An analysis of competitive situation medical tourism industry: a case study in northwest Iran

Khalil Momeni,1 Ali Janati,2,3 Ali Imani,3 Rahim Khodayari-Zarnaq,2 Morteza Arab-Zozani2

ABSTRACT

Background: Medical tourism is a relatively new concept where patients travel to a foreign destination to obtain quality medical treatments which much better or comparable and also available at a significantly lower cost. Though, a number of literature available with regard to the tourism industry and the competitiveness of the destination for medical tourists are hardly focused specifically in Northwest Iran.

Purpose: The aim of this study is to determine the competitive status of East Azerbaijan province medical tourism industry.

Materials and Method: It was a qualitative study which conducted in-depth interviews with 15 key stakeholders of the tourism industry in East Azerbaijan Province (North-West of Iran). Purposive sampling technique was used and the data analyzed by using framework analysis based on Porter’s diamond model.

Results: In the factory conditions, there are 8 sub-themes such as political and ideological attitudes, similarities of language, culture, restrictions on communication skills, and tourist attractions. In the demand conditions, there is fame of the physicians and the waiting time for receiving medical treatment. In the strategy for structure and rivalry, 7 sub-themes are included such as lack of hospitals approved by JCI, affordability of medical and tourism service prices, inefficient advertising system, and the strengthening medical tourism infrastructure in neighboring countries. Others regarding with supporting industries are poor tourism infrastructure, inadequate support of private sector, poor transfer of medical tourists, and Visa facilitation services.

Conclusion: Long-term planning and involvement of private sector in strengthening the tourism infrastructure should be put at agenda in terms of making province’s medical tourism policy.

Keywords: Medical tourism, Porter’s Diamond, competitive status, Iran, East Azerbaijan


INTRODUCTION

World Tourism Organization (WTO) has recognized tourism as an activity which occurs beyond holidays, includes traveling and staying in places outside their usual living environment in a period of less than a year for commercial purposes, spending leisure time, or other objectives.1 During recent decades, modern tourism has grown increasingly due to the development of countries whereas it has introduced new places to tourists as well as this tourism dynamics makes some progress in socio-economic development of societies.2,3 According to it, many countries has focused on this as their primary economic source where tourism has become one of the greatest actors in international trade, and it is a major source of income and employment in developing countries.4,5

A topic that has found its way to tourism in recent years is medical tourism.6 Many countries have made good progress in this area and achieved important goals which able to afford significant resources for their country, health sector, and all people involved in this profession.7 Medical tourism has recognized by many countries as its potential source of funding for health sector to the extent that the term medical tourism industry being one of the most used words in the field of tourism.8,9

In the Middle East, it has been known that around 5,000 individuals Oman people travel to Britain and India to get medical services. In addition, the United Arab Emirates (UAE) also sent about 8,500 patients in 2010 to other countries (such as Germany, Thailand, Singapore, and America) for treatment and it has spent about 2 billion dollars every year in this field.10 On the other hand, the UAE, particularly in Dubai in 2010, has obtained a revenue more than 7 billion dirhams through medical tourism. In addition, Jordan Country also gains 500 million foreign exchange annually through medical tourism.11 Overall, it is estimated that revenues from Asian countries from medical tourism industry about 4.4 billion in 2012.10

As the WTO has pointed out, investment in the tourism industry generates major revenue sources for developing countries.12 Iran has a high capacity for tourist attraction due to natural, cultural, scientific and religious attractions. However the medical tourism has not grown as it should be and need more planning.13,14

In 2005 and 2006, they were known around 12,000, and 17,500 people have been treated, respectively.
Nevertheless, in 2012 it was 0.35% of world tourism income was obtained for Iran and ranked 53 in medical tourists’ attraction in the world.¹⁵

According to 1404 vision (2025 AD) Iran will be one of the main poles of medical tourism in the region based on geographically, and consequently not only prevents the outflow of currency, rather attracts significant foreign exchange for the country.¹⁶ This policy can attract investment and create jobs which impact to 550,000 medical tourists, 27.5 million dollars foreign exchange earnings, and 392,857 jobs will be created as well as 550,000 dollars would be invested.¹⁷

