

Comparing the status of medical tourism in private and public hospitals in Tehran city

Mahnaz Khoshmanzar Shahroodi¹, Abbas Yazdanpanah^{2*}

¹MSc, Department of Healthcare Management, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran

²Assistant Professor, Department of Healthcare Management, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran

Received: 12 October 2014

Accepted: 1 March 2015

Published online: 12 March 2015

***Corresponding author:** Abbas Yazdanpanah, Department of Healthcare Management, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran. Email: Abbas_yaz@yahoo.com

Competing interests: The authors declare that no competing interests exist.

Citation: Khoshmanzar Shahroodi M, Yazdanpanah A. Comparing the status of medical tourism in private and public hospitals in Tehran city. Report of Health Care 2015; 1(4): 134-138.

Abstract

Introduction: Today, medical tourism is deemed as one of the most growing units of industrial sector in the world. This has caused the governments to plan for developing this industry in private and public sectors in their healthcare system. Therefore, the aim of this study was to compare the status of medical tourism in private and public hospitals in Tehran city.

Methods: This descriptive cross-sectional type of research was conducted in some private and public hospitals in Tehran. The statistical population included employed nurses in these hospitals. In order to gather data, a valid and reliable questionnaire was used. For data analysis, descriptive statistics (frequencies, mean and standard deviation) and analytical tests (*t* test) were applied. SPSS version 17 was used for data analysis. *P* value less than 0.05 was considered as statistically significant.

Results: Findings indicated that the status of medical tourism in all dimensions, including expert manpower, medical equipment, type of services, information and communication technology (ICT), and marketing, in public hospitals was better than in private hospitals.

Conclusion: Although the status of medical tourism in public hospitals is better than private hospitals but healthcare policymakers should find strategies to increase tourist attraction in private hospitals in order to earn income and promote health tourism in the country as well.

Keywords: Medical tourism, Private hospital, Public hospital, Tehran

Introduction

Tourism is an economic activity that may provide an appropriate opportunity to enter in the international trade field regardless of development level of countries due to its specific nature and features. From the perspective of economists, this industry is assumed as one of the fastest ways for capital return with the highest rate (1). Not only the rising growth in the quantity of international trips but also the increased interest in tourist destinations has played a role in the development of sub-fields in 'tourism' every day and more than ever. Some of these terms include war tourism, religious tourism, urban tourism, rural tourism, sports tourism, recreational tourism, ecotourism, events tourism, and health tourism (2). Today, tourism industry is a modern phenomenon in international trade offs which can devote a great volume of international transactions per se and grows fast within a short period of time (1). The reports from International Tourism Organization indicate that in 2014 the revenues resulting from tourism industry in Middle East reached approximately US\$700 billion. Medical tourism is one of the branches of tourism. Medical tourism can be defined as a condition in

which tourists search for a range of medical therapies at first place and then they mainly seek for a conventional form or the same relevant touristic experience with leisure times and amusement in tourist locations (3). During the past decades, this branch of tourism has been dramatically developed. Many Asian countries including Thailand, Singapore, South Korea, India, and Malaysia are the pioneer countries in this industry. These countries attract about 3.1 million medical tourists from different parts of the world every year (4). Due to the high-cost of medical services in developed countries, many people prefer to travel to other countries where the medical cost is cheaper (5). Medical tourism provides an opportunity for hospitals to use their potentials to give services to patients from other countries (6). Evidence shows that the inhabitants of neighboring countries, especially the littoral states in Persian Gulf, travelled to Iran to benefit from medical services. The time of these trips is not exactly known. There is some evidence regarding the importance of spas and warm springs among Iranians. Avicenna classified these zones into spiritual asylum, therapeutic springs and warm spas and examined the application of any category. Based



