

2. Methods

This is a descriptive and cross-sectional study. It was conducted at three educational hospitals operated by Tehran University of Medical Sciences in 2013. Inclusion criteria were having general conditions set in the Act of the Iranian Ministry of Health concerning medical tourist centers as well as providing medical care aimed for tourism market. General conditions approved by the Iranian Ministry of Health consists of having a legal permit, having class assessment certificate at least for two years in a row, and obtaining a minimum degree of care in the NICU, PICU, ICU and CCU in the hospital assessment. Accordingly, among the research population, only five hospitals including Heart Hospital (Heart-related services), Amir Alam hospital (Ear, nose and throat services), Farabi Hospital (Ophthalmology

services), Institute of Cancer (Cancer-related services) and Shariati Hospital (Bone marrow transplantation services) met these requirements and then constituted the study sample. Out of these hospitals, two hospitals were not willing to participate in this study.

Data collecting tool was checklist (translation of the standards of International Joint Commission (latest edition) which comprised two parts. The first section contained questions related to the hospital type, hospital evaluation grade, department to attract medical tourists and the hospital information. The second part consists of 13 standards including: access to care and continuity of care (21 items in 6 main areas), patient and family rights (30 items in 11 main areas) patients (42 items in 6 main areas), the care of patients (23 items in 7 main areas), anesthesia and surgical care (14 items in 7 main areas), administration and use of drug (21 items in 7 main areas), patient and family education (7 items in 6 main areas), quality improvement and patient safety (38 standards in 10 main areas), prevention and control of infections (23 items in 11 main areas), governance, leadership and management style (26 items in 6 main areas), management of communication and information (28 items in 20 main areas), facility management and safety (27 items in 11 main areas), and the training and qualifications of staff (23 items in 17 main areas).

The realization of standards were determined through five choices of always respected, often respected, somewhat respected, it is rarely respected and it is not respected, that scores of 4 to zero were assigned to them.

Researchers went to the studied hospitals and completed the checklists according to the standards through observation and interviews with relevant authorities. Required permits for data collection were achieved from the authorities of hospitals and university. Data analysis was done using descriptive and analytical tests including frequency, standard deviation and T- Test via SPSS 19.0.

3. Results

Three studied hospitals, a total of 39 people of administrators and officials from various departments and units of the hospitals in the study answered the questions.

Among the patient-oriented standards, the highest respect (100%) in the hospital A was related to the discharge, referral and follow-up; in the hospital B was transportation of the patients and the state of anesthesia and laboratory services; and in the hospital C regarding the clearance area, referral and follow-up and manner of drug taking was observed. The lowest level of compliance in the hospital A was related to the Clinical Assessment of Patients (38%), in the hospital B was related to the taking care of high-risk patients (50%) and in the hospital C was medication safety (37%) (Table 1). As to organization-based standards, the highest amount of respects (100%) in the hospital A was related to the medical equipment management, program monitoring, prevention and control, and in the hospital B was monitoring,

management and clinical administration of laws (rule); in the hospital C the highest rate was related to the collection and analysis of data. The lowest level of compliance in the hospital A (50%) was in employment assessment and evaluation areas; in the hospital B (62%) was in the collection, analysis and use of information and in hospital C (25%) was ethical management (Table 2).

4. Discussion

The expansion of medical tourism as a growing industry and its positive impact on several aspects, entails further investment in this field. One of the requirements for convincing people to travel to another country in order to receive medical care is the quality of the services. In this respect, satisfaction of JCI standards were studied as criteria for determination of the quality of tourist services in selected hospitals of Tehran University of Medical Sciences. In the era of globalization, patients are shopping health services around the world which makes the development of health tourism an incredible phenomenon [23]. To attract medical tourists, investors in developing countries have constructed 5 stars hospitals in which there are often doctors who have received their degree from other countries

[24]. Hospitals always are looking for international accreditation to attract medical tourists; because accreditation ensures that patients get advanced quality of care services at the price of third-world countries [25]. According to the results, studied hospitals both in patient-oriented and organization-oriented standards have quite good quality. As Herrick found out, patients were seeking high quality and reasonable price of medical care [26].

Study of Masoudi Asl et al, shows that there is a significant relationship between media advertisement and medical tourism [27]. Advertising opportunities in the international media about the areas of health care, doctors, high quality of medical services and technology will lead to the attraction of more tourists [28].

