A Comparative Study of Health Tourism Potentials in Iran and India
[Using Swot model and Analysis Hierarchy Process (AHP)]

Abstract
Health tourism is one of the most important branches of tourism industry and has high economic and social benefits; people travel to access therapeutic, health and surgical cares in this process. This study aims to comparatively examine the capacities and functions effective on the health tourism in Iran and India. Research method is descriptive-analytical, and data are analyzed using SWOT model, and AHP hierarchical process has been used for weighting the internal and external factors. Results achieved in this study indicate that the weighting score of strengths in India is 3.6 with high efficiency and weighting score of weaknesses is 2.8 with low efficiency. Also,
weighting score of opportunities in India is evaluated 3.6 and threatening 3.4. Tourism strengths in Iran have been assessed 3.8 and the weaknesses 3.5 with a high rate of efficiency and opportunities scored 3.8 and threats scored 1.4 with a high rate of efficiency. However, the findings of this study indicate that India managed to appropriately exploit the opportunities and strengths of health tourism and make the system's weaknesses ineffective. Health tourism planners in Iran should also take a measure to reduce weaknesses and threats of health tourism and enhance its strengths and opportunities utilizing the experience achieved in India. In the main body of the article, according to the findings of this study, instrumental strategies for expanding health tourism in both countries are presented.

**Key words:** tourism potentials, health tourism, SWOT & AHP Models, Iran, India.

**Introduction**

Tourism has been introduced as a multi-functional activity which plays a main role in the regional and spatial developments among countries in recent decades. (Shamaie & Mousavivand, 2011: 25) Most countries in a close and comprehensive competition are seeking to increase their benefits over these international activities. (Kazemi, 2006: 1) Tourism had been improved with the expansion of urban centers and the growth of urbanization and communications phenomena in that tourism today is one of the world economic bases. (Khodabakhsh, 2011: 19) Also, the goals of tourism are different today and tourists aim to travel with different objectives creating different branches in tourism. (Taghizadeh et al., 2011: 248) Reviews on the history of travelling over the past centuries confirm that humans travel with various motivations such as trade, education, pilgrimage, religious affairs, adventures, and political affairs. (Sadrmomtaz & Agharahimi, 2010: 516) Nowadays, life in most industrialized countries has created needs for people, at the top of which is health. By taking into consideration this human need in the 21st century, countries seek to benefit from the opportunities existed in their country named medical tourism. (Nasirpour & Salmani, 2010: 58) Planners of Health and
Medical Tourism define the utilization of medical and health facilities for obtaining recovery and using natural facilities as ‘Treatment Tourism’. In fact, health tourism is a form of tourism that is performed to improve, achieve, and retrieve a person's physical and mental health more than 24 hours and less than a year. (Larousse, 1974: 1030) A health tourist can use the target medical services with vacation from his/her permanent life settlement to retrieve one's physical and mental health. This type of tourism is fortunately prevalent in Iran and attracts many tourists to our country from the neighboring regions to benefit from medical and treatment services. It is, however, noteworthy that health tourism has a short history in Iran. In fact, medical tourism was considered for the first time in Iran by the Ministry of Health. (Azizi & Motahari, 2011: 3) There are various potentials in the country to attract health tourism including mineral water springs in most provinces, desert regions like Qom, infertility treatment departments in Shahid Sadoughi Center of Yazd, etc., dentistry, dialysis centers and types of heart surgery, plastic surgery, ophthalmology and orthopedics in Tehran and Mashhad hospitals, bone marrow transplantation, liver transplantation in Shahid Namazi Hospital of Shiraz and herbal medicine services in Hamedan. (Nasirpour & Salmani, 2010: 58) However, no optimal utilization has been performed out of the country's potentials for attracting tourists in the field of medical tourism despite existence of medical staff, medical facilities, affordable treatment and natural attractions, (Nouri et al., 2011: 3) This is while India which is one of the most popular medical tourism destinations in the world, particularly in the field of heart surgery and hip transplantation and other medical fields, has been identified as a main center in the field of medical services so that over the years 2005 and 2006, no country could be compared with it in the field of medical tourism; the Indian government and its private sector are aware of promoting medical tourism services and turning the Indian subcontinent into a single center in this area, and it has been estimated that the value of the services exports resulted from medical tourism in India will be two billion dollars up to 2012.

The present study aims to comparatively review the health tourism potentials in Iran and India. A comparative study of the factors
affecting health tourism development in successful countries can be done through a comparative evaluation of Iran's health tourism with a successful country as India and assessing the set of internal and external factors in both countries. Also, its promotion can be considered with regard to threats and opportunities, and a success in global competitiveness can be achieved. Meanwhile, this industry causes promoting the quality of medical services level in hospitals and other medical centers as well as employment in the country's health sector and getting closer to international standards and finally, obtaining income and exchange and economic, social, cultural and political prosperity.

