# Situation of health tourism in Iran; opportunity or threat

Izadi M. MD, Ayoobian A. MSc, Nasiri T. MSc, Joneidi N. MD, Fazel M. MD, Hosseinpourfard M. J. MSc

### **Abstract**

**Aims:** Health tourism covers any trip for health promotion and as one of the dimensions of tourism, results in development and leads to dynamic economics. It could also be a national strategy towards increasing the national income and is also considered as a national security aid. This study was carried out to investigate the current status of health tourism in Iran and the specific potentials of the country.

**Methods:** This descriptive review article was done in two stages. First, the research data was extracted from the resource library and scientific websites and then the experts' viewpoints were added to it. Data were investigated and analyzed using the pattern of factors that create competitive advantage and their relationships.

**Results:** Iran has many strength points, including expert physicians, up-to-date medical technology and natural healing regions to attract health tourists; however, weaknesses and challenges such as poor coordination among the organizations responsible for medical tourism and inappropriate planning.

**Conclusion:** Iran could make use of its potentials in the field of health tourism and achieve the goals and visions of "Iran in 1404", through increasing emphasis on the strength points and introducing them as its unique capabilities, comprehensive planning and operational requirements of field units and provide leadership in this industry.

Keywords: Health Tourism, Capabilities, Competitive Advantage, Opportunity, Threat, Iran

## Introduction

Health tourism is an organized travel from one's living place to another place which takes place so as to preserve recovery and to access to the person's physical and psychological health again [1]. Health tourism includes "medical tourism", "truth tourism" and "preventive tourism" [2].

Travel, as an element of treatment and regaining power, is one of the most important goals of medical tourism and most often while receiving medical treatment, the activities of leisure time will increase, depending on the patient's health status [3 and 4]. Since the current financial status and life problems are as the main factors leading to high level of life stress, health tourism is a choice for those who decide to avoid their daily stressful lives, giving more consideration to their health and welfare [5].

Health tourism development as a national strategy could be called as an arm of national security, in addition to efficient use of domestic capitals in the course of increasing the country's income [6]. Today the countries' national security is divided into two sections: "soft security" and "hard security". The medical relation and dependence of personalities and nations in terms of receiving secure and guaranteed services in the second country are among the efficient

factors of stability and increase in security capacity of that country.

The market of health tourism is introduced as one of lucrative and competitive industries in the world and is one of modern realms in advanced tourism. In national level, governments are interested in taking advantage of financial rewards stemmed from this industry. Increasing competition among different countries, in particular Asian developing countries has begun to attract health tourists [7]. On the other side, health tourism has further flourished in developing countries; Globalization and business freedom in the realm of health services has paved the way for rapid development of this kind of tourism [8]. If health tourism is also considered as a priority, then Iran can potentially prevent the outflow of foreign currency and human workforce to other countries.

During the last years, there has been as increase in the number of people who left their countries in order to use health services [9]. This increase in the number of medical tourists bears relation with factors such as the high cost of health services in industrial countries, the rise in ease of international travels, the desired rate of exchange foreign currency in world economic, rapid developments in medical technology, improvement in protection standards in most countries, tourists' access to the internet network and also establishment of new

<sup>\*</sup>Health Research Center, Bagiyatallah University of Medical Science, Tehran, Iran;

<sup>&</sup>lt;sup>1</sup>Health Research Center, Baqiyatallah University of Medical Science, Tehran, Iran;

<sup>&</sup>lt;sup>2</sup>International Travel Medicine Center of Iran, Tehran, Iran;

<sup>&</sup>lt;sup>3</sup>Health Management Research Center, Baqiyatallah University of Medical Science, Tehran, Iran

companies which have no medical specialty but play an intermediate role between all the patients of the world and hospital network [10, 11]. Nowadays, with the advent of standards and global regulations which are run in different parts of the world, people are looking for the highest quality treatment with low and competitive costs [12, 13].

The results of the studies show that the increase in treatment costs in the US and long (waiting) lists in England and Canada have led to the fact that many of the US and Europe patients travel to developing countries in southeast of Asia, in order to receive medical services [14, 15]. There is no exact detail about the number of patients who receive medical services at health tourist destinations. The main problem in determining the number of health tourists relates to the exact definition of these tourists. In fact, the reported number includes the treatment of the foreign residing in the target country, business travelers and the tourists requiring health services during stay. In addition to these statistics, those who use health services such as yoga massage, and etc. may be added to these statistics. All the same, it is obvious that a large number of patients participate in medical tourism process [16]. In a way that MC *Kingsia* estimates in a different report that the incomes stemmed from health tourism in the world markets will reach about 100 billion dollars by the end of the year 2012 [7].

