HEALTH TOURISM IN TURKEY AND PRACTICAL EXAMPLE OF ITS ECONOMIC DIMENSIONS

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Abstract: Turkey has made significant progress in health tourism within the last 20 years and began to compete with the most successful countries in health tourism. Also, the income obtained from health tourism has an important impact on the income obtained in health sector in Turkey and makes great contribution to the economy. This study aims to investigate the place of health tourism in health sector and its impacts on it. Within this context, various statistical data regarding the spending on health and health tourism between 2004-2013 was used. The data obtain from TUIK (Turkish Statistical Institute) was analysed via PASW Statistics 18 (SPSS-Statistical Package for Social Sciences) package program. Within the scope of the analysis, frequency tables and regression tests were used. The research findings illustrated that private hospitals were preferred more in health tourism, Germany, Bulgaria and Iraq are among the countries that send most health tourists, service is obtained more in other branches and eye and oncology fields and health tourism income is affected by the number of the tourists. The results of the study indicated that foreigners make up 70% of total health tourists in 2013, the rate of health spending in health tourism is 2.3% and health tourism income increased total heath income significantly.

Key Words: Tourism, Economy, Health Care, Process, World, Competition, Industry

INTRODUCTION

Tourism activities considered as old as human history, has reached great dimensions today. Tourism, defined as the science, art and trade of attracting tourists and providing service to tourists has gained a quality that expands investments and work volume, creates incomes, provides foreign exchange, creates employment areas, meets the social and humanitarian functions affecting social and cultural life (Küçükaslan, 2006:2).

The need to diversify tourism has become a reality for our country. Many opportunities are available for our country to diversify tourism (Hacoğlu and Şahin, 2008: 35). In this regard, health tourism...
is one of the significant alternatives, and it has become a worldwide important industry with substantial development (Emir et al., 2008:397).

Health tourism is one of prominent sectors within tourism sector, which achieves significant growth with regard to investment and tourist number annually across the globe. People with health problems travel to convenient countries in order to obtain better health service with less cost. Moreover, wealthy people in underdeveloped countries travel to developed countries due to limited health opportunities.

Health tourism is the tourism type that allows for the development of health care facilities by making use of the individuals with the needs of physical therapy and rehabilitation and international patient potential. (Health Tourism Report in the World and Turkey, 2010).

In the general sense, health tourism is regarded as an organized tourism movement encompassing medical tourism, thermal spring Tourism (Thermal Spring + Spa & Wellness), and elderly care visits (www.ktbyatirimisletmeler.gov.tr).

In the recent years, the environmental problems resulting from the rapid population growth, industrialization and urbanisation pose threats against and deteriorate human lives and create an environment, which reduces productivity. The people who have to be present in such environments turn towards health tourism in order to protect their health, to be more productive and find cures to the diseases (Çonkar and Gülmez, 2004: 289).

Image 1: The Map Illustrating The Countries Engaging In Health Tourism (Health Tourism Report In The World And Turkey, 2010)

Health tourism aims at offering medical alternatives in order to ensure wellness of patients and patient families. In parallel with the high education and welfare level in developed countries, service provision might have high costs. The share of the health needs and health expenses of the population getting older in developed countries increases day by day (Ministry of Culture and Tourism, 2010).

Health tourism, which draws attention as the most rapidly developing industry in Turkey, is one of the important in terms of the economic, social and political return it provides to the countries. Taking into consideration that 600 million health tourists across the world spend 2500 dollars in average in addition to the health tourism spending expected to reach 100 billion dollars in 2012, the magnitude of the sector becomes evident. Today, Turkey has become an attraction centre that draws the patients in Europe with the health service it provides. It ranks among the 7 top ten countries in the world in terms of source richness and potential (Gülen and Demirci, 2012).

In 2008, 5.1 trillion and in 2009 5.4 trillion USD in total were spent on health. Countries allocate money changing between % 2 and % 16 of the GNP for health spending. This rate is % 5.7 in Turkey (TÜSİAD, 2009).

Europe is on the top in the regional distribution of tourism income in the world. Europe is followed
by America, Asia and Africa respectively. Tourism contributes to employment, income level, easing the domestic/foreign debt, balancing spending and raising the welfare level of the people in various countries with tourism potential, particularly in developing countries (TSV, 2010: 9).

Also, the benefits of health tourism for the countries include the contribution of the revenue obtained from foreign tourists to the economical welfare of the country, enhancing the information exchange between the countries and developing partnership strategies between them, contributing to the technology and information transfer between the countries, providing better service to the domestic patients because of the international competition provided to the foreign patients (Annette and De Arellano, 2007).