Several studies were conducted in many parts of Iran for medical tourism which investigated the situation of different regions in terms of medical tourism attractions, facilities and infrastructure for medical tourism, and other factors associated with the industry as well as the solutions and addressed existing strengths and weaknesses.¹³,¹⁴,¹⁶,¹⁸,¹⁹ In Iran, several cities including Tehran, Mashhad, Shiraz, Isfahan, and Tabriz are active in the field of medical tourism. The province has a strategic position because of its unique features such as abundant tourist attractions, the borders with Republic of Azerbaijan, Armenia, Nakhichevan and closeness with Turkey and Iraq, and having specialized and advanced facilities in the medical field as well as a strategic position in the region. There are major challenges facing the medical tourism industry in the province. The aim of this study was to determine the rivalry status of the medical tourism industry of East Azerbaijan province based on Porter’s diamond model and offering solutions improve the current status.

**Conceptual Framework: Porter’s Diamond Model**

To evaluate the competitive situation of industry, different models are usually used, among which one of the most famous is Michael Porter’s Diamond model. In this model, Porter knows competitiveness in the industry, as a result of the interaction of the four main factors, and changes in each of them can be effective on all other factors. In addition, two outside factors of government and unforeseen events also have an indirect effect on the four factors, and they can influence on the competitiveness through affecting those factors (Figure 1).²⁰

In this model, factor conditions are a set of factors affecting the production of goods or services, such as raw materials, human resources, infrastructure, technological issues, investment, and management capabilities that are necessary to compete in the competitive markets.²¹ However, the demand conditions is a size and growth in competitiveness of industries. With increased population age, the longer waiting list to receive medical services and increased costs in a country, the demand for medical services of target countries of medical tourism is enhanced.²² Therefore, alternative solutions should be provided to respond this essential demand.

In addition, related and supporting industries offer high quality and low-cost production and service factors. Hence they can provide a context for acceleration information and continuity of activities.²³ These factors include suppliers of raw materials, transportation systems, universities, hotels, development of insurance services, visa issues, financial services such as banks and marketing companies can be mentioned. Besides, the strategy, structure, and rivalry structure are developed and implemented to manage an industry, have a direct impact on its performance and competitiveness.²¹

As a major force, the government is always effective in competitiveness and can have a positive or negative impact on competitiveness with its intervention in different political, economic, and social affairs, and applying regulations. Monetary policy, tax regulations, supporting policies, administrative policies, exchange rates, inflation, establishing or preventing economic-trade relationships with other countries are among samples influencing on the competitiveness of industries, particularly medical tourism industry.²⁴ And the last, a chance as unforeseen events are things that have negative or positive impact on the competitiveness which occur outside the control of industry and even government. Disasters, war, economic sanctions, oil shocks, political and economic crises are examples of unanticipated events.²¹

**MATERIALS AND METHOD**

It was a qualitative case study which conducted by in-depth interviews with key stakeholders of East
Azerbaijan province's medical tourism industry. Snowball sampling method was done due to the comprehensiveness and accurate information regarding with subject matter and create maximum access to key stakeholders. The main stakeholders of the medical tourism industry were identified through studying related documents and inquiry from other important stakeholders. They were Tourism vice-chancellor of Cultural Heritage, Handicrafts and Tourism, Health Tourism Office of the Tabriz University of Medical Sciences, the Governor, Representative Office of Ministry of Foreign Affairs in the North West of Iran, the Medical Council, public and private hospitals, physicians, patients as well as researchers in the field of medical tourism.

This study was introduced and approved by the Ethical Committee of Tabriz University of Medical Sciences in order to give the authority for study implementation by researchers. At first, initial arrangements was made with the key informant, then the time and place of the interview were set. The waiting time was around 7 to 90 days for different people. In addition, the deadline for two cases was postponed as the person being busy when interviewed. For foreign patients, arrangement requirements were done in order to interview with the authority of the International Patients’ Department (IPD) at one of the private hospitals in Tabriz; and the entry criteria for the interview was visiting Tabriz more than two times to receive treatment, and the interview was done at the time of discharge from the hospital. The interview was done in a relaxed atmosphere with the patient by the help of an interpreter, and the purpose of the interview was fully explained to them. In 14 interviews, the permission to record voices was obtained from the interviewees, but one person did not permit to record the voice for security reasons of his superior organization. Interviews were done face-to-face, and each lasted between 50-70 minutes. In 15 interviews, data were saturated.

