

A Medical Tourist Perception of Iranian Hospital Quality: Limited Employee Foreign Language Skills Negatively Impact Communication

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Abstract

Background and Objectives: Medical Tourism is emerging as a fast growing healthcare industry with the potential to open a new economic opportunity for developing countries. Iran has been the treatment destination of many medical tourists from Middle Eastern countries for many years, yet this field of services remains underdeveloped. The best judges for the challenges facing development of medical tourism are the travelling patients themselves. Thus, this study aimed to explore the quality of Iranian public and private hospitals as perceived by patient tourists who travelled to the country for treatment.

Methods: Using a cross-sectional design, the study surveyed the perception of 39 medical tourists who referred to two public hospitals, and 40 medical tourists who referred to two private hospitals in Tehran, between May to September 2011. The survey was carried out using a self-designed questionnaire with 16 questions asking about the different aspects of the hospital quality including Staff, Communication, Expertise Level, Standards, and Facilities. The reliability of the measurement tool was examined using Cronbach's alpha. T test was used to compare score mean of hospital quality and the related dimensions between public and private hospitals. The relationship between dimensions of hospital quality was calculated using Pearson correlation coefficient.

Findings: Total hospital quality scored 73.29%. The hospital quality dimensions were rated as follows: Staff, 80.89%; Communication, 56%; Expertise Level, 80.67%; Standards, 75.44%, and Facilities, 71.67%. The overall hospital quality and all related dimensions except communication were rated significantly higher in private health settings as compared to public hospitals. A significant correlation was found between all dimensions of hospital quality as perceived by medical tourists, except between communication and facilities. The strongest correlation was found between Standards and Expertise Level. The former dimension was also found on average the strongest predictor of other dimensions.

Conclusions: While the overall quality of hospitals is generally satisfactory in terms of the measured dimensions, employee communication with tourist patients is challenged by their poor English language skills. Therefore, both private and public hospitals need to address this deficiency by appropriate strategies. Our results also suggest that promoting hospital standards could significantly improve other aspects of hospital quality.

Keywords: Medical Tourism, Patient Tourist, Foreign Patient, Public Hospital, Private Hospital, Language Skill, Communication, Health Services Delivery, Quality

Background and Objectives

In the contemporary world, access to high quality medical care is no longer limited by national borders. As a result of globalization, people find it increasingly feasible to make informed decisions about the treatment they need and identify the most appropriate destination in the world to acquire it. Termed as Medical Tourism, this health para-

digm promises more rapid and cheaper patient access to health care, thereby improved global health [1, 2].

Medical tourism is not a new phenomenon [3]. In the past, many patients travelled from low-income countries to rich countries to take advantage of medical facilities, expertise, and technology for treatments not available in their country. However, recent years have witnessed a reversal in this trend; patients from the developed world leave their home countries to seek medical treatment abroad, with countries from the developing world being the prime destination. The growth of the phenomenon is fueled

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by several factors such as high medical treatment costs [4], lack of sufficient insurance coverage for certain treatments [4], long waiting queues for certain procedures [5], unavailable treatments in the home country due to legal or cultural reasons [6], lack of trust in local treatment quality [6], and access to technology, expertise, and overall better health-care services in foreign countries.

While these motives are already strong enough to encourage patients in seeking medical treatment overseas, the patients' decision making in this regard is as well facilitated by easy access to information over the internet, reduced linguistic obstacles due to globalization, suitable currency exchange rates in the global economy, and rapid development of health care standards and technology in most countries [1, 2, 5]. The combined effects of these motivators and facilitators have created a significant momentum in the growth of medical tourism [6-8]. The prospect of this market encouraged many countries, especially those in the Far East to invest in this emerging industry as a viable policy for creating new sources of revenue, and at the same time enhancing medical services for the local community [9]. One example of such a success story in this regard is India. By providing cheap, high-tech, and quality healthcare services, and taking advantage of expert health professionals, common language, and diversity of medical conditions that physicians can address, this country achieved a high status as a destination country for medical tourists [10]. Comparable achievements have also been made by several other Asian countries including Malaysia, Thailand, Singapore, and South Korea, and efforts made by many other nations promise higher diversity of attractive treatment destinations in the future [3].