Table 1. The Share Of Turkey In World Tourism And Internal Tourism (Gülen And Demirci, 2012)

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of the international tourists (million)</th>
<th>The number of the tourists visiting Turkey</th>
<th>International tourism income (billion USD)</th>
<th>Turkey’s tourism expenses (million USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>277</td>
<td>1,288,060</td>
<td>102</td>
<td>326</td>
</tr>
<tr>
<td>1985</td>
<td>330</td>
<td>2,614,924</td>
<td>116</td>
<td>1,482</td>
</tr>
<tr>
<td>1990</td>
<td>455</td>
<td>5,389,308</td>
<td>255</td>
<td>3,225</td>
</tr>
<tr>
<td>1995</td>
<td>581</td>
<td>7,726,886</td>
<td>380</td>
<td>4,957</td>
</tr>
<tr>
<td>2000</td>
<td>687</td>
<td>10,412,000</td>
<td>481</td>
<td>7,636</td>
</tr>
<tr>
<td>2005</td>
<td>806</td>
<td>21,124,886</td>
<td>593</td>
<td>18,154</td>
</tr>
<tr>
<td>2010</td>
<td>1006</td>
<td>19,648,882*</td>
<td>682</td>
<td>10,043**</td>
</tr>
<tr>
<td>2020</td>
<td>1561***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: World Tourism Organization (WTO), Türsab, Turkish Tourism Investors Association

*January-August 2010 (TYD)

** January-July 2010 (TYD)

*** WTO Estimation

ith regard to Turkey tourism, 27 million tourists visited Turkey in 2009 and Turkey obtained 22 billion dollars of revenue. While Turkey ranked 29th in 1990, it rose to 7th position in 2009 (Gülen and Demirci, 2012). The number of the tourists visiting our country for health tourism is 91,504. Primary purpose of these visits is eye surgeries and infertility treatment. Tourists averagely spend is 4-5 days and spend 2500 dollars. All these figures and staying time illustrate the contribution made to the economy by health tourism compared to holiday tourism (Yılmaz, 2010: 27).
Turkey rose to 5th position in health tourism in which it started its journey from the 21th position in the world and rose to third position in terms of income. According to the data by Turkish Health Tourism Development Council, Turkey hosted 587,000 tourists in 2011 and obtained 3.5 billion dollars. 2015 goal has been set as 1 million patients and 10 billion dollars return. Turkey, which gained a significant infrastructure with the increase in state research hospitals and private hospital investments, expands the share it obtains from health tourism that reached a magnitude of 400 billion dollars day by day (www.turizmyatirimdergisi.com.tr).

Geographical location and moderate climate, 2th position in the world with 39 hospital accredited by JCL, presence of qualified human sources (especially in medicine and tourism areas), adequate bed capacity of the hospitals, having necessary physical and technological hospital infrastructures and having qualified doctors, developing private hospital sector and increasing number of the personnel who can speak different languages, lower health service cost offered in Turkey compared to European Union countries, adequate number of high quality hotels that will support health tourism, suitable climate conditions, presence of historical and touristic centres and rich thermal springs (1st in Europe and 7th in the world) are among the major advantages (Gülen and Demirci, 2012).

Moreover, medical tourism in Turkey can be sustained along with thermal tourism and it manifests itself as a very significant advantage of our country. Turkey, which is located on an important geothermal line in terms of tourism, is among the top seven countries in the world with regard to source richness and potential in this area (Western Blacksea Development Agency, 2011).

According to Western Mediterranean Development Agency data, health tourism grows between %6 and %12 annually. The patients from Germany constitute the majority of the patients receiving treatment in Turkey. The most important reason why many tourists coming from different countries prefer the health care facilities in Turkey for treatment is that the surgical operations conducted in Turkey are low-cost (Western Blacksea Development Agency, 2011).
Table 2. Comparison Of The Price Of Health Services In Countries (Thousand Dollars)

<table>
<thead>
<tr>
<th>Service</th>
<th>USA</th>
<th>TURKEY</th>
<th>INDIA</th>
<th>THAILAND</th>
<th>SINGAPRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angio</td>
<td>47</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Heart Bypass</td>
<td>113</td>
<td>12</td>
<td>10</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Cardiac Valve Replacement</td>
<td>150</td>
<td>17</td>
<td>9.5</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Hip Joint Replacement</td>
<td>47</td>
<td>11</td>
<td>9</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Knee Joint Replacement</td>
<td>48</td>
<td>11</td>
<td>8.5</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Spinal Fusion</td>
<td>43</td>
<td>7</td>
<td>5.5</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>


When Table 2 is examined, comparing the health service prices in Turkey and Asia with America, the price advantage in Turkey and Asia can be understood very well.

