



Hospital's Challenges in Providing Healthcare Services to Medical Tourists: A Phenomenological Study at the National Level

Samira Raoofi¹, Rahim Khodayari-Zarnaq² and Soudabeh Vatankhah^{1,*}

¹Department of Health Care Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran

²Tabriz Health Services Management Research Center, Department of Health Policy and Management, School of Management and Medical Informatics, Tabriz University of Medical Sciences, Tabriz, Iran

*Corresponding author: Department of Health Care Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran. Email: vatankhah_s@yahoo.com

Received 2022 October 29; Revised 2023 February 22; Accepted 2023 March 19.

Abstract

Background: Hospitals play a crucial role in providing medical services to medical tourists and their satisfaction; however, they face many problems in this field.

Objectives: This study aimed to explain hospitals' challenges in providing healthcare services to medical tourists.

Methods: In this qualitative-phenomenological study conducted in 2021, data were collected through semi-structured interviews, purposive sampling, and the participation of 21 key informants involved in hospitals and medical tourism industries in six large cities in Iran. They were then analyzed using the thematic analysis method with the MAXQDA-10 software.

Results: Hospital challenges were included in 165 final codes. The six main ones were governance and leadership, financing, human resources, technology-equipment-medicine, information systems, and service delivery. Three categories of structure, process, and outcomes related to medical tourism were also identified.

Conclusions: Improving the information and communication infrastructure, developing the activities of facilitator companies, updating the standards of the International Patient Department (IPD), compiling guidelines related to insurance, and setting tariffs are suggestions that can help reduce the existing challenges.

Keywords: Medical Tourism, Healthcare Services, Hospital, International Patients, Iran

1. Background

Medical tourism is a developing industry that seeks and receives non-emergency medical services and cares from outside the residence (1, 2). There are various reasons why medical tourists travel from developed to developing countries. These may include expensive medical services and inability to pay, low-quality services in the country of origin, long waiting times to receive health services, lack of access to some services or insufficient coverage of health insurance, and lower-price services in developing countries (3-11).

According to global reports, the global medical tourism market was valued at \$61.1 billion in 2016 and is expected to reach \$165.3 billion by 2023, with a joint growth rate of 15%. Meanwhile, the World Economic Forum reported only five million foreign tourists to Iran in 2017, accounting for 2.5% of Iran's GDP and 2% of the country's total employment (12, 13).

Iran intends to become the region's medical tourism

hub and serve 20 million foreign tourists by 2025 (14). Investment in this field can increase revenue, improve services, and higher foreign exchange earnings. Despite many capabilities and merits to attract medical tourists, the country faces different challenges in various fields, such as the government's loose intention to develop this industry, inadequate air transportation, low quality of accommodation, presence of brokers, cultural differences, and language challenges of the international patients in hospitals, absence of support and utilization of private sectors in providing health services, lack of post-treatment follow-ups, and loose marketing and advertising (15-18).

Due to the challenges in its affiliated hospitals, the Iranian Ministry of Health and Medical Education (MOHME) established an International Patient Department (IPD) in 2015, which has been set up in hospitals to improve the quality of medical services, reduce healthcare wait time, and increase physicians, staff, and international patients' satisfaction. This has been accepted as a suitable approach to solving the challenges of medical tourism at the inter-

national level (19).

According to the MOHME, there were 954 active hospitals in the country in 2017, with 80% government and 20% private hospitals and, according to statistics published in 2019, out of 154 hospitals that received medical tourists, 121 hospitals had one-year validation licenses, and 33 had conditional certificates for health tourism. But, according to a 2016 study, the performance of these departments faced problems, and department establishment was not significant for the admission of foreign patients. The number of admitted international patients has not significantly changed before and after the implementation of this department (20).

2. Objectives

This qualitative study was conducted in Iranian hospitals to explain hospitals' challenges in providing health-care services to medical tourists specifically.