Semi-structured and deep interview questions were conducted since April-June 2016. Interview guides were done by two people where someone asked the questions while the other recorded voices as well as took notes. To access some of the statistical data, documentations observing method was used, that is, the number of hospitals, doctors, beds, hotels, and so on was collected through attending Health Tourism Office of the Tabriz University of Medical Sciences, the governorate’s and Cultural heritage, Handicrafts and tourism organization website, and they were used alternately. In order to increase the consistency of the data and prevent prejudice, researchers discarded any possible presumption about the subject during the interviews and data analysis (bracketing). For the validity of the interview content, and transparency of any uncertainties, the interviews were listened to and transcribed verbatim immediately and in the shortest possible time after the interview, and then they were sent to the interviewee so as to be approved by them. Also, the long-term employment of researchers to the topic of medical tourism and the use of highly relevant persons for the interviews led to increased validity of the data. To analyze the data, the analysis framework was used as Porter’s advantage Diamond model, as the basis for organizing data (Figure 1). Each interview was review several times by two researchers to establish a balance between the main themes (factor conditions; demand conditions; related and supporting industries; structure and rivalry strategy; government and unforeseen events) based on Porter’s diamond model and emerged themes from the interviews. Finally, sub-themes were put in the main themes of Porter’s model and MAXQDA-12 has used for encoding, classification as well as data analysis.

**RESULTS**

**Characteristics of Participant**

There were 15 participants enrolled in this study from various background such as public sectors (8 participants), private sectors (5 participants), as well as patient and researcher (1 participant respectively) as shown in Table 1

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Organization</th>
<th>Participant position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>Hospital</td>
<td>Chief executive</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Representatives of the Ministry of Foreign Affairs in the northwest of the country</td>
<td>Supervisor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Health Tourism office of Medical Council</td>
<td>Expert</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Health Tourism office Tabriz University of Medical Sciences</td>
<td>The Deputy Tourism</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tabriz governor</td>
<td>The Deputy Governor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tabriz governor</td>
<td>Associate Professor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Faculty of Geography &amp; Planning, University of Tabriz</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Private</td>
<td>Hospitals</td>
<td>Chief Executive</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Hotel</td>
<td>Chief</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medical Tourism Corporation</td>
<td>Chief</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Clinic</td>
<td>Cardiologist</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>Patient</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Researcher</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
Medical tourism situation in East Azerbaijan province

A. Organizational structure of medical tourism

There were 4 organizations monitored by political, security, and social vice-chancellor of East Azerbaijan Province to provide appropriate services toward international patients and their companions in Figure 2.

Treatment Affair of Tabriz University of Medical Sciences is responsible for providing medical services to foreign patients, and hospitals, diagnostic and visual centers and Health Tourism Office is a subset of this department. Tourism vice-chancellor of Cultural Heritage, Handicrafts and Tourism monitor hotels and inns as well as licenses health tourism agencies. In addition, Representative Office of Ministry of Foreign Affairs in the North West of Iran is responsible for facilitating the issuance of visas for foreign patients and their companions. Finally, Medical Council is responsible for formulating medical tariffs for international patients.

B. Service providers

East Azerbaijan province has 41 hospitals, of which 23 are located in Tabriz (10 public, 6 private, 3 military, and 4 non-governmental public). Among them, there were only 20 hospitals (except 3 military Hospitals) which located in Tabriz admit foreign patients as the highest number of foreign patients admitted, belongs to three private hospitals (Shams, Behboud, and Noornejat).

Figure 4 shows information regarding with service providers (the number of hospitals, beds, laboratories, pharmacies, radiology, Specialist physicians, nurses, and hotels) to tourists in the city of Tabriz.