on cultural proximity, ethnicity and often familial relations most of these patients referred to Fars and Azerbaijan provinces for treatment (7). Health tourism can be flourished in Iran because of the low cost medical services as compared to other countries, appropriate quality, and the latest techniques used in treatments. Iran has been ranked as the 5th, 10th, and 67th in the world in terms of cultural heritage, climate and tourist attraction respectively (8). In 2000s, health tourism topic was formally introduced within the framework of entrepreneurship in healthcare and treatment sector. In recent decade, the Ministry of Health and Medical Education (MOHME) has paid specific attention to job opportunities in medical tourism field and established entrepreneurship in different ministries for it. In other words, specific attention was paid to medical tourism in the field of healthcare in world markets based on the fourth and fifth National Development Plans. At present, many patients travel to Iran for medical problems such as infertility, plastic and cosmetic surgery, dental transplantation and gingival surgery. These medical conditions are carried in different locations of Iran. For instance, Milad hospital in Tehran, Bent-Al-Hoda and Razavi hospitals in Mashhad, and Namazi hospital in Shiraz (5). Unfortunately, there has not been a remarkable step forward regarding medical tourism in Iran. The underlying reason is lack of adequate knowledge about chances and challenges in medical tourism. This includes the absence of adequate and appropriate advertisements for health tourism in target countries as well as the lack of private centers to manage medical tourism process for foreign patients. Although Iran is ranked as the first ten superior countries in the world in terms of tourism, natural attractions and climate, but its portion of the total world tourism revenue is very little (0.001%) (5,9,10). Therefore, with respect to the aforementioned matters and considering that no specific study has been carried out to compare private and public hospitals regarding medical tourism, the present study aimed to compare the status of medical tourism in private and public hospitals.

Methods

This descriptive cross-sectional study was conducted from February 2015 to July 2015 in public and private hospitals in Tehran city. The statistical population included all nurses in the studied hospitals. As it is daunting and time consuming to enter the whole population into the study the sampling method was used to guarantee that the sample chosen is representative of the population. The Cochran's formula was used to determine sample size in this study. Totally, 60 nurses entered the study (30 nurses from private hospitals and 30 nurses from public hospitals).

Data collection techniques and tools

In order to collect data a self-developed questionnaire was used. In this regard, a comprehensive literature review was done to compile the questionnaire. The questionnaire encompassed two parts. The first part included five questions regarding the demographic information of partici-

pants (age, gender, education degree, working experience, and organizational position) and the second part included 20 questions. Of these questions, questions 1-5 were related to manpower, questions 6-9 were related to medical equipment, questions 10-13 were related to marketing, questions 14-18 were related to type of services and questions 18-20 were related to information and communication technology (ICT) use. Respondents had to answer the questions on a 5-point Likert type scale.

Validity and reliability of questionnaire

Validity means that any measurement tool should measure the same trait that has been designed for. Our questionnaire contains 20 words, four choice questionnaires. (Likert scale: very low, low, too much) and based on a sample of 50 specimens, obtained Cronbach alpha coefficient 85/40 which indicate good internal validity of the questionnaire.

Data analysis method

In order to analyze data, descriptive statistics such as percentage, cumulative percentage, mean and standard deviation was used. In addition, inferential statistics such as one-sample *t* test was used to compare medical tourism in private and public hospitals. SPSS version 17 was utilized for data analysis.

Results

Table 1 shows the demographic information of participants. Findings showed that the majority of participants were in the age group of 20-30 in both public (46.7%) and private (30%) hospitals. Similarly, female participants included 86.7% and 93.3% of population in public and private hospitals respectively. In terms of working experience, those who had 10-20 years of experience included 33.3% of the population in public hospitals. In private hospitals, the maximum working experience was jointly related to those who had 5-10 and 10-20 years of experience. Other demographic information such as educational status and organization position is depicted in Table 1. Findings also showed that medical equipment (10.06) and type of services (11.16) were ranked as the most important in private hospitals. Likewise, medical equipment (10.36) and marketing (12.06) were the most important in public hospitals (Figure 1). Based on Table 2, the role of medical tourism variable has been shown in private and public hospitals ($P < 0.05$) using independent *t* test. Comparing expert manpower in private and public hospitals showed that with respect to higher mean value of this variable in public hospitals and mean difference from private hospitals (4.8), the potential of manpower in public hospitals was higher than in private hospitals regarding the subject of medical tourism. As can be seen from Table 2, the condition of medical equipment in public hospitals was more appropriate than in private hospitals. By the same token, public hospitals provided better services in comparison to private hospitals. This was true for other variables such as marketing and ICT application. Table 3 shows the status of