3. Methods

This study was carried out using a phenomenological qualitative design in 2021 in six large cities in Iran. Due to the lack of previous research, this approach was chosen to investigate medical tourism research in the hospital setting. The research communities included Tehran (the Capital of Iran), Mashhad (located in the northeast of Iran), Tabriz (situated in the northwest of Iran), Shiraz (located in the south of Iran), Isfahan (located in central of Iran), and Yazd (located in the southeast of Iran). These cities were chosen because of their geographic situation in foreign countries, such as Republic of Azerbaijan, Iraq, Afghanistan, and Armenia, and the provision of superior medical services and equipment (21-23).

The study participants included the executive manager, an IPD expert in hospital, vice-chancellors, and the facilitator's company. The inclusion criteria for the study were at least five years of work experience or scientific experience in the medical tourism field. The exclusion criterion was the unwillingness of the participants in the interviews. Purposive sampling was used for the study, and we determined the sample size according to data saturation at the point where no new code was generated from the interview. Therefore, after 21 interviews, saturation was achieved, and data saturation was confirmed.

Data were collected through semi-structured face-to-face and online interviews. For data collection, an interview guide was prepared based on relevant literature and experts' opinions (5-10) for validating the interview guide,

three interviews were conducted and then analyzed; after that, the research team finalized the order of the questions, and the interview guide (Table 1) the study protocol was reviewed and approved by the Ethics Committee of the Iran University of Medical Sciences (IR.IUMS.REC.1399.484) reviewed, then a license for data collection was obtained from the Iran University of Medical Sciences.

The researchers went to the hospitals to conduct the interviews and obtained verbal consent before running the interview aims of the study were fully explained to each interviewer, then running the face-to-face interview in a relaxing atmosphere; in some cases, if there was no access to the interviewees, the interviews were conducted online via Skype (12 face-to-face interviews and nine online interviews). Each interview lasted between 45 to 90 minutes (an average of 70 minutes). After obtaining consent, we recorded each interview session and, at the same time, took notes, and to keep the information of the interviewees confidential, we did not mention their names in the findings section and listed the quotations based on numbers.

The data were analyzed using the thematic analysis method and MAXQDA-10. The content of the interviews was typed and reviewed several times to extract the primary codes concerning various aspects of the data obtained. The first main codes related to the challenges of hospitals were identified in the text of interviews by two researchers; similar codes with close meanings were grouped into sub-categories and, finally, in the main categories. The primary and secondary contents were reviewed several times and, if necessary, combined, modified, and separated to create a logical thematic map of the relationships between creating primary and secondary contents; then, the main and sub-themes were named and defined and in case of disagreement between the researchers, the opinions of the third researcher were used, ultimately, the primary and secondary themes were named and described. As to the purpose of the research, the main themes and sub-themes identified through codes and relevant quotes from the interviewees were prepared as a report in the form of a purposeful story.

Four criteria proposed by Guba and Lincoln (i.e., credibility, dependability, confirmability, and transferability) were used to increase the consistency and accuracy of the study. To credibility and confirm ability criteria, submergence and review by research colleagues and expert opinions were used, in addition to sending interview files to interviewees for their complementary comments. For dependability, two researchers were used for coding, and for transferability, the experts' opinions, maximum sampling diversity, and purposeful sampling were used (8).

Table 1. Interview Guide

No.	Question
1	What is the process of providing services to medical tourists in your hospital/company?
2	What are the facilities and infrastructure for providing medical services to your hospital/company?
3	What was the challenge in providing the service?
4	What has been the efficiency of the international patient unit in the hospital? Is it efficient at all?
5	What has been your most important problem in this unit? What solution did you find for that?
6	What has been the strength of this unit in your hospital?
7	What have been the most important problems raised by patients since the establishment of this unit?
8	Do you think the establishment of this unit can be useful for the development of medical tourism?

4. Results

A total of 21 people participated in the interview, including the IPD expert in hospital and vice chancellor, managers, nursing management, and chief managers of the facilitator's company (Table 2). Challenges of hospitals in providing services to medical tourists in 165 final codes and six main themes, according to the World Health Organization (WHO) classification for health systems, were as follows: governance and leadership, financing, human resources, technology, medicine, equipment, information systems, and service delivery (24). The three categories (structure, process, and outcomes-related factors of medical tourism services) are presented in Table 3.

