Infection Diseases Section Review Article

Interaction of Economic Indicators and Medical Tourism Industry

Zahra Pourkhaghan*1, Sahand Ebrahimi Pour Faez², Shima Pourkhaghan³, Soheil Ghahrieh⁴

Abstract

Medical tourism is one of the subdirectories of tourism in order to receive health care in other countries. It has become a major industry in the global arena. According to the great potential of this industry in Iran, is essential to paying more attention to this branch of tourism, economic effect and also the effect of economic indicators on tourism industry. Therefore, this paper examines the interaction of economic indicators and medical tourism using descriptive and qualitative content analysis. The results show that medical tourism is helping the sustainable development and economy dynamism through exchange gaining, creating jobs and etc. This type of tourism is more profitable than the other subdirectories of tourism and considers the sustainable development of tourism destinations in a more appropriate manner.

Also growth rate of this branch of tourism is more than the other subcategories of tourism, which due to the large impact on job creation, Making Foreign Currency and sustainable tourism development required that the government and private sectors accurately and consistently work on investment development and appropriate infrastructure in this sector centering primary medical services.

- 1. Masters of Economic Sciences, Shahid Ashrafi Isfahani University, Isfahan, Iran.
- 2. PhD Candidate of Econometrics, Mazandaran University, Tehran, Iran.
- 3. Masters of Management Sciences, Isfahan University, Isfahan, Iran.
- 4. PhD Candidate of Econometrics, Chamran University, Ahvaz, Iran.

* Corresponding Author

Zahra Pourkhaghan, Masters of Economic Sciences, Shahid Ashrafi Isfahani University, Isfahan, Iran.

Email: z_po933@yahoo.com

Submission Date: 2013.November.19

Accepted Date: 2013.December.15

Tel: +989137122391

Keywords: Medical tourism, Economic indicators, Making foreign currency, Health care

Introduction

In the recent years -due to the advancements in information and communication technology, increase in movements of the producers and also the consumers of these services and expansion of the private sector – health services have been traded more and more every day[1]. Therefore many countries are competing in the matter. Improvement in countries' economic performance, increase of life expectancy among the people and the increase in population are the determining economic factors that result in increase in demand for health services. Furthermore, development of health service institutes and expansion of information technology also, in addition to growth in demand for health services in a national level, have similar effects on international trades of these services. Trade of health services, increases

the economic share of the health sector in the national economy of a country. Developed and developing countries are searching for various options to maximize their competitive resources and advantages including implementation of strategies for export of health services and commercial property release.

Considering low expenses and high revenues of this industry and improvements of health structures in countries, many have put their focus on this tourism industry and make plans for it[2-4]. In order to overcome the issue of monoculture in Iran, it is necessary to emphasize on production and export of those goods and services that have the potential to create hard currencies. Health industry is one of the possible ways to gain this objective. Especially, considering the low prices and high qualities of these services and also Iran's

International Journal of Travel Medicine and Global Health, Volume 1, Issue 3, Autumn 2013; 133-139



geographical conditions, by applying a comprehensive plan, attracting health tourists could create considerable incomes. In this study, we used the available Data and models in order to identify the economic sides of health tourism in Iran. Our paper is a descriptive-applicable study and tries to analyze the current state and provide some complementary suggestions.

Methods

This descriptive - analytic study aimed to describe the objective, systematic and realistic relationship between economic indicators and health tourism. Information of this article was collection from library resources, articles and dissertations, and related websites. Therefore, to identify and assess economic conditions and the relationship between economic indicators and health tourism are discussed.

Health Tourism: Health tourism includes two groups of people; the healthy and the ill. The health services provided for the healthy also includes two categories: first the steps taken to prevent a specific disease[5]. Steps such as providing low calorie food substances and weight loss plans. The second category is health maintenance which is provided through health towns and spa hotels[6, 7] . Health tourism can be divided into three categories of health maintenance tourism, treatment tourism and medical tourism. Treatment and medical tourism include trips that are taken to cure physical illnesses or perform medical surgeries. The World Tourism Organization defines treatment tourism as: applying services that result in recovery or increase in health and spirit of the person and are done outside his place of residence for more than 24 hours[7, 8].

Medical and treatment tourism as one dimension of tourism aides in sustainable development and mobility of a country. Considering its low costs and high benefits, most of developing countries focus on this industry and prepare strategies to enhance it. Health tourism is known as one of income generating and competitive industries throughout the globe and is considered as novel areas in advanced tourism. In a macro state, the governments are interested in gaining the economic advantages of this industry. There is an ever increasing competition among different countries specially the developing countries to attract

health tourists[3-9]. The main factors in health tourism are the price, the quality, availability, relevance of treatments not covered by insurance, etc.