Table 1. Demographic information of respondents

Variable	Public hospital (%)	Private hospital (%)
Age (year)		
20-30	46.7	30
30-40	16.7	30
40-50	36.7	40
Gender		
Female	86.7	93.3
Male	13.3	7.6
Working experience (year)		
Less than 5	23.3	23.3
1-5	26.7	10
5-10	16.7	33.3
10-20	33.3	33.3
Educational status		
Under diploma	0	0
Diploma	6.7	0
Bachelor's degree	76.7	66.7
Master's degree	16.7	33.3
Doctorate and higher	0	0
Organizational position		
Nurse	83.3	80
Matron	6.7	20

Table 2. Role of medical tourism in private and public hospitals^a

Medical tourism variables	Type of hospital	SE	Mean	P
Specialized manpower	Public	2.7	8.83	0.000
	Private	1.71	4.03	0.000
Medical equipment	Public	2.98	7.36	0.000
	Private	2.25	7.06	0.000
Marketing	Public	3.48	9.06	0.000
	Private	1.71	4.03	0.000
Type of services	Public	3.52	10.2	0.000
	Private	2.37	8.16	0.000
ICT application	Public	2.53	3.1	0.000
	Private	0.264	0.9	0.000

Abbreviations: SE, standard error; ICT, information and communication technology.

^a*P* < 0.05.

Table 3. The condition of medical tourism in private and public hospitals^a

	SE	Mean	P
Medical tourism in private hospitals	7.32	36.86	0.000
Medical tourism in public hospitals	13.02	50.56	0.000

Abbreviations: SE, standard error.

^a*P* < 0.05.

medical tourism in private hospitals. With respect to this table, the mean scores in public hospitals were higher than private hospital. Similarly, regarding higher mean value in public hospital and its mean difference from private hospital (13.7), it can be implied that in comparison with private hospitals, the medical tourism had a better position in public hospitals.

Discussion

Today, medical and health tourism is an important entity

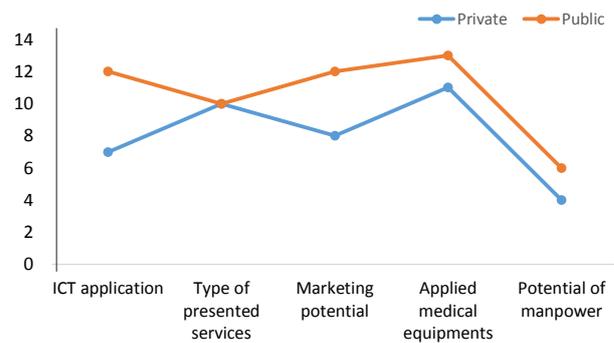


Figure 1. Comparison of mean value of variables in private and public hospital.