Among the patient-oriented standards, the most reached one was access to care and its continuity. Studies have shown that continuous care is considered as one of the major priorities to medical tourism [29-30]. In other words, it is the responsibility of hospital to ensure JCI's standards after patient's discharge and return to home [31]. Medicine safety and anesthetic techniques are other important items which are emphasized as prerequisites of tourism services [26, 32]. In the present study, it obtained the second most reached standard after access to care.

Table 1. Rating standards for patient-oriented hospitals

Standards	Axes	Number of items	Hospital A		Hospital B		Hospital C		Total average	
			scores	%	scores	%	scores	%	scores	%
Access to care and continuity of care	Access to care	7	22	78.5	25	89.2	22	78.5	23	81.1
	Continuity of care	2	7	87.5	7	87.5	6	75.0	6	82.5
	Discharge, referral and follow-up	4	16	100	12	75.0	16	100	14.6	91.2
	Transport and patient transport	8	26	81.2	32	100	29	90.6	29	90.6
	Total scores	21	71	84.5	76	90.4	73	86.9	73.3	87.2
Anesthesia and surgical care	Anesthesia services	8	31	96.8	24	75.0	-	-	27.5	85.5
	Status after anesthesia	6	22	91.6	24	100	-	-	23	95.8
	Total scores	14	53	94.6	44	78.5	-	-	48.5	86.6
Care of patient	Integrated care for patients	6	16	66.6	16	66.6	22	91.6	18	75.0
	Care for high-risk patients	10	31	77.5	20	50.0	38	95.0	29.6	74.0
	Nutrition and diet therapy	3	8	66.6	8	66.6	11	91.6	9	75.0
	Pain management	4	8	50.0	9	56.2	13	81.2	10	62.5
	Total scores	23	63	68.4	53	57.6	84	91.3	66	71.7
Patient and family education	Patient education	3	7	58.3	7	58.3	11	91.6	8.3	69.1
	Content and teaching methods	4	13	81.2	15	93.7	13	81.2	13.6	85.3
	Total scores	7	20	71.4	22	78.5	24	85.7	22	78.5
Medication management and use	How to use medicines	5	14	70.0	18	90.0	20	100	17.3	86.6
	Drug safety	4	15	93.7	14	87.5	6	37.5	11.6	72.8
	Management and distribution of prescription drugs	12	35	72.9	38	79.1	38	79.1	37	77.0
	Total scores	21	64	76.1	70	83.3	64	76.1	66	78.5
Assessment of patients	Clinical assessment of patients	18	28	38.8	66	91.6	69	95.8	54.3	75.4
	Laboratory services	13	32	61.5	52	100	49	94.2	46.6	89.7
	Radiology services	11	20	45.4	43	97.7	35	79.5	32.6	74.2
	Total scores	42	80	47.6	161	95.8	153	91.0	131.3	78.1
Patient and family rights	Patient and family rights	18	50	69.4	59	81.9	45	62.5	51.3	71.2
	Informed consent	12	39	81.2	30	62.5	29	60.4	32.6	68.0
	Total scores	30	89	74.1	89	74.1	74	61.6	84	70.0
Total average	scores	22.5	62.8	69.7	73.5	81.7	67.4	74.9	67.9	75.4