Diamond Advantage Analysis of Medical Tourism Industry in East Azerbaijan Province

A. Factor conditions

There were 8 factors as condition factors affecting the medical tourism industry of the province as shown in Table 2. In Table 2, lack of direct airlines between Baku and Tabriz were the least frequent cause among participants.

Disapproval and disagreement of elders of the region and local residents with tourism development will eventually lead to a stop, and sometimes complete removal of the tourism. One of the factors that still exists in the structure of the province’s tourism culture is political and ideological attitudes towards tourism Industry which was emphasized by five interviewees.

“Some authorities of the region disagree with medical tourism and say that tourism brings its culture and affects outs, nothing can be done until they oppose.” (Participant 14)

East Azerbaijan province with tourism attractions and capabilities is still unknown to tourists; even domestic tourists are somewhat alien to them; while there are many natural, historical attractions in this province.
Participants insisted on this ability of the province to attract tourists.

“There are many tourist attractions (historical, natural, religious and cultural) in the province, especially in Tabriz, and even people of Azerbaijan country, are interested in more communication because of the shared religion (Shi’a) with the province.” (Participant 15)

6. Lower cost for transmitting the patient from origin country to medical tourism target, a common language (Turkish), and comprehensive treatment facilities (clinical, laboratory, radiology, etc.) are among very important factors in choosing destination country for treatment by the patient.

7. “Turkish is the common language between us and Azerbaijan, and even Turkey, and in terms of distance, there is a very little distance between them; these factors are very important for patients who come from these countries.” (Participant 13)

8. “In most hospitals in Tabriz, laboratory, radiology, ultrasound and pharmacy units are located in the hospital, and this advantage prevents patients and their companions from going out of the hospital to get some services.” (Participant 9)

The concern that is observed in the majority of interviewees about appropriate interaction and communication with medical tourists is restrictions on foreign language skills (hospital staff, drivers, etc.).

“Some patients visit the hospital from English language countries, and there is always problems due to lack of an interpreter. However, hospital nurses are not familiar with English, and the problem appears in most hospitals in Tabriz.” (Participant 4).

B. Demand Conditions

Table 3 shows the demand factors of the medical tourism industry in East Azerbaijan Province which has been mentioned by participants and suggests that the international fame of the physicians was among the most frequent causes in participants.

Committed and experienced practitioners; low waiting time for treatments have a very important role in revisiting of foreign patients.

“There are highly qualified doctors with international experience in the city of Tabriz, which are known as gold claw doctors. Patients of Azerbaijan country who come here say that we wish we had doctors like Tabriz doctors in our country. Even the world’s recent surgeries (open heart surgery, joint replacement, orthopedic, etc.) are performed in medical centers of the city.” (Participant 7)

“The waiting time for international patients to receive care is very low so that foreign patients who visit the hospital are accepted without delay.” (Participant 12)

Azeri’s living (in the province of East Azerbaijan, West Azerbaijan, Ardebil, and Zanjan) out of the country who are also significantly numerous can be counted as potential demanders of health services of the city of Tabriz. One of the participants in this field says:

“Azeri’s living out of the country come to their own cities annually to meet their relatives and stay here for a while. With a little advertisement, they may do their medical processes in Tabriz.” (Participant 13)

C. Strategy, Structure, and Rivalry

There were 7 sub-themes developed as sub-sets of the main theme (strategy, structure, and rivalry) (Table 4) which will be dealt with.
In recent years, developing countries have enhanced their share of medical tourism market by providing high-quality medical services and lower medical services costs due to consumers are very sensitive to the reasonable costs of each product.\(^{26,27}\) There were 14 interviewees agreed on the affordability of medical service costs. One of them said:

“The cost of medical services here is lower than neighboring countries, and the quality of provided services is very high, but unfortunately the structure of medical tourism industry is weak in the province, and consequently the mentioned factors (low cost of services and high quality) cannot be seen.” (Participant 6)

The frequency of advertising centers and lack of a single system of advertising and marketing is one of the obstacles to tourism development.\(^{28}\) All participants were concerned over this issue.