A research in India emphasizes that the increase in health tourism market in India will be 2.2 billion dollar in 2010 and the government's commitment will provide motivation for private investors. In so far that the US private monetary fund, together with India's investors, have invested more than 40 million dollar on India medical-health protections [17].

At present, with respect to the low cost and high income of this industry, many countries interested in tourism development, have focused their attention on this section of tourism industry and are planning in this regard [18]. Iran will also be, in 1400 perspective, one of the main places for health tourism in the region and by doing so, not only does Iran prevent the outflow of foreign currency, but also it will benefit from a huge foreign currency income [19]. A research in Thailand showed that the government was on the verge of planning and defining strategies based on the development of the infrastructure of medical centers, hospitals, technology, medical facilities specialized human workforce and advertisement in the area of attracting health tourists so as to develop health tourism industry [20].

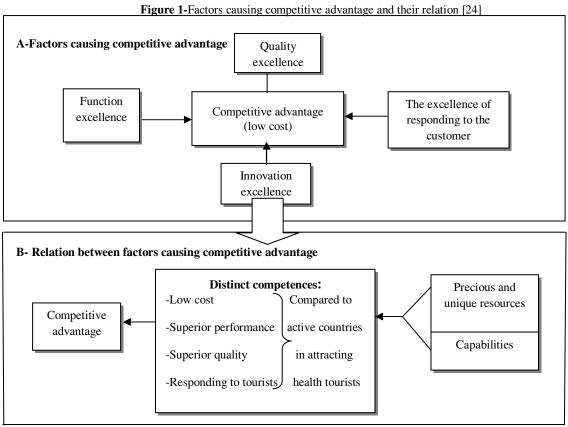
Iran, considering its own advantages in health tourism including low cost, the high quality of health services, competent doctors and possessing abundant natural attractions, has decided to take advantage from this benefit [21]. Health and medical Ministry has enacted a rule in this regard under the name of conditions and stipulations medical centers receiving health tourist in which it has defined these conditions in 6 articles. The 6 mentioned articles are as follows: General condition, human workforce, medical facilities, geographical conditions, secondary conditions and principles for medical centers' website [22].

Health and medical Ministry is obliged to offer the facilities in terms of introducing capabilities, distribution and marketing health services, and medical training and medical and medicinal productions, equipment and manufactures within the framework of guideline and business policies, in order to pave the way for effective presence in world markets, and the transformation of Islamic Republic of Iran into the center of removing health and medical needs of the region. In a way that at the end of the fourth scheme of development, the amount of foreign currency stemmed from exporting the mentioned services and products equals 30% of foreign currency use in health and medical section [23].

Due to the important stance of medical-tourism industry in world economic and with respect to Iran's capabilities in attracting health tourists, this research was done with the aim of investigating health tourism status and determining Iran's peculiar advantages.

## Methods

The current research is a kind of descriptive-reviewing researches which was done with the aim of factors causing investigating the competitive advantage in Iran's health tourism. This research was done in two stages. In the first stage, with reference to library resources and searching in valid websites, the existing data, in the area of the factors causing competitive advantage in Iran's health tourism was extracted. In the next stage, the findings derived from the previous stage were gathered and then the experts' opinions about this were added and were investigated and analyzed, using the pattern of factors causing competitive advantage (Figure 1) and the most important factors of this pattern were extracted and were collected in the form of Table 1.



<b>Table 1-</b> Investigating	factors	causing	competitive	advantage in Iran

Valuable resources	Capabilities	Distinct competences	Particular advantages	Drawback
-Laboratory and equipped genetic tools -Possessing the newest and modern recognition, health and medical facilities -Update dentistry tools Specialists with national experience and international capabilities -The existence of diverse specialty and subspecialty medical centers at international level -The existence of 51 medical Faculties -Physical infrastructure (hospitals and research centers, tourist places)	-Accomplishing the most advanced surgery operations such as open heart surgeries, spine, iris, plastic and transplantingAccomplishing advanced reproduction methods	-Worldwide fame of Iranian doctors, particularly in the countries of the region -Iran's access to new successes in medical arena (fundamental cells) -Appropriate cultural environment for Muslim countries -Being famous at worldwide level in specialties of heart surgery, transplant, eye, plastic and beautification, treating barrenness, and dentistry -Low costs of recognition, treatment and stay -Desired and diverse weather conditions (consisting four seasons) -Tourist, historical, cultural and natural attractions	-Geographical closeness to Central Asia and Middle East, Arab's market -Cultural and language similarity and congruency with foreign neighbors -3 million Iranians residing in foreign countries, applying for high quality treatments with desired costs -The high demands of neighboring countries' patients for medical services of saving unit and beautification -Foreign patients' demands for receiving unique treatments	-The lack of definition of general goals to develop health tourism in Iran -The weak role of private sector in health tourism section -Weakness in communication and collaboration between organizations related to health tourism (such as travel agencies, hotels, residential places, hospitals, insurance companies, cultural and historical places) -The non-existence of medical visa for health tourists