**Literature Review**

Of the studies performed in the field of health tourism we can name Jahani's (2008) who came to this conclusion in his study that taking advantage of economic facilities, reducing the current barriers in the administrative system and using the proposed model shall be helpful to the globalization of hospital services. According to these findings, developed countries like America and England with modern and sophisticated management and technological structures, and India and Thailand due to the success in presenting hospital services at an international level of successful marketing as well as the advent of technology from developed countries in the past decade had an effective role in this regard.

In another study, Kazemi (2008) concluded that social security, benefiting from global standards in medical centers and also medical equipment and issuing treatment visas are among the most important factors affecting the development of this industry in Iran. In another research, Rouhi Yaman (2003) reviewed various issues of medical tourism and ethics in different levels. Caballero and Mugomba (2007) showed in their research that tourists preferred to seek treatment overseas using the framework of tourism. Lee (2009) analyzed the health care sector's role in international tourism and its impact on health care in Singapore and suggested that the authorities will lead the government towards the creation of long-term medical activities. Not only does Nagarajan (2004) mention the competitive advantage of India in the field of medical tourism, he maintains that the important factors
preventing the development of this industry are somewhat the government performance, defects in the coordination of the pillars of this industry, lack of mechanisms for the accreditation of hospitals, and lack of standardization policy of the prices in country's hospitals. Among other studies can be the one conducted by Nasirpour and Salmani (2010) which examined the role of Tehran's hospitals in developing therapeutic tourism. Sadrmomtaz and Agharahimi (2010) who studied medical tourism in Iran believe that the most important factors in developing the health tourism industry in order to develop a strategy for public infrastructure are as follows: human resources development strategy, strategy of development in information systems and marketing, and product development strategy. They suggest that for the development of medical tourism, the Iranian government should take all factors into consideration and develop a comprehensive and coordinated program to develop its medical tourism industry.

**Research Theoretical Concepts and Framework Tourism**

The term tourism was first used in 1811 in an English magazine called *Sporting Magazine*. At that time, this term meant ‘to travel’ and was used for watching historical sites and visiting natural sightseeing for pleasure. (Mahallati, 2001: 20) However, various meanings and definitions have been presented by experts since then. Tourism includes all activities performed by a tourist while he lives far from his native place for personal or occupational reasons. (Smid& Zuart, 2002: 23)

World Tourism Organization (WTO) puts it that tourism includes the set of activities one performs during travelling in a place other than their native environment for not less than 24 hours and not more than a year with the aim of entertainment, recreation, leisure, sports, visiting relatives and acquaintances, business, mission, participation in conferences or seminars, treatment, study, research, religious activities and the like. (Sadr Mousa, 2007: 130)

**Health Tourism**: Health tourism is a form of tourism that is performed with the aim of maintaining, improving and retrieving mental and physical health for more than 24 hours and less than a year.

**Types of Health Tourism**: Divisions presented for health tourism are different which in a general classification are as follows:
**Wellness Tourism:** Travelling to health regions and the areas having mineral water sources and warm water to get rid of the stresses of everyday life and revitalizing without intervention and medical monitoring and in cases where the tourist has no specific physical illness is called Wellness Tourism. The patients spending their convalescence can accelerate their improvement using natural facilities and caring plan with the supervision of the therapist. (Harahsheh, 2002: 27)

**Curative Tourism:** Travelling with the aim of using natural resources (mineral water, salt, mud, etc.) for the treatment of some diseases or passing the recovery period under the supervision and intervention of a therapist is called Curative Tourism.

**Medical Tourism:** It is another type of health tourism that the journey is carried out with the aim of physical therapy and doing a type of surgical operation under the supervision of therapists in hospitals and medical centers. In this type of health tourism the patient may require the use of spaces of medical tourism services (such as spas) after being cured and treated in which his travel may be completed by travelling to the places where these facilities exist. (Ildoromi & Sefidi, 2011: 5)

Types of health tourism are shown in Figure 1.

![Figure 1. Health Tourism Classification (TRAM, 200).](image-url)
Factors Affecting Health Tourism Prosperity: There are some requirements in most industrialized countries which accordingly some needs have been created for people living in different communities. Nowadays, people tend to impressively use natural resources and vitamins, pain killers, and stress management to increase their mental and physical health. Despite long waiting of patients, severe medical costs and existence of barriers to travel to other countries, they tend to travel to other countries to treat themselves by using medical services.

There are several reasons in support of health tourism as the issue of health care causes obtaining required exchange earnings. This important issue has led to the promotion of regional and national health care systems through providing better infrastructures and easier access to qualified providers and innovation. (Resouyel & Berijez, 2006)

There were some factors which strengthened this industry from the mid1990s such as the following ones:
- avoiding long waiting lists and queues for treatment in one's own country
- getting proper treatment quality in terms of both technology and global standards
- lower costs of treatment
- good reception quality and rest
- visiting attractive and interesting places (Rokni et al., 2010: 163)