International Trade of Health Services: The health sector is one of the most emphasized sectors in the global economy. Increase in costs of medical treatments and also demand for health services due to increase in the average age of the society in developed countries and the increase in the availability of these services with adequate quality and affordable costs and also the development of new medical technologies in developing countries specially information and communication technologies had a considerable effect in demand for health services in developing countries [10]. Furthermore, development of transportation infrastructures and easier traveling made attaining health services with developed qualities and developing prices possible[11]. These factors are the reason for the presence of developing countries in the global markets. Table (1) shows the number of health tourists from each region. Asia is the destination of health tourism for all regions of the glob which are only exporters of health tourists. Quality is one of the most important factors of competition; there are seven gaps in defining quality of services that are due to the differences between expectations in various dimensions. These gaps are: gaps in knowledge, gaps in standards, gaps in delivery, gaps in internal affairs, gaps in perceptions, gaps in interpretations and gaps in services. Gaps in knowledge results in gaps in standards and following it are gaps in delivery and internal affairs. Gaps in delivery results in gaps in perception and gaps in internal affairs is a cause for gaps in interpretation and therefore gaps in services. Each of these gaps could damage the customer relations. The quality of the service is the customer's general view of the service's delivery that consists of several successful and unsuccessful experiences. Preventing the services' gaps in each encounter helps the institute to improve the quality of its services and consequently increase its popularity[12].

The trade in health services was formed by creating new types of treatment centers and increase in out of border supply of the services using supplier and consumer transportation and also applying E-communication. Based on the general agreement

of services' trade, trade in services occurs in four formats: 1) out of border transportation: 25 to 30%, 2) consumption in abroad: 10 to 15%, 3) business presence: 55 to 60%, 4) presence of individuals in abroad: less than 5% [13]. Health tourism is in form of consumption in abroad or out of border supply. Out of border supply of health services includes activities such as: remote medical treatment and outsourcing the business process. These activities are considered some sort of electronic treatment tourism. Out of border supply of health services have some positive externalities for the importer among which we could refer to increase in supply of treatments for deprived regions, decrease in some human resource limitations, improvement in quality of treatment and diagnosis services and also improvement in proficiency by transporting knowledge through electronic communication[14].

Advantages of Health Tourism in Iran: Advantages in each industry lead to increase in demand for that industry. Many factors determine its advantages. In order to evaluate the advantages of tourism we used Diamond's advantage model beside the model competitive advantage of factors. These models were first applied in the studies of [15].

Diamond's advantage model presents the factors influencing firms' competitiveness. They include land, capital, labor, etc. The more production factors are in a country, the more its production capacity and hence its comparative advantage will be. Furthermore, professional production factors have significant effects in competitiveness; factors such as: trained human resources, specialized infrastructure, rate of citizens' security and state's protection policies[16]. Table (1) shows the Diamond's advantage model for Iran. The Model shows that despite Iran's diverse climate, numerous tourist attractions (historical, religious, cultural and natural) and also world renown modern health centers with specialized staff -especially in the region -it is the center of attention for Iranians residing in abroad and the countries in the neighboring region. Iran's most important advantage is low costs of treatment in a global and regional scale. Iran has also some advantages in related and supporting industries because of numerous medicine universities that can provide the professional human resources the health sector requires. According to the model of competitive advantages' factors, better quality, better innovations, better efficiency and better customer relations results in lower costs and creates competitive advantages. These factors follow unique resources and human capabilities and are followed by competitive advantages. Diagram (1) shows Iran's competitive advantages

Health tourism will experience more increase in the following years —especially due to the increase in privatization and the differences in prices. Furthermore, heart surgeries will become the center of attention because of their quite low prices. Increase of health tourism objectives is another feature of this newly found trend. Under the shadow of current competition, in addition to new jobs and revenues, travel agencies and marketing have also improved.

Economic Influences of Health Tourism: The main reason behind health tourism is acquiring hard currencies. This industry creates an effective foreign income in the balance of payments[17, 18]. At the beginning, this foreign income will be directly influencing the health system; the income from purchasing health services by the foreign patients can be used for treatment of national patients or aid in capitalizing the hospitals.