## **Results**

Iran, the seventh country of the world in terms of width with a population of about 70 million is known as one of the most ancient countries in the world. This

country holds tenth, fifth and fourth ranks in the world in terms of natural tourist attractions, water and weather and ancients respectively [24].

According to the statistics of World Trade Organization, the sum of service trade in 2001

amounted over 1.4 trillion dollars (equivalent to 25% of world trade) which is predicted that this volume reach to 50% of international trade by the year 2020. Despite the fact that service section includes 46% national gross production, it has not been given enough support in relevant planning in Iran as yet, and this section of health tourist market has not a crucial role [25].

In terms of the centers providing medical services in Iran, medical institutions related to Health Ministry constitute a huge portion of all medical centers. This means that Health Ministry as the government's representative is the biggest provider of health services in Iran. Less than half of equipped and advanced private hospitals locate in Teheran. After Tehran, Shiraz, Mashhad and Tabriz are among the commonest destinations of medical travels. However, Health Ministry in 2008 issued a circular under the name of conditions and principles of medical centers receiving health tourists in which the Ministry has obliged these centers to possess and observe the stipulated conditions and principles [23]. Appropriate and unidirectional policy making of the related organizations in the realm of health tourism could decrease the trend of Iranian's departure to foreign countries for treatment, by two paths of attracting foreign with widespread advertising and investment in different sections of research and education, establishing medical centers, particular check-up clinics, establishing equipped centers both modern and conventional in warm-water fountains by appropriate information giving. As such, it prevents the annual outflow of foreign currency greatly. Researches show that these kinds of people bring about one million dollar out of Iran annually [19].

According to the documents concerning the perspective of the next 20 years of Iran (or Iran's 20-year vision plan), "Iran should become the first in the region in terms of health tourism". On this basis, Iran should turn into the center of removing health and medical needs of the region and receive 20 million international tourists entering Iran and as its consequence, obtain 15 billion foreign currency income by the year 2026 [22]. In fact, the goal of these endeavors is that Iran contributes to world markets and to introduce Iran, as a medical central center in the region, so as to develop and profit-making [18].

According to the statistics of Cultural Heritage organization in 2007, 20,000 health tourists entered Iran from the Middle East and the countries lying in the precincts of Gulf and 12% of tourism industry's overall income has been obtained from medical section. All the same, there is no exact statistics from

treated patients or those under treatment, because there is no organization in Iran responsible to register and save reports concerning health tourists [26].

Each one of hospitals or health centers which meet the requirements for receiving foreign patients can apply for obtaining patent from Health and Medical Ministry. Health Ministry is responsible for investigating and emphasizing the quality of above health centers in terms of the existence of specialized staff, skillful specialists, appropriate geographical situation, public relations and effective marketing. All medical centers can protract their patent's validity duration and update it by internet and send all their data about treated patients or those under treatment to the Ministry. Along with health tourist programs, Health Ministry has decided to issue medical visas with the collaboration of Ministry of Foreign Affair. If the Ministry of Foreign Affair approves this scheme, patients can use these medical visas [27].

Alongside Health Ministry's activities, Cultural Heritage, Tourism and Handcraft Organization has also done some activities whose outcome is "comprehensive health tourism scheme". As was mentioned, article 87 of the rule concerning the fourth scheme of Iran development has invested the Health Ministry with the right of achieving desired situation in the area of international health services. But this happens while many experts believed that integral management in this arena has led to neighboring countries getting an upper hand in this international competition gradually. Emirate is one of these countries. At present in the region, Malaysia, India, Singapore, Dubai, Jordan, Turkey, Azerbaijan, and some countries in Central Asia and Caucasia and White Russia are among Iran's rivals in the area of health tourism, despite the high cost of treatment in these countries [25]. For example, the cost of open heart surgery in Turkey is 18000 dollars, in England 40000 dollars and in Iran 10000 to 16000 dollars in private centers. Patients can spend the rest of their money on touring and visiting Iran's landscapes [11]. Without doubt the achievement of article 87 of the fourth scheme of Iran development, that is, access to new resources, which equal 30% of Health and Medical Ministry's foreign currency needs requires the governors' huge endeavor and all Iran's health issue organizers welcoming this seriously and efficiently, particularly non-governmental section. Therefore, it is necessary that the government takes action on the basis of researches and results stemmed from the studies and that determines the framework of nongovernmental activities, so that this section can regulate and implement its developmental and Izadi M. et al.