in tourism industry. Many organizations worldwide try to develop tourism and plan to thrive on it. By the same token, hospitals tend to attract new patients using competent physicians and providing high quality services with low costs (5). In this study we compared each of medical tourism variables including skilled manpower, medical equipment, marketing, type of services, and ICT application as well as the general status of medical tourism in private and public hospitals. Regarding skilled manpower, findings showed that the status of this variable is better in public hospitals than private hospitals. It means that public hospital staff members possess higher and more updated scientific potentials and capabilities and also more people in public hospitals have these qualities. As medical universities are affiliated to public hospitals, medical students, interns, residents and also other health related majors are present in public hospitals. Due to their presence and special and up to date knowledge, they can provide better services to patients in these hospitals. Conversely, these skilled students are not available in private hospitals. In addition, there might be no training courses for the personnel of these hospitals. The number of staff in public hospitals is more than private hospitals because there are graduate members from various healthcare and medical fields for taking part in internship courses. This finding is inconsistent with the results of Jabbari's study in which manpower did not have a significant difference in private and public hospitals and both of them were at a reasonable level (11). Evidence shows that holding specialized training courses for personnel in hospitals can have a positive impact on the services they provide to patients (9). In terms of medical equipment, findings indicated that the status of this variable is better in public hospitals than in private hospitals. It seems that in public hospitals, there are better medical instruments and space available to provide medical services to tourists. This can be related to budget and money provided by government to public hospitals. Thus, they can purchase more advanced medical equipment to provide health services to patients and tourists. This situation is different in private hospitals as the money or budget they need is met through receiving the costs from patients. There is also a reluctance to spend money to purchase more advanced equipment

in private hospitals as making profit is more important. Findings also highlighted that public hospitals excelled at marketing. In public hospitals, more arrangements and preparations are done for introducing their services to customers throughout the country and abroad. In fact, public hospitals have more chance to be introduced at international level due to their close relationship with public universities, the availability of medical students in these hospitals and modern equipment. Apparently, promotion at international level is significantly related to the attraction of medical tourists (12). Kazemi stated that the appropriate marketing in line with Iran's situation is an effective factor to attract medical tourists (13). With regard to type of services, public hospitals provide services for a shorter period of time which are more economical. As already mentioned, public hospitals, due to their financial support by government, possess higher potential for offering more services with less costs, but private hospitals handle all financial subjects by themselves. This finding is consistent with Jabbari's study in which the price of services in public hospitals was lower than private hospitals. This can also be related to higher tariffs in private hospitals (11). Concerning ICT application, it was evident that public hospitals had a better condition than private hospitals. In other words, more arrangements and activities are done for making the appropriate link with origin hospital and presenting information about the treatment process. As mentioned before, dependency of public hospitals to governmental universities is one of the reasons for ready facility in these arrangements, because this advantage provides more opportunity for communication with hospitals in other countries and exchange of patient's information. Based on the obtained results it is clear that the status of medical tourism in public hospitals is better than private hospitals. Although in Iran, similar to other countries, most medical tourism services are presented in public sector, some researchers believe that medical tourism services should be directed to private sector as much as possible because the public hospitals are financed by public budget and they are supposed to present services for people of their own country (14). In other hands, along with medical tourism industry growth in various countries, the problems and issues related to it will become huge. Surely, the consequences would affect both sides of this equation including host countries and countries of origin. The poor inhabitants would be the main victims in host countries while in origin countries the victims are the patients who have travelled to other countries to receive low-cost healthcare services (15). In fact, at macro level there must be cooperation among relevant institutions regarding medical tourism policies. These policies should be in line with international laws, absorbing foreign currency revenues for the country through the presentation of medical services to tourists, creating inter-sectorial and intra-sectorial cooperation for developing medical tourism as well as arrangements for domestic patients to travel abroad for treatment along with strategic design and planning in compliance with outlook of the national future 20-

year horizon in this sector are deemed as the objectives for policymaking council of health tourism (16). In order to attract more medical tourists, four basic elements must be taken into account including professional medical employees, modern technology, medical costs, and national regulations. Iran possesses a better condition concerning these elements in comparison to its neighboring countries (17). This study can be considered as the first research which compared medical tourism between private and public hospitals. This study had some limitations. First, the study sample was small and from a specific location in Iran, which limits the generalization of its results to other countries in the region. Secondly, this study was based on a structured questionnaire with pre-specified and limited items. Thus, a more in-depth and extensive examination concerning medical tourism is of utmost importance. Thirdly, due to the paucity of researches conducted in this regard, researches could not make an exact comparison between different studies.