For instance in Singapore, India and Malt the common belief is that by engaging health tourism in the health system, a more vast area of clinical services could be provided which (if not used for health tourism itself) can be used by the native citizens of the country[5, 19]. In Cuba, these incomes are used for reinvestment[20]. Therefore the focus of some countries on foreign patients is for developing better services for local patients and off course gaining foreign currency.

However, foreign patients are treated "in addition to" local patients and should not pass the adequate limits; because it could result in different economic externalities. For instance, in 1990 (as a result of the Asian Crisis) Thailand was under a lot of attention as a health tourism center; the result was a vast decrease in local patient reception followed by complementary capacities in the private sector. Therefore, the net profit changed direction towards the privet sector. Potential capacities in these times could reduce the financial pressure.

Table 1. Share of medical tourists from the regions

	Asia	Africa	Europe	Latin America	North America	Middle East	Pacific
Asia	93%	-	%1	-	%6	-	-
Africa	95%	-	%4	%1	-	-	-
Europe	%39	-	%10	%5	%33	%13	-
Latin America	%1	-	-	%12	%87	-	-
North America	%45	-	-	%26	%27	%2	-
Middle East	%32	-	%8	-	%57	%2	-
Pacific	%99	-	-	%1	-	-	-

Source: Interviews with providers and patient-level data; McKinsey analysis

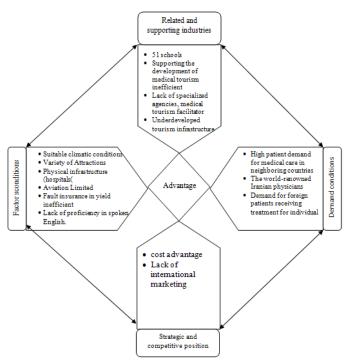


Diagram 1: Diamond Advantage Medical Tourism in Iran Source: (Divera, 2008)

Development in health tourism results in Tourism's total income; because even though the majority of tourists' expenses are for treatment costs, but the patients have companies who acquire non-medical services; such as: food, housing, etc. which could direct foreign currencies towards the nonmedical sectors.

One of the indicators both influencing and being influenced by health tourism is taxation. In some countries tax discounts and subsidies result in adequate environment for developing health and treatment context[21, 22]. On the other hand, in countries such as Thailand (with high concentration on health tourism) many sectors such as hotels, restaurants and different tourism centers

benefit from health tourism; the central state receives a share from these benefits by increasing its tax income; albeit, this income could be spent in supporting public health systems.

Matters such as privatization in health sector, improvement in technology and availability of health resources could result in improvement in health tourism followed by improvement in tourism industry[23]. Improvement of health tourism allows low income countries to enter the global tourism industry and guarantee their country's growth; followed by adequate taxes and profits in the industry. The state could use this income in the form of subsidies to improve social health. Such subsidies could include payments to staff,

staff training and improvement of equipment and facilities in public health system[21-24]. In developing countries health tourism results in foreign direct investment and provides the necessary capital for the development process[25]

Marketing in Health Tourism: Marketing for services is restricted to before and after the delivery. Also providing a general service package including medical services and tourism is an important pillar of heath tourism's success[11, 26, 27]. Marketing strategies in different countries focus on prices, production, place, promotion, individuals, process and physical features. For instance in Thailand, high standards in medical treatments and services is a competitive advantage; provided in low prices. While India supplies the services much cheaper, the costumers have negative image of the quality of these services there. Malaysia has also cheaper prices compared to India but mostly focuses on Islamic Countries[23, 28]. In this industry, Mouth to Mouth Marketing has considerable effect; for instance, patients who attended Thailand and were satisfied by the services would recommend the place as a destination for health tourism. Another strategy is creating value added by providing services. Services such as efficiency, security for patients and improvement in costumer relations. Other services are like online services for medical arrangements and providing translators in different languages[22].

As a connection bridge between consumers and suppliers it has an important role in this industry. According to tourists, internet connections are the best and most adequate channel for gathering information[29].

Health Tourism in Iran: Three main dimensions of tourism are capital, management and technology and the two sub dimensions are natural factors and cultural heritages[13, 30]. Capital is one of the main necessities and adequate technology revolutionizes the tourism trend as an infrastructure. Capital is an important factor in political, economic, social and cultural parameters. There is direct relation between the increase in foreign tourism and improvement in facilities[1] .In health tourism –whether naturally or medically – there are high direct effects in economic, social and cultural levels. Health tourism (in economy) results in attraction of foreign currencies, improvement in life standards and increase in per capita income and direct/indirect job creation in different services. Table (2) focuses on the number of heath tourists, the foreign income, the number of jobs created and the necessary capital for the 2021 horizon. Table (2) shows that with an increase in investments by the year 2021 to 550,000 thousand dollars the number of health tourist will reach 550,000 tourists and the foreign income will reach 275,000\$ and the jobs created will be 392,875 jobs.