World Successful Countries in Health Tourism
No matter which country, tourists seeking for treatment and health can travel to a country to be taken under the medical care and services in areas such as cancer, neurological diseases, transplantation surgery, cosmetic surgery, etc. Among the countries which mainly welcome health tourists are Brunei, Cuba, Hong Kong, Hungary, India, Jordan, Lithuania, Malaysia, Philippines, Singapore, Thailand and recently the United Arab Emirates (Dubai). Also, the countries that are interested in cosmetic surgery mainly include Argentina, Bolivia, Brazil, Costa Rica, Mexico and Turkey. Belgium and Poland in Europe are engaged in the business of tourism as well. Interestingly, South Africa with the slogan: ‘facial cosmetic surgery along with seeing wildlife’ is trying to attract medical tourists. (Iran Trade Promotion Organization Plan)
**Research Method:** Research method in this study is descriptive-analytical in which health tourism and the influential functions and the requirements to be considered in Iran and India are qualitatively and quantitatively analyzed and described; assessment and adaptation of the potentials and functions of health tourism in Iran and India have also been considered in order to understand and assess health tourism conditions. To collect data and information, documentary and library studies, and to analyze data, SWOT and AHP models have been used. Finally, after analyzing the data, some guidelines and strategies appropriate for health tourism development and effective functioning as an important pillar of health tourism in targeted countries have been presented.

**Goals and Stages in Studying SWOT in Analyzing the Factors Affecting Health Tourism in Iran and India**

A: Study of the internal factors affecting health tourism in Iran and India

This stage aims to assess the internal environment for identifying the strengths and weaknesses of tourism. Indeed, the important and effective aspects in achieving the strategic planning objectives of tourism and their technical implementation in both countries have been considered.

B: Study of external factors affecting various sectors of health tourism in Iran and India

This stage aims to study the impacts of external factors in health tourism in both India and Iran and also to analyze and develop appropriate strategies through identifying opportunities and threats facing health tourists in these countries.

Accordingly, the following steps have been taken by providing a table consisting of these factors, and how they affect health tourism functioning, and analyzing them based on SWOT model.

C: Column 1 (internal and external factors) consists of the most important strengths and weaknesses, opportunities and threats facing health tourism in Iran and India.

D: Column 2 (weight): each factor is weighted based on each possible effect on strategic position of health tourism with AHP. These weights have been obtained based on mathematical relations of binary
factors and then weighted score for each criterion is calculated in each country.

E: Column 3 (grading): each factor is graded 1 to 5 (very poor to very good) based on the significance and the status quo of health tourism according to Likert range in appropriate with each relative influence. This grading shows how health tourism will respond to any of the internal and external factors.

F: Column 4 (Weighted Score): weights are multiplied by the degree of each factor (column 2*3) until the weight of each factor's weighted factor is achieved. Thus, a weighted score was calculated for each factor.

Finally, weighted score of internal and external factors are added in the column and the ultimate weighted score is calculated. The total weighted score shows that how a system responds to existing and potential factors and forces in its external environment. Average total weighted score in a system and in a field is always 3 and if it is higher, it will have greater effect and if it is less than that, it will be less effective. (Ebrahimzadeh & Izadfar, 2009: 248)

Introducing Areas of Research: According to research objectives which aim to comparatively study the factors affecting health tourism in Iran and India in terms of health tourism, now this important issue is comparatively analyzed. India is located in South Asia and has a very diverse geography ranging from mountains, deserts, plains, hills and plateaus with a very ancient and rich history that dates back to 3000 BC. India is a land of races, languages, rituals and abundant and diverse cultures with an economy which is the world's fourth largest economy.

Despite the global economy stagnation in recent years, India has become an economic power with average economic growth of higher than 8 percent over the past few years. This amount of economic growth is close to the one in its neighbor country, China. With a population of 1,210,193,422 people, India is, in fact, the second world's most populous country, comprising one sixth of the world's population. This country has over 35 big cities with the population over one million, the most populous of which is Bombay (www.wikipedia.org). Islamic Republic of Iran with 1,648,195 square kilometers populated with 75 million people is located in Asia. Iran has a long history and
the type of its government is Islamic Republic with one legislature. Persian is the official language of this country and its capital is Tehran. (Research Branch and Cosmography Compilation, 2005: 8), (Figure 2)

![Figure 2. Iran and India’s location in the world map](image)

**Study of Health Tourism in India and Iran**

India is one of the most popular curative tourism destinations in the world, especially in the field of heart surgery and femur transplantation and other medical fields as a global center in the arena of medical services. No country could be compared with India in curative tourism in the years 2005 and 2006; the government and private sector in India aimed to promote curative tourism services and turning of the Indian subcontinent into a single pole in this field. (Iran Trade Development Organization, 2007: 9) Treatment costs in India are so affordable compared with the costs of medical services in developed countries such as America and England, and it has been estimated that the value of export services due to India's curative tourism in 2012 will reach to $2 billion. (Iran Trade Development Organization, 2011: 9)