Conclusion

This study showed that the status of medical tourism in public hospitals is better than private hospitals. Therefore, policymakers should seek for some strategies to attract more tourists in private hospitals. In this regard, private sector can use its capacity and earn some money respectively. Considering the appropriate status of public hospitals regarding medical tourism, private hospitals can benefit from this firsthand experience to flourish in this arena.

Ethical considerations

This study was approved by the Ethics Committee of Shiraz University of Medical Sciences. Before the distribution of the questionnaires, respondents were informed about the purpose of the study. Questionnaires were completed anonymously and confidentiality of the data was maintained.

Acknowledgements

We would like to express our sincere thanks to all employees who participated in the study.

References

1. Eslami F, Sheykhi M. The sociological study of tourism obstacles in Qeshm island. Scientific-Cultural Tourism Center of Iranian Students; 2011. [In Persian].
2. Haghghi M, Ziyayi M, Jafari Q. Priorities in medical tourism development in Iran. *Tourism Study Journal* 2011;11. [In Persian].
3. Caballero D. Medical tourism and its entrepreneurial opportunities a conceptual framework for entry into industry [Dissertation]. Gothenburg: School of Business, Economic & law, Goteborg University; 2006.
4. Sadr Momtaz N, Agharahimi Z. Medical tourism industry in Iran: solutions for developing, *Health Information Management* 2011-12. special issue: 516-524 [In Persian].
5. Khalilifar S, Valadkhani A, Nejati Zarnaghi B, Ebrahimi M. Chabahar, the hub of medical tourism in Mid-East and South Asia. *First National Conference in Developing Mokran Coasts and Iran's Navy Authority*; 2013, 17th-18th March. [In Persian].
6. Delgoushaie B, Jabbari A, Farzin MR, Sherbafchizadeh N,

- Tabibi SJ. Medical tourism in iran: a case study. Paayesh 2013; 11(2): 171-9. [In Persian].
7. Tourani S, Tabibi S, Tofighi S, Sherbafchi N. Health services international business in selected countries of ASEAN Members, Challenges & opportunities. Health Information Management 2012; 8(4): 453-468 [In Persian].
 8. Alaviyan S. health tourism standards, Deputy Minister of Health & Medical Education, Medical Tourism in Iran Conference; 2008.
 9. Khodayari Zarnagh R. The preparation level of medical hospitals in medical tourist attraction according to International Committee standards [Dissertation]. Tehran, Iran: Iran University of Medical Science; 2010. [In Persian]
 10. Sarmad Z, Bazargan A, Hejazi E. Research Methods in the Behavioral Sciences. Tehran: Agah; 1998. [In Persian].
 11. Jabbari A. Designing medical tourism template in Iran [PhD Thesis]. Iran: Medical Science University; 2009.
 12. Ayyoubiyan A. The mechanism of Advertising and attracting tourists in Isfahan's private hospitals [Dissertation]. Tehran: Science & Research University; 2012.
 13. Kazemi Z. Study of the Effective Factors for Attracting Medical Tourism in Iran [Dissertation]. Isfahan: Isfahan University; 2007
 14. Qadeer I, Reddy S. Medical tourism in india: perceptions of physicians in tertiary care hospitals. Philos Ethics Humanit Med 2013; 8: 20.
 15. Mostafavi H, Shamsi Goushki E, Abbassi M. Moral in Health tourism. Biological Moral Journal. 2013; 2(4): 161-80,
 16. Arabshahikarizi A, Aryanfar M. Health tourism and medical tourism and treatment capabilities in Iran. Journal of Space Tourism 2010; (9): 133-52
 17. Nasiripoor A, Salmani L. Potential role in the development of medical tourism hospitals in Tehran in development treatment tourism. Journal of Hospital 2011;35(3,4):57-67