operational schemes with a clear view from the future, after determining the capital policies and appropriate policy-makings and providing and defining the required principles in the area of internal communications with organizations and related institutions. It is evident that non-governmental section can find its place and embark on in the course of developing and promoting health services [25].

Annually about one billion dollar is transferred out of Iran by Iranians applying for treatment. According to the report of the office of investigating market and the services of Iran's business development organization, it is possible to turn this country into one of central centers of this industry in the region, by depicting horizons of health tourism industry in Iran by the year 1400 and by doing so, it not only decrease the outflow rate of foreign currency but also Iran will benefit from a significant foreign currency income and will provide for direct and indirect job-creating opportunities and attracting investment (Table 2) [19].

**Table 2-** The number of health tourists, the rate of foreign currency income, the number of created jobs and the rate of investment in the horizon of the year 1400

Year	Number of health tourists	Rate of foreign currency income in thousand dollars	The number of created jobs for each 7000 dollars of a job	Rate of investment in thousand dollars
2005	20000	100000	14200	20000
2006	28000	140000	20000	28000
2007	40000	200000	28570	40000
2008	53000	265000	37857	53000
2009	70000	350000	50000	70000
2010	92000	460000	65714	92000
2011	123000	615000	87857	123000
2012	150000	750000	107142	150000
2013	180000	900000	128571	180000
2014	215000	1075000	153571	215000
2015	260000	1300000	185714	260000
2016	305000	1525000	217857	305000
2017	350000	1750000	250000	350000
2018	400000	2000000	285714	400000
2019	450000	2250000	321428	450000
2020	500000	2500000	357142	500000
2021	550000	2750000	392857	550000

### Discussion

Iran has an appropriate situation, considering having favorite weather and four-seasoned nature, historical, religious, natural and cultural tourist attractions, modern and equipped medical centers, together with specialized and world-famous human workforce particularly in the region's countries, possessing an appropriate cultural environment for Muslim

countries, having a large number of Iranian residing in foreign countries who apply for treatment in Iran, the high demand of the patients in the region's countries for life-saving treatments, beauty and uniqueness both in operating and demanding conditions. In terms of guidelines and competition, the most important advantage of Iran comes down to the low medical costs in comparison with world and regional scales. In dependent and supporting sections, the only advantage of Iran is possessing diverse medical faculties which can provide the professional human resources of the health section quantitatively.

With respect to the potential conditions, Iran has a lot of opportunities to be turned into a precursor country in medical tourism industry. But in competitive and strategy situations, it needs development and should also reinforce dependent industries and their own support ones. Ghalami proposes in his research that 6 groups are effective in the issue of health tourism in Iran. Their responsibilities include: policy-making and information-giving, planning, advertising and provision of societal-psychological and financial safety of the tourists, executing training programs, provision of welfare facilities, and standardization [28].

Knowledge of behavioral codes is necessary in order to promote the satisfaction of health tourists. From this perspective, it is possible to penetrate many of behavioral subjects of internal medicine into travel medicine. But due to the internationalization and diversity of interests and politicians, manners, culture, religion, and different nations' conventions, some of cases are proposed, in a particular fashion, which have direct impact on attracting addresses' attention. Iran plays a new role in humanitarian services and travel medicine because of possessing religious, theoretical, philosophical and moral resources, [29]. Considering the above mentioned factors, Iran can be turned into the target country, among Islamic countries in the matter of attracting medical tourists.

Recently, Dubai has started its planning for opening "Dubai's city of medical protections" in 2010. This clinical center located in Persian Gulf will be the biggest international medical center in Europe and Southeast Asia and since it is planned to be introduced as a branch of Harvard medical faculty, it will probably be presented as the most famous medical center outside of the US borders [30]. Iran can in potential attract 5% of all treatment costs of neighboring countries, amounting 5.2 million dollars which is 1.3 of all income stemmed from non-oil exports [31]. With that, this city will be the medical tourists' destination, and considering Iran's 20-year

vision plan, policy-makers in health section should find a solution for achieving international market of this industry.