4.1. Governance and Leadership

4.1.1. Structure-related Factors of Medical Tourism Services

One of the main factors in the field of governance and leadership is the guidelines compiled on medical tourism, which, in some cases, are contrary to the national accreditation standards in Iran. However, these guidelines do not follow international standards and are outdated.

"We admit patients without wait time because they give us extra money, which is opposite to the patient rights (P 5)".

The lack of a single trustee for medical tourism is a recurring challenge because the disagreement between the Ministry of Cultural Heritage and the Ministry of Health and Medical Education has confused facilitator companies in gaining licenses and limited the activities in medical tourism.

4.1.2. Process-related Factors in Medical Tourism Services

One of the challenges is the supervisory role of medical universities, which loosely monitor hospitals. Sometimes, hospitals without medical tourism licenses provide

Table 2. Characteristics of the Participants (n = 21)

Qualitative Variables	No. (%)
Gender	
Male	12 (14.57)
Female	9 (86.42)
Age, y	
30 - 40	9 (86.42)
40 - 50	10 (62.47)
< 50	2 (52.9)
Marital status	
Married	16 (19.76)
Single	5 (81.23)
Educational level	
Bachelor	1 (76.4)
Master	14 (67.66)
PhD	6 (57.28)
Work experience	
1 - 10	17 (95.80)
11 - 20	4 (5.19)
Position	
IPD expert in hospital	7 (33.3)
Nursing manager-hospital	1 (4.7)
Chief manager-hospital	1 (4.7)
Vice-chancellors-IPD expert	2 (9.5)
Chief manager-facilitators company	10 (47.6)

services to international patients. The absence of facilitating companies and a network among hospitals, even within the country, is another problem.

"No legal action is conducted against unlicensed centers at all, and they provide services without following the standards (P 10)".

Table 3. Hospital's Challenges in Providing Healthcare Services to Medical Tourists

Challenges	Leadership/Governance	Financing	Human Resources	Technology, Medicine, and Equipment	Information Systems	Service Delivery
Structure-related factors of medical tourism services	Political and regional constraints; lack of a unit trustee in the medical tourism industry; lack of transparency or ineffectiveness of existing regulations	Lack of budget allocation for tourism development in hospitals; not transparency in health service tariffs; non-acceptance of international insurance	Lack of attention to academic training in medical tourism; employing personnel with multiple duties to perform medical tourism affairs; lack of specific organizational position for medical tourism	Lack of medicine and equipment due to sanctions; lack of funding for medical equipment upgrades	Lack of integrated website design to introduce centers and capabilities; inadequacy of information technology infrastructure in the country; lack of proper marketing not using telemedicine	Lack of attention to amenities in cities; problems with obtaining a medical visa; lack of organization among brokers; lack of branding of health services; not using the capacity of the private sector
Process-related factors in medical tourism services	Lack of legal action against unlicensed centers; lack of supervision of facilitating companies	Delays in payment to tourism teams; existence of financial problems in public hospitals with companies	Unprofessional treatment team; lack of familiarity of staff with the rules of medical tourism; verbal communication problems among international patients and the treatment team	Lack of up-to-date equipment for diagnosis and treatment; lack of proper consuming equipment for patients	Lack of online admission system; lack of updating the content of the hospital's website; problems with service coding and information registration in hospital systems	Lack of nutrition services to patients; food interests; crowded public hospital facilities and delays in service delivery; lack of welfare facilities in the hospital; not providing tourism services
Outcome-related factors of medical tourism services	Lack of contracted medical centers in health tourism countries; the dissatisfaction of tourists and the loss of opportunities to attract international patients	Irrational treatment costs; lack of accurate statistics on medical tourism income and expenses in the hospital	Lack of proper communication between the provider and the recipient of the service; unmotivated health tourism team in providing services	Lack of attractive media for patient education; according to international standards; decreasing the quality of diagnostic and treatment services due to old equipment	Failure to introduce the capabilities of hospitals; failure to register patient information in the systems of the ministry of health	Lack of integrated health services to tourists (lack of follow-up - lack of treatment package, etc.); lack of creativity in providing services; low-quality services

4.1.3. Outcome-related Factors of Medical Tourism Services

The lack of patient follow-up, mainly due to the lack of contracted centers in other countries for treatment follow-up, has led to incomplete treatment processes, patient dissatisfaction, and loss of opportunities to provide services to international patients.