Iran for many years has received medical tourists from neighboring countries. Based on cost analyses, Iranian authorities have identified an unrivaled potential for medical tourism in Iran among neighboring countries [11]. The combined advantage of cost effectiveness and several other attributes including Iran's particular geographical location, long and rich history of medical practice, and high medical treatment standards, indicate the country's potential to emerge as the regional hub in medical tourism [12]. Despite that, however, the field has remained undeveloped in Iran [13], and the country's healthcare system has not been successful in medical tourist attraction when compared with pioneer countries such as India [14]. Limited academic research into the field has identified factors such as inappropriate

inter-agency coordination, lack of a comprehensive information management system specific to medical tourists, inadequate marketing, insufficient infrastructure, lack of skilled professionals in the field, and shortage of relevant training programs, as the major barriers to development of the industry [14, 15]. To achieve a fair understanding of the status of medical tourism infrastructure, perhaps no evaluation is more realistic than that by patient tourists themselves. Based on this premise, the present study surveyed perception tourist patients on quality of Iranian hospitals they referred to, in order to provide insight into the challenges confronting development of medical tourism at hospital level. In addition, considering the difference in the quality of health care services between private and public hospitals [16], the present study explored the corresponding impact on tourist patients' satisfaction with hospital quality. The implications of the findings for policy are discussed.

Methods

A cross-sectional study was conducted in 2011. The study population consisted of patients hospitalized in four health facilities with relatively high rates of medical tourist admission. Our study enrolled 39 medical tourists referred to two public hospitals (Hasheminejad Kidney Center and Sina Hospital), and 40 medical tourists referred to two private hospitals (Madaen Hospital and Atiyeh Hospiat) in Tehran over the period of May to September 2011. Data were collected using a self-made questionnaire. The questionnaire comprised 16 questions related to five different aspects of hospital quality. Answers were rated using a 10-point scale. The validity of the questionnaire was determined by expert judgment method. The internal consistency reliability of the the scale and its subscales was evaluated using Cronbach's alpha. Descriptive statistics was used for data summarization. The scores were transferred to a 100-point scale for more convenient interpretation of the results. For the purpose of this study, the scores below 60 represented "unsatisfactory" rating levels, 60 to 80 "satisfactory", and over 80 "very satisfactory". Normality of data distribution was examined using the Kolmogorov-Smirnov test. The t test was employed for comparison of the means, and the relationship between hospital quality dimensions were measured by the Pearson correlation coefficient. All statistical analyses were carried out using SPSS Software Version 16.

Table 1 Mean, Standard Deviation, and Reliability of hospital quality dimensions as perceived by medical tourists

Dimensions	Mean (SD)	Reliability
Staff	80.89 (19.55)	0.743
Communication	56 (19.77)	0.708
Expertise Level	80.66 (15.33)	0.685
Standards	75.44 (20.44)	0.746
Facilities	71.67 (14.77)	0.486
Total	73.29 (15.55)	0.886

Results

Table 1 describes the results of patient tourists' evaluation of the hospitals, and the reliability of hospital quality dimensions. All dimensions except 'Facilities' are of adequate internal consistency ($\alpha > 0.7$). As seen, while the communication factor scores the lowest, the highest score is received by the 'Staff' factor followed by 'Expertise level'. The two highest rated dimensions fall marginally within the range of 'very satisfactory' level. 'Standards' and 'Facilities' were scored as satisfactory, and 'Communication' was rated as unsatisfactory.

Table 2 compares hospital quality scores between public and private settings. The total hospital quality and all quality dimensions with the exception of 'communication' were perceived significantly higher in private hospitals as compared to public hospitals.

Table 3 shows the correlations of hospital quality dimensions. The correlations between all pairs of dimensions are significant with the exception of that between 'Communication' and 'Facilities'.

Discussion

The purpose of this study was to evaluate tourist patients' perception of Iranian hospital quality. Medical tourists expressed on average a satisfactory evaluation of hospital quality. In addition, all dimensions of hospital quality were rated within the range of satisfactory to very satisfactory.

The lowest rated dimension of hospital quality was 'Communication'. This factor comprised two questions: one that asked about how well physicians can communicate with patients, and the other that asked about tourist patients' evaluation of employees' English oral language skills. The poor rating of the second question was responsible for the relatively low score of this dimension.

Language is a key factor in medical tourists' decision on choosing their treatment destination country [17]. Studies have identified employees' companionship with tourist patients as one of the important factors in their satisfaction, which is not effectively possible without a common language [13]. Common language is accounted for one of India's competitive

Table 2 Comparison of medical tourists' perception of hospital quality between public and private hospitals

Dimensions	Public Hospitals Mean (SD)	Private Hospitals Mean (SD)	t	df	P-value
Staff	71.3 (22.8)	90.22 (8.9)	-4.87	77	< 0.01
Communication	51.89 (23.4)	60.11 (14.67)	-1.89	77	0.063
Expertise Level	72.44 (17.2)	88.66 (6.67)	-5.54	77	< 0.01
Standards	64.40 (23.5)	86.22 (7.67)	-5.47	77	< 0.01
Facilities	86.11 (15.3)	75.22 (13.4)	-2.21	77	0.03
Total	64.77 (12.9)	81.55 (4.11)	-5.62	77	< 0.01

Table 3 Correlation analysis among hospital quality dimensions as perceived by medical tourists

Dimensions	Staff	Communication	Expertise Level	Standards	Facilities
Staff	1				
Communication	0.558 **	1			
Expertise Level	0.562 **	0.470 **	1		
Standards	0.758 **	0.624 **	0.781 **	1	
Facilities	0.373 **	0.202	0.343 **	0.440 **	1

** P < 0.01

advantages in attracting medical tourists [18]. Studies have also indicated that foreign language skills can influence the quality of services delivery. Hence, the Iranian hospitals will need to improve the English language skills of their employees as an essential requirement for tourist patient attraction.