“We are very weak in the field of advertising; marketers and agency offices have no agencies in the target countries, and they have no financial support from the government. Turkey is facing political and security crises, and even statistics of tourists entering this country is downward, yet its highest income is through tourism, and this is mostly due to the strong promotions that they are doing” (Participant 2)

Reduced demand for medical services of Tabriz (Figure 3) by neighboring countries in recent years have become one of the main concerns of the province’s medical tourism industry. One of the reasons for the participants in this field says:

“Exchange and petroleum policies (decreased petroleum cost) of recent years of Azerbaijan which have damaged the economy of that country, led to lower financial power of Baku patients and hence they would not travel here for treatment, and on the other hand, Turkey has invested on health market of this country and it is following two strategies; one is that it offers medical services with highly expertized hospitals and the best physician in the country itself, and the other is that it provides services for Azerbaijan patients on the borders of Azerbaijan, and it implements these two

In the ninth Conference of Ministers of Tourism of Islamic Countries, the city of Tabriz was chosen as the capital of Islamic Tourism in 2018.
strategies simultaneously, and we have no policy in this area yet.” (Participants 9)

Clinical capability and hospitals licensed by JCI (Joint Commission International) in Healthcare of India are the most important factors in attracting patients from other countries of the world. Even though; there is no hospital approved by JCI in the province. However, there is only one hospital (Shams) in Tabriz to admit international patients.

“Based on the bill of the President Strategic Council, Shams hospital of Tabriz is chosen to integrate medical tourism attraction for treatment of foreign patients for one year; this is the only hospital in west and northwest of the country which is licensed to admit foreign patients according to the country law” (Participants 4).

D. Related and supporting industries
The main themes (related and supporting industries) are having 9 sub-themes discussed by interviewees (Table 5) will be mentioned below.

Medical tourists visit Tabriz for treatment, visiting historical attractions, city bazaar, etc. This requires a necessary infrastructure for the welfare of medical tourists. All those interviewed spoke about the poor tourism infrastructure where one of them said:

“There is not enough 4, and 5-star hotels in the city of Tabriz and patients and their companions encounter problems in accommodation in some cases. Interpol police are not present in the city in case of any problems for medical tourists. Traffic signs in this city are not clear to guide tourists, and most tourists get confused finding directions.” (Participant 1)

Lack of interest in the private sector to invest in the medical tourism industry is a result of lack of government support from the private sector.

“The government does not support the private sector in practice, for example, it does not help the private sector in the construction of hotels next to the hospitals, called hospital hotel (hospital), by giving subsidies or low-interest loans, because the government has not adopted any policy in this area. While Turkey helps the private sector in building hotels by giving free land and low-interest loans.” (Participant 10).

Uncertainty and differences in prices at service centers (restaurants, shops, hospitals, transport, etc.) of Tabriz are one of the challenges that patients and their companions face. One foreign patient in this field, says:

“The best way is that the price of all services is specified, we go shopping, and there are no specific prices, the same goods have different prices in shops. Radiology and ultrasound prices must be written in our own language (Turkish or English) so that we are aware of the real service prices.” (Participant 11)

The most serious problem of the province’s medical tourism industry from the interviewees’ perspectives was the poor patient transfer from the origin country to Tabriz and the emergence of the phenomenon of brokers in the province, which all 15 respondents somehow made statements about that.

“We have problems from the moment of the entrance of medical tourists to the province, as a proper organization is not performed for entering the province. Their transportation should be done with official channels, and they should easily receive medical services, and they should not be defrauded, but unfortunately, drivers as brokers, defraud international patients. There is already a secretary of specialists who receives more money than the doctor itself, which means that the secretary receives kickback so as to determine an appointment for foreign patients.” (Participant 3).

“Social and ethical abuses from foreign patients and their companions are done by brokers, for example, some drivers take patients to their own houses and accommodate them there which must not happen.” (Participant 1)

In countries that have a great desire to receive tourists, essential facilitates for the issuance of visas for tourists is always considered. Of course, in Iran, this attitude is reinforced during the last few years, and good activities have been done in this area.