Table 2: Rate of organization-oriented Standards in studied hospitals

Standard	Axes	Number of items	Hospital A		Hospital B		Hospital C		Total average	
			scores	%	scores	%	scores	%	scores	%
Facility management and safety	Risk management	8	26	81.2	26	81.2	22	68.7	24.6	76.8
	Disaster management	6	19	79.1	21	87.5	18	75.0	19.3	80.4
	Management of medical devices	3	12	100	10	83.3	9	75.0	10.3	85.8
	Facility and building management	6	22	91.6	21	87.5	22	91.6	21.6	90.0
	Staff training	4	14	87.5	11	68.7	11	68.7	8.6	53.7
	Total scores	27	93	86.1	89	82.4	82	75.9	88	81.4
Governance, leadership, and direction	Board and CEO management (governance clinical)	15	31	51.6	44	91.6	44	73.3	43.3	72.2
	Ethical management	8	21	87.5	24	100	18	75.0	21	87.5
	Total scores	26	62	59.6	89	85.5	65	63.7	72	69.2
Prevention and control of infections	Prevention and control program	15	60	100	50	83.3	30	50.0	46.6	77.6
	Monitoring, prevention and control	8	32	100	27	84.3	20	62.5	26.3	82.2
	Total scores	23	92	100	77	83.6	50	54.3	73	79.3
Management of communication and information	Information and Communication network	5	11	55.0	18	90.0	15	75.0	14.4	72.2
	Information management and patient records	19	64	84.2	62	81.5	73	96.0	66.3	87.2
	Collect, analyze and use the information	4	12	75.0	10	62.5	16	100	12.6	79.1
	Total scores	28	87	77.6	90	80.3	104	92.8	93.6	83.6
Quality improvement and patient safety	Planning, improving quality and safety	8	19	59.3	27	84.3	23	71.8	23	71.8
	Clinical monitoring	12	31	64.5	47	97.9	26	54.1	34.6	72.2
	Monitoring managerial	9	24	66.6	36	100	24	66.6	28	77.7
	Data collection and analysis	9	22	61.1	33	91.6	24	66.6	26.3	73.1
	Total scores	38	96	63.1	143	94.0	97	63.8	112	73.6
Staff qualifications and education	Assessment and recruitment	9	18	50	34	94.4	29	80.5	27	75.0
	Education	5	12	60	18	90.0	16	80.0	15.3	76.6
	Evaluation	9	18	50	33	91.6	28	77.7	26.3	73.1
	Total scores	23	48	52.1	85	92.3	73	79.3	68.6	74.6
Total Average	scores	27.5	79.6	72.4	95.5	86.8	78.55	71.4	84.5	76.8

Table 4. Relationship between the average and acceptable standards (level 3)

Standard	Average	Standard deviation	Value of t	Significant
Patient- oriented	3.10	0.17	31.13	0.001
Organization- oriented	3.09	0.36	14.83	0.005

Table 5. The relationship between organization-oriented and patient-oriented standards

Standard	Organization- oriented
Patient-oriented	The correlation coefficient 0.877
	Significance level 0.318

With regard to patient-oriented standards, studied hospitals scored the least in the area of patients and their families' rights.

Several studies have emphasized that the patient and his/her companions have the right to be informed on the care plan and actively in which they participate. They should be especially aware of the different care outcomes [24, 33-34]. Among the organization-oriented standards of this research, the best state was related to the management of communication and information.

Afshani and colleagues in their study believe that gaps in the hospitals' electronic Public Relations play an important role in the lack of knowledge or interest in medical tourism and

then offering potential capabilities of international health services [35]. Moreover, in this study, weakest standard in the field of organization-based standards was leadership and guidance standard. "Clinical governance system", "the board and chief executive officer" and "ethical management" are some items that shortcomings related to them led to poor leadership standard in studied hospitals. Establishment and management of clinical governance, restructuring hospital system structure particularly in the public sector and moving toward having board and an emphasis on the ethical management strategies in the hospital can be valuable in improving the standard of leadership in the hospital.

Finally, it should be noted that the income of medical tourism in a developing country like Iran, despite the enormous potential that they have, is insignificant and the limited number of patients from neighboring countries, especially Iran and the Persian Gulf states come Iran, unfortunately there is not a good advertisement in outside or even inside the country [36]. From the positive effects of medical tourism in developing countries can name producing rapid health infrastructure, increase foreign exchange earnings, Inhibition of brain drain.

5. Conclusion

On the whole it looks research hospitals have relatively high quality based on the accreditation standards. Other factors affecting medical tourism services, such as price, legal infrastructure, cultural contexts and other fields should be examined to make a comprehensive judgment regarding providing all the conditions for better and more attendance of medical tourists in the country. The main limitation of this study was the small sample size because of the difficulty in getting support for the hospitals participation in this study and using only a questionnaire, which respondents were carefully give their actual comments, because of various reasons including the inherent bias of the questionnaire. It is suggested this study be performed with larger sample size in the same hospital and along with respecting accreditation standards, using qualitative methodology for better understanding the facts. Also it is recommended that other researchers do further studies to determine factors affecting medical tourism tourists attitude.

Acknowledgments

Hereby the authors thank the company of research hospitals participating in the study.

Authors' Contribution

All authors were involved in the study design, data analysis, and result interpretation. All authors confirmed the final draft before submission.

Financial Disclosure

The authors declared no financial disclosure.

Funding/Support

This study was a research project supported financially by Iran University of Medical Sciences.

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