We identified considerably higher perceived hospital quality in private hospitals compared to public hospitals. This indicates the higher compatibility of private hospital ownership with the requirements of a successful medical tourism program. At the same time, our results suggest that public health settings can learn much from private hospitals in improving health services delivery to tourist patients. The only insignificant score difference between private and public hospitals was in 'Communication', which indicates the generality of English language skill problem in Iranian health workers. The largest score difference between the two types of hospital was related to hospital standards. Indeed, the higher standards in private hospitals may underlie their other perceived advantages relative to public health settings. This hypothesis is corroborated by the observation that hospital standards make on average the highest correlations with other dimensions of hospital quality. This emphasizes the importance of hospital compliance with international standards and accreditation criteria in order to succeed in tourist attraction [19, 20]. Private hospitals are generally perceived to be more willing to comply with accreditation criteria due to their higher authorities and financial strength. Our results reflect the impact of such a tendency on tourist patient satisfaction.

The highest correlation of hospital quality factors, as perceived by tourist patients, was between 'Standards' and 'Expertise level'. Hospital standards also displayed high correlations with 'Staff' and 'Communication'. It appears that there is a mutual relationship between hospital standards and other dimensions of hospital quality. For instance, the higher the tech-

nology of hospital equipment is, the more expertise will be required by the medical staff to operate them. Conversely, the more skilled and expert the medical and nursing staff is, the higher the order and quality of health care delivery will be. Therefore, initiatives toward implementing accreditation standards facilitate requirement of more professional health workers, which in turn, helps a smoother journey towards high standards. Our results support the notion that establishing such a cycle of standard improvement would lead to higher satisfaction of medical tourists with hospital quality.

Overall, the results of this study help identify some of the immediate factors that need to be addressed to boost medical tourism in Iran. Some gaps in requirement of medical tourism development in Iran may be narrowed by focused training programs. English language and communicational and behavioural skills are critical points of focus as our study indicated. Several previous studies highlighted the role of employee training in hospitals' success in attracting medical tourists [21].

In addition, our results identified hospital standards as a predictor of some other factors that influence medical tourists' satisfaction with hospitals including expertise level and staff quality. Hence, a policy that encourages hospitals to comply with standard criteria, promises further attractiveness of the country as a treatment destination for medical travellers.

Moreover, the fact that private hospitals scored higher satisfaction of medical tourists, suggests that an effective medical tourism strategy should mostly rely on private health sector capabilities to ensure positive outcomes.

Study Limitations

While this study was among the first to survey tourist patients' perception of Iran's health facilities, the study limitations should be considered as well when

interpreting the results. Firstly, the study enrolled only a few hospitals and a limited number of tourist patients. This constraint impedes generalization of the results at national level. However, it should be considered as well that the field of medical tourism is relatively young in Iran, and there are not a large number of health facilities that provide professional health services to tourist patients. Secondly, our study explored only a limited number of hospital quality dimensions, which did not include such important factors as costs and length of stay, patient outcomes, and treatment effectiveness. Therefore, further extensive studies are required to allow for more conclusive insights. Thirdly, the dimension of 'Facilities' fell short of the minimal internal consistency to be considered as reliable. Therefore, caution should be exercised in interpretation of the results obtained by this subscale.

Conclusions

According to surveyed medical tourists, the quality of hospitals is overall satisfactory. Tourist patients expressed a high perception of staff and expertise level, while hospital standards, communication and facilities were evaluated at moderate level. The lowest scored factor was communication, with English language oral skill having the major influence. Tourist patient satisfaction with hospital quality was higher in private hospitals as compared to public hospitals, with the largest difference related to hospital standards. Hospital standards had the strongest correlations on average with other dimensions of hospital quality. Hence, our study provides a number of implications in terms of medical tourism policy: 1) Hospital administrators should improve the English language skills of their employees, 2) Private hospitals have a higher potential to attract tourist patients, and 3) Hospitals compliance with international standards and accreditation criteria is critical to successful development of medical tourism.

Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

MRM, SJT, and FA jointly designed the study. FA collected the data and contributed to data analysis and interpretation of the results. MA was involved in data analysis, interpretation of the results and preparation of the manuscript. MRM revised the manuscript. All authors read and approved the final manuscript.

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