Turkey hosts most patients from Germany, Turkic Republics, Bulgaria, Romania and neighbouring countries like Iraq. The increase in the number of health tourists in years is directly proportional to the recognition level of health tourism. Health tourists coming to our country provide a price advantage with %50 and %65 rates per treatment. Making optimal use of the resources in hand, conducting advertisement and promotion studies aimed at target market effectively and turning the health tourism into a national policy and proceeding with state support is of great importance for the future of the health tourism. Target countries of Turkey in health tourism are given in the table below (Western Mediterranean Development Agency, Health Tourism Sector Report, 2013).
Table 3. Target Countries Of Turkey In Health Tourism

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>Madagascar</td>
<td>Germany</td>
<td>Montenegro</td>
<td>USA</td>
<td>Azerbaijan</td>
<td>Qatar</td>
</tr>
<tr>
<td>Sudan</td>
<td>Mali</td>
<td>England</td>
<td>Russia</td>
<td>Canada</td>
<td>Uzbekistan</td>
<td>Iraq</td>
</tr>
<tr>
<td>S. Sudan</td>
<td>Mauritania</td>
<td>Holland</td>
<td>Ukraine</td>
<td>Turkmenistan</td>
<td>Kuwait</td>
<td></td>
</tr>
<tr>
<td>D.Kongo</td>
<td>Uganda</td>
<td>Denmark</td>
<td>Romania</td>
<td>Kazakhstan</td>
<td>Saudi Arabia</td>
<td></td>
</tr>
<tr>
<td>Libya</td>
<td>Tunisia</td>
<td>Norway</td>
<td>Switzerland</td>
<td>Tajikistan</td>
<td>Yemen</td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td>Zambia</td>
<td>Sweden</td>
<td>Luxemburg</td>
<td>Mongolia</td>
<td>Bahrain</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>Senegal</td>
<td>Finland</td>
<td>Belgium</td>
<td>Afghanistan</td>
<td>UAE</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Ethiopia</td>
<td>France</td>
<td>Bosnia</td>
<td>Pakistan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>Algeria</td>
<td>Albania</td>
<td>Kosovo</td>
<td>Kirghizstan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>Cameroon</td>
<td>Macedonia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The number of the foreign patients visiting Turkey in the last years is over 100,000 and it was found that tourists travelling to Turkey for health spend almost more than five fold of the normal tourists. It is reported that a tourist visiting Turkey spend between 3,500 and 35,000 dollars only for medical intervention excluding the travel expenses and expenses other than hospital. Occasionally, this figure might be higher. Taken into consideration the other expenses like accommodation, transportation and accompanying person, it can be clearly seen that tourism income is substantial. Besides, taken the direct and indirect taxes paid into account, the importance of health tourism in economy is underlined. Another advantage, the increase in the demand for service and the improvement and development studies conducted in the sector within this context have paved the way for Turkish people to get better health service (Quoted in: Mert, 2013).

Turkey has some features which makes it prominent in health tourism. Turkey is one of the countries offering affordable prices in health tourism. Sometimes, price advantage provided by Turkey reaches 70%. Accessing more than 60 countries without visa is another advantage (Çukurova Development Agency, Health Tourism Clustering Study, 2012).

OBJECTIVE, SCOPE AND METHOD

The research makes use of the health spending and health tourism statistics of 2004-2013 obtained from Turkish Statistical Agency and sağlık turizmi.org web site. The study aims at determining the impacts of health sector on Turkish health sector and make forecasts regarding the future.

To this end, total health tourism data, the distribution of foreign and Turkish citizens, total health tourism spending data was examined. Regression
method was employed in order to determine the correlations and to what extent it affects.

**Data Analysis**

Data set obtained from Turkish Statistical Agency was analysed via PASW Statistic 18 (SPSS-Statistical Package for Social Sciences) package programme. Within the scope of the analysis, frequency tables and regression tests were used.

The distribution of patients receiving health service according to hospital types by Years:

Examining the distribution of tourists visiting Turkey so as to receive health service in Turkey according to hospital types by years, it was identified that state hospital are the least preferred type. Private hospitals are preferred more than the state hospitals. The gap deepened in years and reached 102% in 2012.

![](image2.png)

**Image 2. The Distribution Of Tourists Visiting Turkey In Order To Receive Health Service According To Hospital Type By Years**
Image 3. The Graph Illustrating The Distribution Of Tourists According To The Hospital Types

Distribution of the number of health tourists by countries and provinces:

Examining the distribution of the health tourists visiting Turkey by countries, it can be seen that Germany ranks first. Germany is followed by Bulgaria and Iraq.