In other words, India is becoming a leading center in the world health tourism and is widely considered as a destination for treating different patients. Accordingly, some advantages of traveling to India for treatment are as follows:
- medical equipment with the latest technology
- existing high expertise in India (cardiovascular, orthopedics, obesity surgery, gastroenterology, ophthalmology, dentistry, urology and plastic surgery)
- existing experienced medics and surgeons and trained support staff
- affordable medical costs compared to European and American countries and other Asian countries (in many cases 40-80 percent difference in price)
- lack of waiting list
- a rich cultural heritage
- fluency of hospital staff and personnel in speaking English
- existing charming and beautiful hospitals hotels in India
- alternative treatments in hospitals such as Ayurveda, yoga, meditation and therapy massage (www.indian-medical-tourism.com)

Iran also has medical capabilities such as production of recombinant drugs, stem cells, ophthalmology treatment and cancers. Also, low medical costs compared to European and American countries, low residential costs than those of the area, religious commonalities with people in the region along with natural potentials such as climate variability as a four season country, mud therapy, sand therapy, mud volcano in the hydrotherapy area and over 1000 hot mineral springs (Table 1 with province separation) and other natural attractions in the field of human health which are suggestive of Iran’s myriad of potentials in the field of health tourism. According to national development outlook and programs, it has been predicted that the increase of tourism investments and promoting investments in this field will reach $ 550,000 until 2021, and the amount of exchange earnings until 2021 will be $ 275,000, and the number of jobs created in this area is 392,875. (Nouri et al., 2011: 10)

<table>
<thead>
<tr>
<th>Province</th>
<th>The number of Hot Mineral Springs</th>
<th>Province</th>
<th>The number of Hot Mineral Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azarbaijan gharbi</td>
<td>46</td>
<td>Ilam</td>
<td>9</td>
</tr>
<tr>
<td>Mazandaran</td>
<td>40</td>
<td>Bushehr</td>
<td>9</td>
</tr>
<tr>
<td>Sistan&amp;Baluchestan</td>
<td>27</td>
<td>Hamedan</td>
<td>8</td>
</tr>
<tr>
<td>Azarbaijan sharghi</td>
<td>26</td>
<td>Markazi</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 1: Distribution of the Number of Hot Mineral Springs in the Provinces of Iran
Findings Analyses

Using SWOT matrix is today a new tool in the analysis of functions and functional gaps status which has been utilized by strategic designers and evaluators. In fact, this orientation is a kind of conceptual framework for systemic analyses which made possible the study of the factors and comparing the impasses, threats, damaging aspects, opportunities, demands and the situations of external environment along with system's strengths and weaknesses to explain and determine the strategies. The combination and conflation of these factors with each other based on developing SO opportunities and strengths strategies, ST strengths and weaknesses, WO weaknesses and opportunities and WT weaknesses and threats. (Ebrahimzadeh, 2010: 164)

Hierarchical analysis is a tool widely used in multi-criteria decision making and has been first introduced by Saaty. (Saaty, 1980: 32) This method which is quickly pointed out in various sciences is one of the best and most accurate rating and classification methods based on several indicators. On the other hand, this method has been designed in such a way that large and complex problems can be divided into small ones which makes possible simplifying the problems. (Akbari & Muhammad Zahedi, 2008: 194) Strategic planning is also one of the vital and important ways for making decision, and common use of it in analyzing internal and external factors of the environment which the system is able to create represents some strategies based on it. (Yuksel & Dagdeviren, 2007: 365)
**Analysis of the Internal and External Factors Affecting Health Tourism in India**

**A: Analysis of Internal Factors**

(Strengths and Weaknesses): The results achieved from health tourism based on SWOT method in India have been shown in table 2. Accordingly, most important strengths using AHP weighting and the degree of their significance based on Likert scale and the opinions delivered by some experts have been calculated.