“There is no specific problem in the field of visa; visa of Turkey and Iran, for example, is valid for 3 months. Bilateral visa cancellation has happened with Georgia. Visa cancellation of Azerbaijan has happened on our behalf. State Department policy is to remove visas completely, but this is a time-consuming process” (Participant 5).

E. Government
International sanctions by certain countries including America and the United Europe (failure to secure Swift); anti-Iranian propaganda in the international media by some countries, the absence of a specific trustee in the medical tourism industry and the interrelationship of the tasks of key stakeholders of the industry; lack of planning, continuous and systematic supervision and executive measures in the province’s medical industry are among the most important factors cited by interviewees.
F. Chance

Among the most important factors cited by respondents as unpredictable events, terrorist attacks in Turkey, the current insurgency in Iraq and the region, and Azerbaijan’s lowered currency value (manat) are mentioned in the last two years.

DISCUSSION

The medical tourism industry in the province of East Azerbaijan has multi-decision making organization (Figure 2) which has made problems in management and supervision in the areas of medical tourism. It has made some problems such as lack of effective intra-sector coordination in stakeholder organizations of the province’s medical tourism industry (Table 5). Izadi et al. also recognized that the most important challenge of health tourism is poor coordination between medical tourism agency organizations and inappropriate planning.30

The number of service provider centers (Figure 3), including hospitals, beds, laboratories, pharmacies, radiology, doctors, and nurses seems appropriate, but in terms of quality and the way of service delivery, it has faced challenges which are mentioned in Tables 2, 3, 4 and 5. The number of hotels (Figure 3) in the city of Tabriz to accept tourists is not sufficient, so that there are only 2 five-star hotels in this city and tourists have to accommodate in inns. While the city of Antalya Turkey with a large number of 5-star hotels and their luxury had a very important role in attracting tourists.31

The medical tourism industry in East Azerbaijan province from the aspect of factor conditions (Table 2) has positive potentials including adjacency and closeness with the countries of the region, language, cultural, and religious similarities. But among them, the most important problem is the negative attitude of some officials of the province towards tourism based on a purely cultural issue. However, the culture of the tourism target country plays an important role in strengthening or weakening behavior of tourists, in their subsequent travel to that country.30

Lack of dominance of nurses and medical tourists’ drivers in English are the main problems facing the industry in the province. One of the problems in Hong Kong is a lack of oral communication among hospital staff and medical tourists.24 The common language of hospital staff in Singapore country is English, and it has caused that foreign patients in this country have no trouble communicating with hospital staff.32

The demand conditions of the medical tourism industry (Table 3) has provided good demand conditions for international patients by having international experienced and renowned doctors, as well as successful surgery in various specialties and low waiting time to receive medical care. Low waiting time to receive medical services in Asia is important factors in choosing the countries as a medical tourism destination.33 In his study, Fort recognizes having valid physicians and offering timely medical services among the affective factors in choosing Thailand by medical tourists; and the results of these two studies are consistent with ours.10

Strategy, structure and rivalry aspects of the medical tourism industry in the province (Table 4) is faced with great obstacles that we will mention below. Tabriz lacks any hospitals licensed by JCI. According to the requirements and needs of international patients admission, so that Turkey with 42, Saudi Arabia with 39, the United Arab Emirates with 38, and Brazil with 21 hospitals licensed by JCI, are the four best countries in the world in terms of having hospitals with international licenses.34

The success of neighboring countries such as Turkey and Azerbaijan in the medical tourism industry has dedicated a large share of this market in the region to itself. For example, by sending medical students to European countries and building equipped hospitals, Azerbaijan tries to strengthen its medical tourism industry. Turkey is having hospitals licensed by JCI and familiarity of its medical personnel with several international languages and widespread international advertisements, tries to boost its medical tourism industry.35

One of the strategies that the medical tourism industry can use to attract foreign patients is the affordability of medical service, and tourism prices in the city of Tabriz are a comparison with other countries. For example, the price of Open Heart Surgery in Tabriz is equivalent to 5236$ of America, and in Turkey is 14600$ of America. Abdul-Manaf et al. have stated the importance of this issue and they have stated the acceptable costs of health care as one of the most important aspects of medical tourism in Malaysia.36 On the other hand, in another study, the high cost of health care and tourism in Hong Kong is counted as one of the main obstacles to the development of medical tourism in this country.24

Related and supporting industries of medical tourism industry of the province (Table 5) has a lot of problems, among which the lack of basic tourism infrastructure and poor transfer of medical tourists’ patients are the most important; and all participants recognize these two as the main causes of reduction of medical tourists to the province.