4.2. Financing

4.2.1. Structure-related Factors of Medical Tourism Services

One of the critical challenges for public hospitals is the absence of a specific budget for developing medical tourism. Another main problem is the lack of service packages for medical tourism, which has led to different prices for services delivered to hospitals.

4.2.2. Process-related Factors in Medical Tourism Services

There are no specific payment guidelines between hospitals and facilitating companies; the financial regulations announced by the university are not applicable to hospitals, and no financial incentive has been considered for the tourism team, which may cause the worker to be demotivated to provide service to medical tourists.

"In a public hospital, the doctor's salary is not paid like in the private sector, and it even goes on stepwise payment and becomes very insignificant. This makes them force patients to go to private hospitals or not to accept to be treated (P 4)".

4.2.3. Outcome-related Factors of Medical Tourism Services

The lack of registration of services and the number of medical tourists admitted to hospitals have led to the incorrect number and income from providing services. As a result, the medical service tariffs have not been set by the university in some cases, and the price difference between hospitals has led to the dissatisfaction of medical tourists.

4.3. Human Resources

4.3.1. Structure-related Factors of Medical Tourism Services

The health tourism team does not have an organizational position in the hospitals, and the qualifications are unclear. Academic education has yet to be designed for this occupational position, and most people serve international patients in addition to their other duties.

4.3.2. Process-related Factors in Medical Tourism Services

The distribution of multiple tasks among employees, the problems of verbal communication with international patients, and the unfamiliarity of employees with the guidelines and regulations of medical tourism are among the problems raised in the field of employees.

“The management often does not support us, and in some departments, the staff is not tended to provide services to international patients (P 9)”.

4.3.3. Outcome-related Factors of Medical Tourism Services

The lack of support for the worker has caused them not to have enough motivation to provide services to international patients, and the poor communication between the patient and the nurse has caused medical tourists to distrust the healthcare team.

4.4. Technology, Medicine, and Equipment

4.4.1. Structure-related Factors of Medical Tourism Services

Due to the sanctions, importing diagnostic and medical equipment has faced many problems, which has affected the medical tourism industry. There are insufficient funds to upgrade the equipment in public hospitals, and most diagnostic and treatment tools are ineffective.

4.4.2. Process-related Factors in Medical Tourism Services

The lack of up-to-date medical equipment has led to poor diagnosis and a decrease in the quality of medical services. Most of the time, medical tourists are introduced outside the hospital to procure equipment such as implants, which are sold to them at various prices in the open market.

4.4.3. Outcome-related Factors of Medical Tourism Services

Not using new technologies to produce training programs, implementing standards and training employees, and training patients' rights and educational items in line with post-hospital care to complete the treatment process are among the challenges raised in this field.

“I think a good solution for us is to use patient education software in different languages, to make our treatment process at least a little more complete because we do not have a follow-up for them (P 3)”.

4.5. Information Systems

4.5.1. Structure-related Factors of Medical Tourism Services

Lack of proper internet infrastructure, insufficient knowledge of doctors and public health systems about information technology (IT), lack of a multilingual national website to introduce licensed medical tourism services and hospitals, and lack of essential marketing are some of the challenges raised in this field.

“In Iraq, people do not trust the Internet and ... very much, but they care a lot about the definition of their country's people, so we must do this model of ads in Iraq to attract medical tourism (P 7)”.

4.5.2. Process-related Factors in Medical Tourism Services

Not having an appropriate website in hospitals and not providing online admission infrastructure have led to patients only going directly to hospitals whose information systems are not coded for accepting international patients, creating admission problems.

4.5.3. Outcome-related Factors of Medical Tourism Services

Improper registration of medical tourists and uncertainty in registering their services in hospital information systems result in inaccurate statistics of patients, provided services, and tourism income.

“In general, there are no accurate statistics of patients in the whole country. There is no special site at all to know how many hospitals have tourism licenses (P 8)”.