<table>
<thead>
<tr>
<th>Internal Factors (Strengths and Weaknesses)</th>
<th>AHP weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 Affordable and inexpensive medical and health services</td>
<td>0.186</td>
<td>4</td>
<td>0.744</td>
</tr>
<tr>
<td>S2 High quality of medical and health services and existing proficient medics</td>
<td>0.157</td>
<td>4</td>
<td>0.628</td>
</tr>
<tr>
<td>S3 Existing tourism markets with most adopted with scientific achievements and the cardiovascular-like technology</td>
<td>0.142</td>
<td>3</td>
<td>0.426</td>
</tr>
<tr>
<td>S4 Little waiting time and lack of waiting list</td>
<td>0.11</td>
<td>4</td>
<td>0.44</td>
</tr>
<tr>
<td>S5 The attribute of hospitals and medics at the international level</td>
<td>0.0953</td>
<td>4</td>
<td>0.3812</td>
</tr>
<tr>
<td>S6 High quality of medical tourism infrastructures</td>
<td>0.0893</td>
<td>3</td>
<td>0.2679</td>
</tr>
<tr>
<td>S7 Giving special services at the hospitals</td>
<td>0.0653</td>
<td>3</td>
<td>0.1959</td>
</tr>
<tr>
<td>S8 An almost integrated management in all sectors of health tourism</td>
<td>0.0578</td>
<td>3</td>
<td>0.1734</td>
</tr>
<tr>
<td>S9 Private sector investments in the field of health tourism</td>
<td>0.0572</td>
<td>4</td>
<td>0.2282</td>
</tr>
<tr>
<td>S10 Cultural richness and diversity of tourism destinations</td>
<td>0.337</td>
<td>2</td>
<td>0.0674</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>--</td>
<td>--</td>
<td><strong>3.6</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Factors (Weaknesses)</th>
<th>AHP weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 Lack of accreditation and proper regulation systems for the hospitals</td>
<td>0.169</td>
<td>3</td>
<td>0.507</td>
</tr>
<tr>
<td>W2 Shortage of facilities and transportation infrastructures like the roads and airports in all cities</td>
<td>0.156</td>
<td>4</td>
<td>0.624</td>
</tr>
<tr>
<td>W3 Lack of similar pricing policies in all hospitals</td>
<td>0.169</td>
<td>4</td>
<td>0.676</td>
</tr>
</tbody>
</table>
The results of this analysis are as follows: strengths are suitable: affordable price of medical and curative services in India with 0.744 weighted score, high quality of medical and curative services and existing proficient medics with 0.628 weighted score, little waiting time and lack of waiting list with 0.44 weighted score; while most important weaknesses of the system are lack of uniform pricing policy in all hospitals with 0.676 weighted score, lack of facilities and transportation infrastructures such as roads and airports in all cities with 0.624 weighted score and lack of accreditation and proper regulation systems for the hospitals with 0.507 weighted score.

Finally, weighted score of strengths has been evaluated 3.6 which indicates a strong impact of strengths in India's health tourism. Also, weighted score of weaknesses in India's health tourism has been evaluated 2.8 showing low effects of weaknesses in health tourism in this country.

**B: Analysis of External Factors (Opportunities and Threats):**

According to the results achieved in Table 3, the most important opportunities in India in the field of health tourism include the shortage of presenting new health products in Western countries like Great Britain, Canada with 0.88 weighted score, increasing foreign currency revenues and increasing profits with 0.79 weighted score, increasing demand for health care services in countries with middle age population with 0.76 weighted score.
<table>
<thead>
<tr>
<th>External Factors (Opportunities - Threats)</th>
<th>AHP weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply shortage of new health products in countries such as Great Britain, Canada</td>
<td>0.225</td>
<td>4</td>
<td>0.88</td>
</tr>
<tr>
<td>An increased demand for healthcare services of the countries with aging population</td>
<td>0.190</td>
<td>4</td>
<td>0.76</td>
</tr>
<tr>
<td>Rising foreign exchange earnings and higher profitability</td>
<td>0.159</td>
<td>5</td>
<td>0.795</td>
</tr>
<tr>
<td>Creating job opportunities</td>
<td>0.116</td>
<td>3</td>
<td>0.348</td>
</tr>
<tr>
<td>High demand in national health systems of countries such as Great Britain, Canada, with aging population</td>
<td>0.103</td>
<td>4</td>
<td>0.412</td>
</tr>
<tr>
<td>Improving lifestyles move quickly to the demand of health tourism</td>
<td>0.0895</td>
<td>3</td>
<td>0.2685</td>
</tr>
<tr>
<td>Development of activities to improve tourism</td>
<td>0.0587</td>
<td>3</td>
<td>0.1761</td>
</tr>
<tr>
<td>Creating novel ideas in marketing</td>
<td>0.0563</td>
<td>4</td>
<td>0.2252</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>--</td>
<td>3.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>External Factors (Opportunities - Threats)</th>
<th>AHP weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rise of strong competitors in countries such as Thailand, Malaysia &amp; Singapore</td>
<td>0.337</td>
<td>5</td>
<td>1.685</td>
</tr>
<tr>
<td>Lack of international accreditation as the main controller</td>
<td>0.256</td>
<td>3</td>
<td>0.768</td>
</tr>
<tr>
<td>Economic difficulties and global economic downturns</td>
<td>0.192</td>
<td>3</td>
<td>0.576</td>
</tr>
<tr>
<td>Lack of insurance coverage by insurance providers at international level</td>
<td>0.115</td>
<td>4</td>
<td>0.46</td>
</tr>
<tr>
<td>Using the unjust competitive practices for health to attract tourists worldwide</td>
<td>0.0981</td>
<td>3</td>
<td>0.2943</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>--</td>
<td>3.4</td>
</tr>
</tbody>
</table>

According to the results achieved in tables 2 and 3, the most effective and influential internal and external factors on health tourism in India have been presented in Table 4.

<table>
<thead>
<tr>
<th>Internal &amp; External Factors</th>
<th>AHP weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable and inexpensive medical and health services</td>
<td>0.186</td>
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</tbody>
</table>
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2 High quality of medical and health services and existing proficient medics 0.157 4 0.628
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1 Supply shortage of new health products in countries such as Great Britain, Canada 0.225 4 0.88
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1 Rise of strong competitors in countries such as Thailand, Malaysia & Singapore 0.337 5 1.685
2 Lack of international accreditation as the main controller 0.256 3 0.768
3 Economic difficulties and global economic downturns 0.192 3 0.576

Calculations and Analysis by the Authors, 2012.