In the research done by *Kazemi* known as "the approaches to attracting medical tourists", it is observed that in researcher's view the factors affecting development in Iran's medical tourism are as follows: Inter-organizational collaboration and contribution in capital and operational scale, development in human resources, development in basic and medical infrastructure, obtaining international validity for centers providing services and eventually effective marketing [18].

Gonzales defines the reinforcement of legal frameworks, so as to achieving safety about protecting consumer, and also possessing high quality protection as one of vital factors in developing health tourism industry [32]. Porter et al. define necessary the creation of particular insurance system for medical tourists so as to develop Philippine's health tourism [33]. Sing indicates in his research of one of the most important activities of Malaysia's Health Ministry which was based on the formation of 5 committees to develop this country's health tourism [34].

In a research which was done in Jordan concerning medical tourism mentions the following as effective approaches to develop Jordan's medical tourism: The collaboration between public and private hospitals, defining programs for tracking the patients after receiving treatment, holding courses to teach English language and developing medical infrastructures [35]. Erfanniya concludes in his research known as "comparative study of medical-tourism informative system in selected countries and the provision of approach for Iran" that the use of integral informative systems can manage the process of medical tourism and all its dimensions of service providing and hence it is possible to give information about Iran's facilities and capabilities in attracting medical tourist, including the existence of world-famous, proficient and specialized doctors which this, in turn, leads to increase in the rate of attracting medical tourists to a large extent [36].

In table one, factors causing competitive advantage and Iran's capabilities are collected with respect to the experts' viewpoints and studies at libraries.

## Conclusion

Although medical tourism in Iran possesses numerous capabilities, it faces diverse challenges in this arena. Factors such as the following have caused Iran's health

tourism industry not to have an appropriate standing: Inappropriate collaboration among organizations in charge of health tourism, lack of specialized work committees in Health and Medical Ministry and in Tourism Heritage, Handcrafts Cultural and organization, lack of comprehensive system for collecting data concerning the entrance of health tourists to Iran, inefficiency of information-giving system in terms of Iran's medical tourism capabilities, lack of the necessary infrastructure and legal gap in order to develop this industry. Also, considering the clarification of strong points and promotable points, Iran can make its role in this market more evident by investing, more than before, on its own strong points and their introduction as its own unique capabilities in providing services. In terms of modifiable points, it is possible to achieve the desired results by defining comprehensive programs, marketing and modifying some of processes accordingly. With respect to the identification of strong and weak points, these hospitals can use the model of SWOT (Strength, Weaknesses, Opportunities and Threats), which is used in some countries' health tourism industry.

#### References

- 1- Carrera P, Bridges J. Health and medicaltourism: What they mean and imply for health care systems? In: Merz F, editor. New York: HanserVerlag; 2008.
- 2- TRAM (tourism research and marketing). Medical Tourism: A global analysis, a report by tourism research and marketing. Netherlands: Atlas Publication; 2006.
- 3- Harahsheh S. Curative tourism in Jordan and its potential development [dissertation]. Bournemouth: Bournemouth University; 2002.
- 4- Caballero SD, Mugomba C. Medical tourism and its entrepreneurial opportunities: A conceptual framework for entry to the industry [dissertation]. Sewden: Goteborg University; 2006.
- 5- VajiraKachorn T. Implementation of an effective health tourism development plan of Thailand [dissertation]. Thailand: University of Wisconsin-Stout; 2004.
- 6- Healthtourisminasia.com [homepage on the Internet]. Janson Y, Sim S, Nelson N. Medical tourism: The Asian chapter. Malaysia: c2009-2010 [updated Jun 2011]. Available from: http://www.healthtourisminasia.com
- 7- Herrick MD. Medical tourism: Global competition in health care. Dallas: National Center for Policy Analysis; 2007.
- 8- Garcia Altes A. The development of health tourism services. Ann Tour Res. 2005;32(1):11-6.
- 9- Nagarajan GS. Medical tourism in India: Strategy for its development [dissertation]. Bangalore: Crisil Young Thought Leader; 2004.
- 10- Association for Tourism and Leisure Education, Tourism Research and Marketing. Medical tourism: A global analysis. Ireland: Atlas Publication; 2006.
- 11- Connell J. Medical tourism: Sun, sea, sand and ... surgery [dissertation]. Australia: University of Sydney; 2006.