4.6. Service Delivery

4.6.1. Structure-related Factors of Medical Tourism Services

The challenges raised in this field (services and welfare amenities and health-related services) are the limited number of flights, high cost of medical visas, lack of attention to welfare amenities in cities, presence of brokers at the border who demand a lot of money from patients, and the absence of branding in health services.

“Tourism belongs to the private sector, and we should only monitor it because sometimes it does not charge standard tariffs from the patient (P 14)”.

4.6.2. Process-related Factors in Medical Tourism Services

The absence of recreational programs and welfare amenities for medical tourists, crowded hospital spaces, and public hospital service delivery delays have dissatisfied patients.

“We have not got a comprehensive service package for the patient. We only provide medical services. It is better to consider a kind of entertainment in the city for them (P 6)”.

4.6.3. Outcome-related Factors of Medical Tourism Services

Failure to provide services in an integrated manner has led to medical service provided incomplete and low-quality services to medical tourists. Considering that hospitals and medical tourism managers are not creative in delivering services and solving existing problems, we have witnessed a decrease in the number of medical tourists in hospitals.

“We should solve problems through the help of the other universities. We must set up a network to address all these challenges (P 16)”.

5. Discussion

The challenges of providing services to medical tourists in this study were classified into six main themes and three categories. The main challenges in medical tourism are infrastructure and fundamental factors associated with the country and hospitals to provide medical services. The most important ones are the lack of tourism-related regulations and guidelines as a reference for the implementation of standards in hospitals or facilitation companies, the lack of qualifications for the medical tourism team in the hospital, the high-cost but low-quality flights, absence of well-structured information systems, the lack of good marketing to introduce services and hospitals, presence of brokers, and non-standard service delivery to medical tourists, which can cause dissatisfaction for international patients. The results of different studies have shown that multidimensional marketing for the introduction of hospitals, excellent quality of services provided, inexpensive services, professional doctors, presence of welfare services, international accreditation, political status in the country, and the image of the country in the international media are the important aspects of tourism development (25-29).

In line with the above study, Raoofi et al. put the essential factors of underdeveloped medical tourism in Iran into three categories: Infrastructure, government, and health system factors (12). These include the absence of updated tourism regulations and facilitator companies, the lack of specific funding for tourism in Iran, and political fluctuations (12). Rokni and Park mentioned the presence of different players in the tourism industry and the lack of coordination and cooperation as serious challenges (30). The lack of a single trustee for health tourism and the dispute between the Ministries of Health and Cultural Heritage to determine the licenses of facilitating companies are other challenges that make the companies ineffective in this field. One of the principal factors in the development of tourism in South Korea is the presence of an institution affiliated with the Ministry of Health and Welfare for the development of medical tourism activities and the general health system in the country. This institution provides tourists with services and hospital staff through training courses (31).

The service delivery process in hospitals and health systems is another challenge that makes incomplete services to medical tourists. Unprofessional treatment teams and verbal communication problems between international patients and the treatment team have caused mistrust in medical tourists and a lack of instruction for international patients in self-care and post-treatment care, reducing service quality. In line with that, De Gagne et al. in South

Korea showed that one of the main problems for patients was their inability to communicate in English with medical staff, which caused dissatisfaction (32). Mosadeghrad and Sadeghi, contrary to the above study, concluded that proper advertising, patients' former experience of traveling to Iran, and the presence of experienced staff were among the reasons for choosing Iran as a medical tourism destination (33). The common language among medical tourists is another reason for choosing this country as a tourist destination (33). Musa et al. also showed that providing clear and understandable explanations of self-care during discharge, disease processes, and treatment costs affect medical tourists' satisfaction (34).