The lack of basic tourism infrastructure including inappropriate transportation system, lack of Interpol, insufficient hotels, vague guidance signs
in the path of tourists, etc. has made challenges for the province. In a study in Africa, tourism economic sustainability of Gambia is encountered with instability due to poor tourism infrastructure, and the main precondition for attracting tourists is to provide the basic infrastructure for tourism. 37

Medical tourism agencies are responsible for transporting medical tourists from the origin country to the destination country. Given the few number of medical tourism agencies in the city of Tabriz, and poor performance in this field, medical tourists in shared borders of countries neighboring East Azerbaijan province visit Tabriz for treatment through brokers who lead to many problems including ethical and economic problems which eventually leads to distrust of medical tourists to the province. While in the study by Casey et al., facilitating the transfer of patients to medical tourism destination countries is a solved issue in many countries. 38

Despite the emphasis on the government to support private sector of medical tourism in Iran’s developmental plans, this support is too weak in practice and leads to lack of investment in the private sector in the province’s medical tourism industry. In a study, lack of support of Hong Kong state of the private sector was stated as one of the main obstacles to the development of medical tourism in the country. 39 While in Thailand, Singapore and Malaysia government supporting packages of the private sector in the field of health, cure, and tourism infrastructure are considered in order to develop medical tourism industry. 39, 40

The most important strength from the aspect of related and supporting industries of the medical tourism industry in East Azerbaijan province is facilitated visa for medical tourists of bordering countries with the province, and it can be an important factor to attract more of them. This is also done by the government of Malaysia in order to facilitate entry of foreign patients, so that the duration of a visa would be increased from 30 to 90 days, if necessary, and even provides visa for 4 foreign companions of the patients with the same conditions. 32

**Study limitations**

The possibility to interview a few important stakeholders was not provided due to management problems and the certain rules of their respective organizations. Also, arrangements of scheduling time of interviews with some of the stakeholders were among difficulties of this study due to their managerial preoccupation.

The limited time of the interview was among factors which may result that some interviewees were not able to fully reflect their views about the subject and it is also possible that some of these key informants could not completely talk about the subject because of mind and job occupation.

**CONCLUSION**

The medical tourism industry in East Azerbaijan province has the positive potential for attracting medical tourists although facing some major obstacles.

Based on Diamond Model of Porter advantage, the demand and factor conditions (cost, medical service provision, fame of physicians, adjacency and low transfer fee) of medical tourism industry in the province is in a good status, but except for two other aspects such as related industries as well as strategies, structure, and rivalry.

In order to obtain rivalry abilities with countries of the region like Turkey in attracting medical tourists, we need to perform long-term plans to strengthen infrastructures and cultural reforms. Further participation of the private sector is needed in strengthening the infrastructures and planning for more efficient use of mass media and local and province press in order to enhance awareness and cultural reform. Finally, systematic plans with broker phenomenon and enforcing hospitals from the perspective of international accreditation should be included in the policy agenda of the province’s medical tourism.

**CONFLICT OF INTERESTS**

The authors declare there is no conflict of interests.

**ACKNOWLEDGEMENTS**

This study is a part of a PhD dissertation and was supported Research Vice - Chancellor Tabriz University of Medical Sciences under research grant number 5/4/56308

**REFERENCES**

10. Ricafort KMF. A study of influencing factors that lead Medical tourists to choose Thailand Hospitals as medical tourism destination: Webster University; 2011; 1-117
11. Bayati SH, M. Ismailli, T. Abhari, Sh., editor “ examination Iran’s position on medical tourism in the countries of the Persian Gulf”. First International Conference on Tourism Management and Sustainable Development; October 2011; Marv Dasht Islamic Azad University.