Strategies Effective on Health Tourism in India: At this stage, with the interference of each factor interacting on each other and by analyzing how these strengths and weaknesses mutually have an impact and also threats and opportunities, four different strategies have been developed which can be considered as the best strategies in health tourism, and hence, its planning and strategies are offered in terms of four basic competitive, diversity, reviewing and defensive strategies.

A: Competitive-Aggressive Strategies in India's Health Tourism (OS): These strategies focus on maximum-maximizing internal strengths and external opportunities and each phenomenon tries to take maximum benefits of their strengths to take advantage of more opportunities of the external environment, and hereby the capabilities and capacities will be reached to a maximum level using these strengths and opportunities in that these strategies in Indian health tourism will be as follows:
- taking advantage of affordable services to attract European and American patients
- enhancing the marketing quality with regard to high quality of health tourism services in India
- taking advantage of medical tourism opportunities and the current expertise in India to attract health tourists
- utilization of modern reservation systems with regard to not having waiting queue in Indian hospitals
- identifying targeted purposes and planning to attract health tourists with regard to current potentials
- tourism tours planning along with the treatment with regard to high cultural richness and tourism attractions in India
- utilizing the special services of hospitals with a proper cost for the patients and their attendants
- utilizing the health tourism to create more jobs with regard to high population of India
- health tourism services and products development to create new products and services
- focusing on large markets as well as small markets development to attract medical tourists

B: Contingency or Diversity Strategies (ST) in India Health Tourism:
In this strategy, focus is on maximizing diversity to internal strengths and external threats which is developed to take advantage of sytem strengths to deal with external threats; these strategies in India health tourism are as follows:
- optimal utilization of medical tourism in order to win in the arena of the competition among competing countries
- paying attention to high revenues and earnings achieved from medical tourism with regard to the weakening process of global economy
- the efforts to get international and global certificates
- development of insurance services at the international level according to the current potentials
- development of new policies to curb the competing countries in the medical field
C: Reviewing or Adaptive Strategies (WO) in India Health Tourism: In this strategy, minimum-maximizing is done to mitigate weaknesses in order to use available opportunities; these strategies in India health tourism are as follows:
- establishing strategic policies for the benefit of deficiencies in medical facilities in targeted countries
- getting legal certificates to attract more foreign patients
- developing the strategies to integrate prices in the country to attract and acquire international consideration
- equipped with air and rail transportation systems in all cities
- using health tourism potentials for life improvement in India

D: Defensive Strategies (WT) in India Health Tourism: This strategy is based on minimum-minimization with the aim of reducing weaknesses to reduce threats; these strategies in India tourism development are as follows:
- development of tourism facilities and amenities with regard to high volume of patients' demand
- thriving the insurance coverage at the international level
- support of the health tourism by the government for coherent and valid planning

Analysis of the Internal and External factors on Health Tourism in Iran

A: Analyzing the Internal Factors (Strengths and Weaknesses): Results of the analysis of functions affecting health tourism in SWOT method in Iran indicate that most important strengths using Analytical Hierarchy Process (AHP) and the opinions delivered by the experts include affordable costs of medical services than those of the other neighboring countries with 0.99 weighted score, Iran's achievement to new methods for the treatment such as new combinatory medicines, stem cells, ophthalmology therapies scored 0.61, Iran's strategic position in the region with 0.60 weighted score; while its most important weaknesses include lack of coordination among proctor authorities in tourism and lack of an integrated management with 0.78 weighted score, lack of a comprehensive and coordinated therapeutic system in the country with 0.72 weighted score, lack of facilities and transportation infrastructures, hotels, hospitals and private hospitals
with 0.56 weighted score. Total weighted score of strengths in Iran’s health tourism is 3.8, and the weak points have been evaluated 3.5 which indicate high effect of strengths as well as the impact of internal weaknesses. (Table 5)