Long waiting list in public hospitals is another problem that can be solved by supporting the private sector and using its potential. In line with our results, Jackson et al. showed that in Canada, one of the main barriers for medical tourists to access healthcare is the long wait time which hampers the service of health tourists (35). Following up on international patients after providing medical services and informing them about their recovery status is another challenge for medical tourists, which causes them not to complete the treatment process, be dissatisfied, and mistrust the service delivery system. Ambiguous postoperative complication related to the lack of follow-up by medical tourists is another issue that arises due to the lack of contracted medical centers in medical tourist residence countries. Consistent with the ones mentioned above, studies in Britain and the United States showed that postoperative infections and complications after cosmetic surgery were common among tourists and led to significant compensation from hospitals for medical tourists, all due to non-compliance with follow-up treatment regulations (36, 37).

Considering the three main factors that have hindered the development of medical tourism in Iran, policymakers can improve this industry by highlighting its main problems. We propose introducing the country's health services to medical tourists by developing an information technology infrastructure, allocating a particular budget for the medical tourism industry, selecting a unit trustee to monitor the services supplied to international patients, supporting private centers to reduce the waiting time for services, and reviewing the standards of the IPD. Developing guidelines, such as tariffs for medical services, and designing patient education programs to ensure the quality of services provided to medical tourists are other beneficial points.

5.1. Strengths and Limitations of the Study

This research is the only qualitative study that has explained the challenges of providing services to medical

tourists in six large cities in Iran. However, this study has not taken the views of medical tourists and their companions. It is suggested that an investigation be conducted on the satisfaction of international patients and their companions regarding the quality of medical services and their problems in receiving services from hospitals.

Acknowledgments

This study was part of a Ph.D. dissertation supported by the Iran University of Medical Sciences (grant No: [IR.IUMS.REC.1399.484](#)).

Footnotes

Authors' Contribution: Study concept and design: Samira Raoofi, Rahim Khodayari-Zarnaq; acquisition of data: Samira Raoofi, Soudabeh Vatankhah; analysis and interpretation of data: Samira Raoofi, Rahim Khodayari-Zarnaq; drafting of the manuscript: Samira Raoofi, Soudabeh Vatankhah; critical revision of the manuscript for important intellectual content: Samira Raoofi, Rahim Khodayari-Zarnaq; statistical analysis: Samira Raoofi, Soudabeh Vatankhah; administrative, technical, and material support: Samira Raoofi, Rahim Khodayari-Zarnaq; study supervision: Samira Raoofi, Soudabeh Vatankhah.

Conflict of Interests: There is no conflict of interest.

Ethical Approval: This study was part of a Ph.D. thesis approved by the Ethics Committee of Iran University of Medical Sciences (approval ID: [IR.IUMS.REC.1399.484](#)).

Funding/Support: This study was supported by the Iran University of Medical Sciences.

Informed Consent: Verbal consent was obtained.