Table 2. Factors in creating competitive advantage

Valuable resources	Equipped laboratory and genetic tools- Having the most modern diagnostic equipment and healthcare- Dental appliances to experienced professionals, national and international capabilities- There are numerous specialized medical centers- Physical infrastructure (hospitals and research centers and tourist places)
Features	Advanced breeding procedures- Perform the most advanced procedures such as open heart surgery, spinal, plastic and transplant iris-
Distinctive competencies	The world-renowned Iranian physicians, especially in the region- Iran to achieve new successes in medicine (stem cells)- Being introduced globally at specialty cardiac surgery, transplantation, ophthalmology, plastic and cosmetic dental treatments of infertility- Cultural environment for Muslim countries- Favorable weather conditions different- Tourism, cultural, historic and natural
Special advantages	Geographical proximity to Central Asia and the Middle East and the Arab market-Scaling and linguistic and cultural similarities with neighboring foreign-Three million Iranian expatriates seeking quality care with optimal costs- Demand for foreign patients receiving treatment for individual- The high demand for health care saving patients from neighboring countries and beauty.
Disadvantages	Lack of development goals for health tourism development in Iran- Pale private sector's role in health tourism- Poor communication and coordination between health tourism related organizations (such as travel agencies, hotels and)- The lack of medical visa for health tourists

Source: (Izadi, 2012)

Negative Externalities of Health Tourism:

Health tourism by itself has no damage. The negative externalities are because of incompetent management and misuse of science, technology, natural potentials and human resources. Some of these externalities —which by better managementcould be turn into positive opportunities —are as follows; 1) the possibility of contagious disease, 2) damage to natural resources, 3) destruction of natural habitats, 4) inequality in health system, 5) erratic growth in private sector and 6) increase in medical costs. Inequality in health system, erratic growth in private sector and increase in health costs requires more emphasis.

Inequality in health system: the health tourism industry stimulates faster growths of the private sector in leading countries in health tourism such as Thailand and India by increasing the number of collective investments and risks. Such contributions although on one hand result in better facilities and management methods and aid in information system, but generating income from health tourism could become an important issue for private hospitals in order to demand more subsidies as the time passes. As a result, they consume the public subsidies and government's savings and hence the resources would evaporate from public health system. In such a case two distinct sectors (private and public) would rise. The private sector focuses on high technologies which is not a dire need for the majority of the society. In this two sector system it is possible that people with less needs who pay more, gain services at the cost of the poor[31]. Also it is possible that the resources shift from first aids to third degree treatments which are not a necessity for the domestic population[32].

Erratic growth in the private sector: the government should play an important role in the rules and regulations of the private sector. Unfortunately enforcement and strengthening of the existing regulations are inadequate and many of the rules are outdated and lack the necessary connection with the existing situation. The state has no structural method to organize the private sector. Also the private health institutes, show considerable resistance for accepting specific regulations for professional labor force[21, 24].

Increase in medical costs: in the recent years, some studies showed that medical cost have increased. These costs result in unstandardized and inadequate health state; followed by lack of health facilities and limited access to the public facilities. Therefore the patients will be forced to attend the private sector [18, 29, 33].

Conclusion

Health tourism is an ever increasing industry and each nation is trying to gain its macroeconomic advantages; in micro level, hospitals and other providers of these services are in competition for more foreign income from this industry. The most important limitation in studying health tourism is lack of adequate information and common systematic evaluation systems. These limitations differ in each country based on the country's policies and strategies.

Since health tourism is an issue within the system, a strong plan for development of health tourism is required between the cultural heritages, ministry of health and medical education, ministry of foreign affairs, ministry of interior, the organization of natural environments and Iran's institute of trade development. Also specialized committees for attracting health tourists alongside vast advertisements and investment in research and development, finding health centers, finding modern and traditional centers in natural health centers could increase the demand for health tourism. This policy results in more foreign income, more vacancies and intervention in the process of brain drain in addition to higher life standards and better social welfare.