<table>
<thead>
<tr>
<th>Internal Factors (Strengths - Weaknesses)</th>
<th>Weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 Affordable cost of medical services compared to other neighboring countries</td>
<td>0.199</td>
<td>5</td>
<td>0.995</td>
</tr>
<tr>
<td>S2 Iran’s achievement to modern ways in treatment such as recombinant drugs, stem cells, etc.</td>
<td>0.154</td>
<td>4</td>
<td>0.616</td>
</tr>
<tr>
<td>S3 Iran’s strategic position in the area</td>
<td>0.151</td>
<td>4</td>
<td>0.604</td>
</tr>
<tr>
<td>S4 Existing proficient medical and therapeutic experts in the country</td>
<td>0.119</td>
<td>4</td>
<td>0.476</td>
</tr>
<tr>
<td>S5 Existing more than 1000 mineral and therapeutic water sources at the national level</td>
<td>0.113</td>
<td>4</td>
<td>0.452</td>
</tr>
<tr>
<td>S6 Existing young and affordable labor force in the country</td>
<td>0.108</td>
<td>3</td>
<td>0.324</td>
</tr>
<tr>
<td>S7 Existing religious tourism attractions, exchanging ideas and common religious orientations in the area</td>
<td>0.839</td>
<td>3</td>
<td>0.251</td>
</tr>
<tr>
<td>S8 Tourism and very rich natural therapy attractions</td>
<td>0.608</td>
<td>3</td>
<td>0.204</td>
</tr>
<tr>
<td>Total</td>
<td>---</td>
<td>---</td>
<td>3.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Factors (Weaknesses)</th>
<th>Weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 Lack of a comprehensive and coordinated curative tourism center at the national level</td>
<td>0.180</td>
<td>4</td>
<td>0.72</td>
</tr>
<tr>
<td>W2 Lack of required coordination among responsible authorities in tourism issues and the shortage of a coherent management</td>
<td>0.157</td>
<td>5</td>
<td>0.785</td>
</tr>
<tr>
<td>W3 Lack of advertising and marketing at the regional and international level</td>
<td>0.136</td>
<td>4</td>
<td>0.544</td>
</tr>
<tr>
<td>W4 Lack of facilities and transportation infrastructures, hotels, hospitals hotels and private hospitals</td>
<td>0.113</td>
<td>5</td>
<td>0.565</td>
</tr>
<tr>
<td>W5 Lack of insurance rules consistent with international standards</td>
<td>0.0952</td>
<td>3</td>
<td>0.285</td>
</tr>
<tr>
<td>W6 No specific legislation in the field of health tourism at the national level</td>
<td>0.0860</td>
<td>4</td>
<td>0.344</td>
</tr>
<tr>
<td>W7 Lack of private and public sector investment in health tourism</td>
<td>0.0735</td>
<td>3</td>
<td>0.220</td>
</tr>
<tr>
<td>W8 Lack of attention to the incomes and benefits of health tourism in providing</td>
<td>0.0592</td>
<td>2</td>
<td>0.118</td>
</tr>
</tbody>
</table>
**External Factors** (Opportunities-Threats)  | AHP weight | Grade | Weighted score
--- | --- | --- | ---
O1 Preventing from brain drain  | 0.184 | 5 | 0.920
O2 Being contagious with Afghanistan and Iraq which are medically required to other countries  | 0.167 | 4 | 0.668
O3 Proximity with the Persian Gulf states  | 0.130 | 4 | 0.520
O4 Entering Europe’s markets via Turkey and the countries of the Caspian Sea  | 0.141 | 4 | 0.564
O5 Getting out of a single economy and currency profits  | 0.119 | 4 | 0.476
O6 Creating myriad and diverse job opportunities  | 0.082 | 5 | 0.413
O7 Increasing the number of foreign tourists  | 0.093 | 3 | 0.279
O8 Enhancing services quality and tourism infrastructures  | 0.0790 | 3 | 0.237
**Total**  | --- | --- | 3.8
T1 Brain drain  | 0.337 | 5 | 1.685
T2 Rising the power of the rival’s intentions  | 0.265 | 5 | 1.280
T3 Increasing the number of the patients traveling abroad for curing and treatment  | 0.192 | 3 | 0.576
T4 Increased incidence of infectious and contagious diseases  | 0.115 | 3 | 0.345
T5 Dealer’s abuse of curative tourism markets  | 0.0981 | 3 | 0.294
**Total**  | -- | -- | 4.1

**Calculations and Analysis by the Authors, 2012.**

**B: Analysis of External Factors** (Opportunities and Threats): As shown in table 6, results of the analysis indicate that the most important
opportunities affecting tourism evaluation in Iran include preventing from brain drain with 0.92 weighted score, being contagious with Afghanistan and Iraq which are medically required to these countries with 0.66 weighted score, entering to Europe's markets via Turkey and the Caspian Sea countries with 0.56 weighted score; also, the most important threats include brain drain scored 1.68, increasing the strengths of competing destinations scored 1.28 and increasing the number of patients at the national level emigrating overseas for treatment scored 0.57. Weighted score of health tourism opportunities in Iran in 3.8 in total, and the weighted score of threats has been evaluated 4.1 the effects of which have been evaluated high in Iran health tourism. Now, according to the results shown in Tables 5 and 6, the most important internal and external factors affecting health tourism in Iran are presented in Table 7.

Table 7: Effective Internal and External Factors Affecting the Health Tourism in Iran

<table>
<thead>
<tr>
<th>Internal &amp; External Factors</th>
<th>AHP weight</th>
<th>Grade</th>
<th>Weighted score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable cost of medical services compared to other neighboring countries</td>
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<td>4</td>
<td>0.520</td>
</tr>
<tr>
<td>Brain drain</td>
<td>0.337</td>
<td>5</td>
<td>1.685</td>
</tr>
</tbody>
</table>
Calculations and Analysis by the Authors, 2012.