- 12- Lagiewsky M, Rick R. Medical tourism: Perspectives and applications for destination development. Croatia: American Collage of Management and Technology; 2008.
- 13- Moody M. Medical tourism: Employers can save significant healthcare dollars by having employees seek overseas options. Rough Notes. 2007;150(11):114-6.
- 14- Ramirez de Arellano AB. Patients without borders: The emergence of medical tourism. Int J Health Serve. 2007;37(1):193-8.
- 15- Bovier PA. Medical tourism: A new kind of traveler? Rev Med Suisse. 2008;4(157):1196-8.
- 16- Horowitz D, Rosensweig J. Medical tourism: Health care in the global economy. Physician Exec. 2007;33(6):24-6.
- 17- Kalshrtti P, Pillai D. Tourism products development and management medical tourism: A shifting paradigm. India; Proceedings of the 1<sup>st</sup> Conference on Tourism in India, 2008.
- 18- Kazemi Z. Study of the effective factor for attracting medical tourism in Iran [dissertation]. Netherland: Lulea University of Technology; 2007.
- 19- Iran Trade Promotion Organization. Iran and the world health tourism. Tehran: Office Market of Goods and Services; 2008. [Persian]
- 20- Isc.hbs.edu [homepage on the Internet]. Monica H, Yu-Feng H. Thailand medical tourism cluster. Boston: c2006 [updated May 2006]. Available from: http://www.isc.hbs.edu/pdf/student-project/Thailand-medical-tourism/
- 21- Shalbafian A. Effective factors for developing health tourism [dissertation]. Tehran: AllameTabatabaei University; 2006. [Persian]
- 22- Lawoffice.mohme.gov.ir [homepage on the Internet]. Terms and conditions of service centers in health tourism. Tehran: c1999 [updated Apr 2011]. Available from: http://www.lawoffice.mohme.gov.ir [Persian]
- 23- Parliran.ir [homepage on the Internet]. Fourth development economic, social and cultural plan. Tehran: c2000 [updated Sep 2007]. Available from: http://www.parliran.ir/index.aspx?siteid=1&pageid=2941. [Persian]
- 24- KhodadadeHosseini SH. Strategic planning and management. Tehran: Saffar Publication; 2008. [Persian]

- 25- Salim Pour H, Tajor M, Arab M. Medical records of exports of goods and services abroad. J Health Homa. 2003;2(17):7-9. [Persian]
- 26- GhafarZadeh Sh. Factors in attracting foreign tourists with the scientific definition of health and medical tourism. Uromia; Third International Conference of Regional Health Services in Iran, 2009. [Persian]
- 27- Iranhealthtourism.ir [homepage on the Internet]. Jahangiri M. Health and tourism industry in Iran. Tehran: c2001 [updated Apr 2010]. Available from:
- http://www.iranhealthtourism.ir/fa/viewnew[Persian]
- 28- Ghalami S. Investigate ways to improve Iran's position in the market for health services and medical tourism attraction [dissertation]. Tehran: TarbiyatModarres University; 2010. [Persian]
- 29- Pakjou A, Izadi M, MasoodiPour A, Fazel M. Pattern of travel medicine ethics in international cooperation program of military medicine. Mil Med J. 2011;13(2):117-123. [Persian]
- 30- Izadi M. International travel medicine. Tehran: Institute of Higher Education Science; 2009. [Persian]
- 31- Izadi M, Joneidi N, Ranjbar R, Ayoobian A. Health tourism in Iran: Competitive advantage factor. Tehran; Asia Pacific Travel Health Conference, 2012.
- 32- Gonzales A, Brenzel L, Sancho J. Health tourism and related services: Caribbean development and international trade. Jamaica: Regional Negotiating Machinery; 2001.
- 33- Rxpinoy.com [homepage on the Internet]. Porter EM, Vera MD, Huang B, Khan O, Qin Z, Tan A. Medical tourism in the Philippines. Philippine: c2007-2010 [updated Jun 2011]. Available form:
- http://www.rxpinoy.com/medicaltourismphilippines/index.php 34- Singh G. Medical tourism in India: Strategy for its development. Bangalore: Indian Institute of Management; 2003.
- 35- Jnco.gov [homepage on the Internet]. Jordan competitiveness report, medical tourism. Jordan: c1999 [updated Mar 2007]. Available from: http://www.jnco.gov.jo/static/pdf/chapter6.pdf/
- 36- ErfanNia M. Comparative study of information systems in selected countries and provide a solution for medical tourism in Iran [dissertation]. Tehran: Tehran University of Medical Sciences; 2010. [Persian]