References

- 1. Chanda R. Trade in Health Services. Indian Council for Research on International Economic Relations 2001;70.
- 2. Kazemi Z. Study of effective factors for attracting medical tourist in Iran 2007 [Persian].
- 3. 03. Janson Y, Sim S, Nelson N. Medical tourism: The Asian chapter. 2008.
- 4. Garcia-Altes A. The development of health tourism services. Annals Of Tourism Research. 2005:32-262.
- 5. Mussell R SJ, Sommerville A,. Medical Tourism. Journal of Medical Ethics. 2006;32(4).
- 6. Mirfakhrodini H. Satisfaction rate of medical tourism Yazd and prioritize factors, Journal of Shahid Sadoughi University of Medical Sciences, Nov-Dec 2012.

- 7. Mardani M. Tourism Management, Principles, Foundations, And Ap-plied Concepts. Astan Ghods Publication. 2006.
- 8. Haghighi kafash M. prioritizes the development of medical tourism in Iran, Tourism Studies 2006.
- 9. Herrick M.D. Medical Tourism: Global Competition in Health Care, National Center for Policy Analysis, Dallas, US. 2007.
- 10. Bernal R. The Globalization of Health care Industry: Opportunities For the Caribbean. Cepal Review 2007;92.
- 11. Cortez N. Patient without borders: the emerging global market for patients and the evolution of modern health care. Ind LJ. 2008;83:71.
- 12. Laolak K RL. Principles of service marketing and management. Trans Tajzadeh Nemin A. Tehran: Samt 2005.
- 13. Izadi M, Ayoobian A, Nasiri T, Joneidi N, Fazel M, Hosseinpourfard M. Situation of health tourism in Iran; opportunity or threat. MilMed Journal. 2012;14(2):69-75 [Persian].
- 14. Jarvis L SB. Tele-radiology: Threat or Opportunity. Clinical Radiology. 2005;60.
- 15. Khodadade Hosseini SH. Strategic planning and management. Tehran: Saffar Pub-lication. 2008 [Persian].
- 16. Yavari K GA, Shahhosseini S, Zeraati M, Mirmohammadi H, Tourism cluster: a new approach in expanding tourism industry. The Institute for Trade Studies and Research 2006 [Persian].
- 17. Taghizadeh Z. The Role of Tourism in the Muslim world with an empha-sis on nature cure treatment (Functions, Challenges and Solutions), Journal of Tourism Space 2011 [persian].
- 18. Siddiqi S SA, Mirza Z, Drager N, Sabri B,. Assessing trade in health services in countries of the East-ern Mediterranean from a public health perspective. Int J Health Plan Manage. 2010;25(3 [Persian]).

- 19. cartographer Iran Trade Promotion Organization.Iran and the world health tourism2008.
- 20. Mazilu M, editor Opportunities and Threats for Romania as a Tourist Destination after the World Economic Crisis. Proceedings ISI of 5-th WSEAS International Conference on Economy and Management Transformation (EMT'10), West University of Timisoara, pag; 2010.
- 21. Agha heydari $\, Z\, SZ. \,$ Medical Tourism Industry in Iran: Guidelines for the De-velopment of Health , Information Management 2010.
- 22. Rerkrujipimol J, Assenov I. Medical Tourism in Thailand and Its Marketing Strategies [Online]. 2008.
- 23. Connell J. Medical tourism: Sea, sun, sand and surgery. Tourism Management. 2006;27(6 [Persian]).
- 24. Agha heydari Z SZ. Systematic review of studies in the field of medical tour-ism. health information management. 2010 [Persian].
- 25. Chinai R GR. Medical visas mark growth of Indian medical tourism. Bull World Health Organ 2007;85(3).
- 26. cartographer Express Healthcare Management. Practicing medical tour-ism: resounding success 2006.
- 27. Gopal R. The Key Issues and Challenges in Medical Tourism sector in India (A Hospital perspective) 2008.
- 28. Barometer UWT, cartographer 2013.
- 29. Hopkins L, Labonté R, Runnels V, Packer C. Medical tourism today: What is the state of existing knowledge&quest. Journal of public health policy. 2010;31(2):185-98.
- 30. Network WTO.
- 31. Hazarika I. Medical tourism: its potential impact on the health work-force and health systems in India. Health Policy Plan. 2010;25(3).
- 32. Weiss E SP, Kodner I, Keune J, Banding in Bangkok, CABG in Calcutta: the United States physician and the growing field of medical tourism. Sur-gery. 2010;148(3).
- 33. Deloitte, cartographer Medical tourism: Update and implications, the Deloitte Center for Health Solutions 2009.