Developing the Strategies Affecting Health Tourism in Iran

At this stage, like the approaches presented for India, four basic strategies (competitive, diverse, defensive and reviewing) are presented for Iran in order to plan and develop its strategies which are as follows:

A: Competitive-Aggressive Strategies (SO) Effective in Iran Health Tourism
- utilizing medical services with low prices to attract curative tourists from various countries
- Utilizing the experiences achieved in successful countries to attract patients with regard to new discoveries and abilities in Iran in the field of medicine
- presenting comprehensive plans to take advantage of Iran's strategic position in the field of health tourism
- utilization and equipment of mineral water sources and therapeutic sources to do natural therapeutic tourism activities
- using young and professional workers in the field of health and curative tourism
- doing extensive and modern advertising in the field of health tourism potentials and various tourism attractions in Iran
- utilizing common religious, cultural and linguistic commonalities to attract health tourists from neighboring countries
- paying special attention to positive impacts of health tourism such as creating exchange and preventing from brain drain and getting out of single product
- utilization of neighboring with the Persian Gulf and Central Asia states

B: Contingency or Diversity Strategies (ST) of Iran Health Tourism
- providing health packs with regard to current potentials and presenting special services along with these packs to attract tourists
- synchronization of equipment and national health tourism services with international developments in order to compete with rival countries
- familiarizing the medical tourists in internal and external parts of the country with new achievements and methods in the area of treatment such as recombination drugs, stem cells and ophthalmology treatments in Iran
- hiring young skilled labor in the field of health tourism to prevent from brain drain

C: Reviewing or Adaptive Strategies (WO) of Iran Health Tourism
- coordinating the trustee authorities of national health tourism to take advantage of current potentials
- improving the facilities and transportation infrastructures, hotels, private hospitals and hospitals hotels in the country
- developing a comprehensive and coordinated system to develop health tourism in the country and raising the number of health tourists
- paying attention to the accomplishments resulted from health tourism while developing health tourism strategies such as getting rid of single product

D: Defensive Strategies (WT) of Iran Health Tourism
- developing comprehensive plans to expand health tourism and taking advantage of young labor force to prevent from brain drain
- equipment of the hospitals and health tourism infrastructures for further development of health tourism
- supporting the private sector
- performing check-up processes on arrival of foreign patients to prevent from infectious and contagious diseases

Results and Discussion
Health tourism is today one of the most flourishing sectors of health industry over the world which attracts the attention of most countries to the health tourism development. With regard to the progress of high level of medical science and the existing capabilities of Iran in providing medical services and current potentials in this regard, especially strong experiences in the complex and hard treatments and cures on the one hand, and cosmetic surgeries such as skin, face, hair,
teeth, eyes, etc. on the other hand, as well as Iran's acquiring of therapeutic natural attractions such as warm and cold water sources, sun therapy, sand therapy, mud therapy, flower therapy and other tourism attractions, it is so essential that useful planning with developing needed strategies be done in this regard. This study comparatively explored health tourism between India and Iran, and the findings showed that India with 18 strength points against 12 weakness points was able to most use strengths and weaknesses, so that the impacts of weaknesses and threats have been made ineffective. On the other hand, Iran with 16 strength and opportunity points and 15 weakness and threat points could take sufficient advantage of strengths and opportunities and restrain the weakness and threat points. Therefore, given that curative tourism in Iran is an intra-system issue, a strong and comprehensive planning in the field of curative tourism development among Cultural Heritage Organization, Ministry of Health and Medical Education, Ministry of Foreign Affairs, Ministry of Interior, Islamic Propaganda Organization should be designed and developed in order that an important step be taken in presenting medical services and curative tourism benefitting from the advantages of natural therapy and change Iran to an excellent pole in health tourism, first at the regional level and finally at the international level. This important matter will be carried out just by a strong management and a targeted planning program. Benefitting from useful experiences and a comparative study of the successful countries such as India in this regard causes myriad of success in this field of tourism. Now, the results of this study regarding health tourism potentials in both Iran and India are in some cases similar (number of strengths and opportunities) and in some cases dissimilar so that India could make the weaknesses and threats of system ineffective by conducting a coherent planning with 2.8 and 3.4 weighted score and make the strengths and opportunities of the system effective with 3.6 weighted score. The designation and modeling of common functions in both countries can be therefore useful in promoting the curative tourism functions. Accordingly, the approaches and experiences of health tourism in India can be utilized in proportion with culture, potentials and functions of Iranian system. In addition, the issue of curative tourism should be
viewed as a system-oriented approach in Iran and the management will be successful in this regard if this issue is considered as the medical tourism. Bringing about private institutions in the field of attracting health tourists through extensive advertising and investment in the research and training sectors, establishment of treatment, modern and traditional centers in the natural health centers, and so on can prevent the process of patient's departure in the Islamic countries to European ones for the treatment. By resolving the current problems and taking modern steps in this regard as well as the establishment of specialized campaigns, the objectives of 2021 courses in curative tourism in Iran can be accomplished in an explicit way.
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