References

- Ghanbari K, Yazdanpanah A, Aghaei P. Challenges and Achievements of Medical Tourism from the viewpoint of Medical tourists and Service Providers in the Public Hospitals of Shiraz (2017). *Int J Ayurvedic Med*. 2019;**9**(4):258-62. [https://doi.org/10.47552/ijam.v9i4.1149](#).
- Penney K, Snyder J, Crooks VA, Johnston R. Risk communication and informed consent in the medical tourism industry: a thematic content analysis of Canadian broker websites. *BMC Med Ethics*. 2011;**12**:17. [PubMed ID: [21943392](#)]. [PubMed Central ID: [PMC3189886](#)]. [https://doi.org/10.1186/1472-6939-12-17](#).
- Alsharif MJ, Labonté R, Zuxun L. Patients beyond borders: A study of medical tourists in four countries. *Glob Soc Policy*. 2010;**10**(3):315-35. [https://doi.org/10.1177/1468018110380003](#).
- Crooks VA, Kingsbury P, Snyder J, Johnston R. What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Serv Res*. 2010;**10**:266. [PubMed ID: [20825667](#)]. [PubMed Central ID: [PMC2944273](#)]. [https://doi.org/10.1186/1472-6963-10-266](#).
- John SP, Larke R. An Analysis of Push and Pull Motivators Investigated in Medical Tourism Research Published From 2000 to 2016. *Tourism Review International*. 2016;**20**(2):73-90. [https://doi.org/10.3727/154427216x14713104855810](#).
- Khodadadi M. Challenges of Branding Iran: Perspectives of Iranian Tourism Suppliers. *Tour Plan Dev*. 2017;**16**(1):112-7. [https://doi.org/10.1080/21568316.2017.1415957](#).
- Khodayari-Zarnaq R, Yousefi M, Hajizadeh M, Heydari M. Medical tourists' perspectives on the quality of care in Iran. *Anatolia*. 2020;**32**(1):70-9. [https://doi.org/10.1080/13032917.2020.1850484](#).
- Momeni K, Janati A, Imani A, Khodayari-Zarnaq R. Barriers to the development of medical tourism in East Azerbaijan province, Iran: A qualitative study. *Tour Manag*. 2018;**69**:307-16. [https://doi.org/10.1016/j.tourman.2018.05.007](#).
- Momeni K, Janati A, Imani A, Khodayari-Zarnaq R, Arab-Zozani M. An analysis of competitive situation medical tourism industry: a case study in northwest Iran. *Bali Med J*. 2017;**6**(2). [https://doi.org/10.15562/bmj.v6i2.529](#).
- Omay EGG, Cengiz E. Health Tourism in Turkey: Opportunities and Threats. *Mediterr J Soc Sci*. 2013;**4**(10). [https://doi.org/10.5901/mjss.2013.v4n10p424](#).
- Saki K, Varzi AM, Momeni K, Khodakaramifard Z, Zouzani MA, Jalilian H, et al. Tourists' Satisfaction of Hospital Services in Iran: A Case Study of Lorestan Province. *Shiraz E-Med J*. 2017;**18**(6). [https://doi.org/10.5812/semj.13797](#).
- Raoofi S, Khodayari-Zarnaq R, Ghasemyani S, Hamidi H, Vatankhah S. Barriers of medical tourism development in Iran. *Anatolia*. 2021;**33**(1):91-103. [https://doi.org/10.1080/13032917.2021.1907760](#).
- Schwab K. *The Global Competitiveness Report*. Cologny, Switzerland: World Economic Forum; 2018.
- Fetscherin M, Stephano RM. The medical tourism index: Scale development and validation. *Tour Manag*. 2016;**52**:539-56. [https://doi.org/10.1016/j.tourman.2015.08.010](#).
- Abouhashem Abadi F, Ghasemian Sahebi I, Arab A, Alavi A, Karachi H. Application of best-worst method in evaluation of medical tourism development strategy. *Decis Sci Lett*. 2018;**7**(1):77-86. [https://doi.org/10.5267/j.dsl.2017.4.002](#).
- Azimi R, Mahmoudi G, Esmaeili HA. Ranking Factors Affecting the Attraction of Foreign Medical Tourists in Hospitals Affiliated to Mashhad University of Medical Sciences Based on Marketing Mix Model. *Iran J Public Health*. 2018;**47**(10):3593-8. [PubMed ID: [30524991](#)]. [PubMed Central ID: [PMC6277722](#)].
- Fani Khiavi R. Health tourism development strategies in Ardabil. *Int J Travel Med Glob Health*. 2014;**2**(2):65-7.
- Hadian M, Jabbari A, Mousavi SH, Sheikhbardsiri H. Medical tourism development: A systematic review of economic aspects. *Int J Healthc Manag*. 2019;**14**(2):576-82. [https://doi.org/10.1080/20479700.2019.1677977](#).
- Ministry of Health and Medical Education. [Manual for the establishment of the international patient admission department in the hospital]. Tehran, Iran: Ministry of Health and Medical Education; 2015. Persian.
- Vatankhah S, Vasokolaie GHR, Turani S, Raoofi S, Rahimi S. Evaluation of international patient department performance and its effect on medical tourists attraction among hospitals affiliated to Medical Sciences Universities in Tehran City. *Hospital*. 2019;**17**(4):91-7.
- Faridi MA. [Assessment Of Medical Tourism In The Province By Arc GIS Software (Case Study: IR Iran)]. *Heritage and Tourism Quarterly*. 2016. Persian.
- Heydari M, Yousefi M, Derakhshani N, Khodayari-Zarnaq R. Factors Affecting the Satisfaction of Medical Tourists: A Systematic Review. *Health Scope*. 2019;**8**(3). [https://doi.org/10.5812/jhealthscope.80359](#).
- Maleki S, Tavangar M. [Analyzing health tourism challenges in Mashhad from the perspective of foreign patients]. *Geography and Urban Space Development*. 2016;**2**(2):153-65. Persian.
- Probandari A. *Revisiting the choice: to involve hospitals in the partnership for tuberculosis control in Indonesia [dissertation]*. Umea, Sweden: Umea University; 2010.

25. Ganguli S, Ebrahim AH. A qualitative analysis of Singapore's medical tourism competitiveness. *Tour Manag Perspect*. 2017;**21**:74–84. <https://doi.org/10.1016/j.tmp.2016.12.002>.
26. Han H, Hyun SS. Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tour Manag*. 2015;**46**:20–9. <https://doi.org/10.1016/j.tourman.2014.06.003>.
27. Junio MMV, Kim JH, Lee TJ. Competitiveness attributes of a medical tourism destination: The case of South Korea with importance-performance analysis. *J Travel Tour Mark*. 2016;**34**(4):444–60. <https://doi.org/10.1080/10548408.2016.1182454>.
28. Sarwar A. Medical Tourism in Malaysia: Prospect and Challenges. *Iran J Public Health*. 2013;**42**(8):795–805. [PubMed ID: 26056632]. [PubMed Central ID: PMC4441909].
29. Tapia J, Dieste M, Royo E, Calvo E. Factors affecting the choice of medical tourism destination: Spain as a host country. *J Qual Assur Hosp Tour*. 2020;**23**(1):115–38. <https://doi.org/10.1080/1528008x.2020.1848749>.
30. Rokni L, Park SH. Medical Tourism in Iran, Reevaluation on the New Trends: A Narrative Review. *Iran J Public Health*. 2019;**48**(7):1191–202. [PubMed ID: 31497540]. [PubMed Central ID: PMC6708548].
31. Seo BR, Park SH. Policies to Promote Medical Tourism in Korea: A Narrative Review. *Iran J Public Health*. 2018;**47**(8):1077–83. [PubMed ID: 30186778]. [PubMed Central ID: PMC6123590].
32. De Gagne JC, Oh J, So A, Kim SS. The healthcare experiences of Koreans living in North Carolina: a mixed methods study. *Health Soc Care Community*. 2014;**22**(4):417–28. [PubMed ID: 24621370]. <https://doi.org/10.1111/hsc.12098>.
33. Mosadeghrad AM, Sadeghi M. [Medical tourism: Reasons for choosing Iran]. *Health Monitor Journal of the Iranian Institute for Health Sciences Research*. 2021;**20**(2):145–66. Persian. <https://doi.org/10.52547/payesh.20.2.145>.
34. Musa G, Doshi DR, Wong KM, Thirumoorthy T. How Satisfied are Inbound Medical Tourists in Malaysia? A Study on Private Hospitals in Kuala Lumpur. *J Travel Tour Mark*. 2012;**29**(7):629–46. <https://doi.org/10.1080/10548408.2012.720150>.
35. Jackson C, Snyder J, Crooks VA, Laverne MR. "I didn't have to prove to anybody that I was a good candidate": a case study framing international bariatric tourism by Canadians as circumvention tourism. *BMC Health Serv Res*. 2018;**18**(1):573. [PubMed ID: 30029651]. [PubMed Central ID: PMC6053718]. <https://doi.org/10.1186/s12913-018-3385-2>.
36. Hanefeld J, Horsfall D, Lunt N, Smith R. Medical tourism: a cost or benefit to the NHS? *PLoS One*. 2013;**8**(10). e70406. [PubMed ID: 24204556]. [PubMed Central ID: PMC3812100]. <https://doi.org/10.1371/journal.pone.0070406>.
37. Miyagi K, Auberson D, Patel AJ, Malata CM. The unwritten price of cosmetic tourism: an observational study and cost analysis. *J Plast Reconstr Aesthet Surg*. 2012;**65**(1):22–8. [PubMed ID: 21865103]. <https://doi.org/10.1016/j.bjps.2011.07.027>.