Examining the distribution of the cities where tourists come from, Istanbul leads by far. Kocaeli and Ankara are in top three.

Image 4. The Distribution Of The Number Of Health Tourists Visiting Turkey By Countries


Image 5. The Distribution Of Tourists Visiting Turkey By Provinces

Distribution of health tourists by branches:

Examining the distribution of health tourists visiting Turkey, it can be seen that other health services rank first. Eye and oncology branches are the other branches in top three.
Private hospitals rank first in all health branches. However, the share of state hospitals is bigger compared to others in other health branch.

Image 6. The Distribution Of Health Tourists Visiting Turkey By Branches

2023 Vision in Health Tourism:

With regard to the future vision of health tourism, it is predicted that the number of the health tourists will increase gradually by 2023. It is aimed that this number will increase five folds and reach 2 million people.

*The figures are achieved and other years are projected

Image 7. The Number Of The Tourists Between 2010-2023
Number of the health tourists by years:

Examining the number of the tourists by years, it is seen that total number of the tourists reached a peak in 2013. The number of the tourists began to increase again as of 2010. While the number of the Turkish citizens did not show a dramatic increase, the share of the foreign tourists within total tourists number increases day by day.

Health tourism spending by years:

Examining the number of the health tourism spending by years, it is seen that health tourism spending has a very small share within total tourism income. However, the proportion of health tourism increases gradually.
**Image 9. Health Tourism Spending By Years**

**H1: Tourism income is affected by the number of the health tourists.**

A moderately positive correlation is available between foreign visitors and total health income.

Highly positive correlation is available between Turkish visitors and total health income.

Highly positive correlation is available between the total tourism income and total health tourism income.

Two data sets were included in the analysis with the aim of testing the correlation between total tourism income and total number of tourists travelling for health and the following results were obtained:

Highly positive correlation is available between the total number of visitors travelling for health tourism and total health tourism income.
Highly positive correlation is available between Turkish visitors and total health income. Highly positive correlation is available between the total tourism income and total health tourism income.

**Table 4. Total Tourism Income And Correlation Table Regarding The Number Of Tourists**

**H2: Total health income is affected by total visitor number.**

Regression analysis was performed with the aim of investigating to what extent total visitor number affects total heath income. Accordingly:

One unit of change in total visitor number creates 2.324 units increase in total health income.

**Table 5. The Correlation Between Total Number Of Visitors And Total Health Income**

**H3: Total health income is affected by total foreign visitor number.**

Regression analysis was performed with the aim of investigating to what extent total foreign visitor number affects total heath income. Accordingly:
One unit of change in total foreign visitor number creates 3.148 units increase in total health income.

Table 6. The Correlation Between Total Foreign Visitor Number And Total Health Income

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3,148</td>
<td>.245</td>
<td>.974</td>
<td>12,873</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sağlık geliri toplam
b. Linear Regression through the Origin

**H4: Total health income is affected by total number of Turkish visitors.**

Regression analysis was performed with the aim of investigating to what extent total number of Turkish visitors affects total health income. Accordingly;

One unit increase in total number of Turkish visitor creates 8,623 units of increase in total health income.

Table 7. The Correlation Between Total Number Of Turkish Visitors And Total Health Income

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>8,623</td>
<td>.520</td>
<td>.984</td>
<td>16,570</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sağlık geliri toplam
b. Linear Regression through the Origin

**H4: Total tourism income is affected by total health tourism income.**

Regression analysis was performed with the aim of investigating to what extent total health tourism income affects total tourism income. Accordingly;

One unit change in total health tourism creates 49.901 units of change in total tourism income.
DISCUSSION AND CONCLUSION

Recently, it is seen that a vast number of patients from different countries prefer private health care facilities in Turkey. The major reason is that the medical operations performed with modern methods in the country of origin are conducted with affordable prices in our country (İçöz, 2009). Medical operations performed with modern methods by world wide known Turkish doctors cost less in our country compared to Europe and USA thanks to high quality infrastructure and equipment (Gençay, 2007:179). In line with the findings obtained in our study it was determined that tourists prefer private hospitals most in health tourism.

Most tourists come to Turkey from Germany, Turkic Republics, Bulgaria, Romania and neighbour countries like Iraq. The increase in the health tourists by years is directly proportional to the increase in the recognition of our country in health tourism. The tourists visiting our country provide a price advantage between 50% and %65 per treatment (Western Anatolia Development Agency, Health Tourism Sector Report, 2013). Another result worth pointing out in our study is that Germany, Bulgaria Iraq are among the countries that send most tourists to Turkey.

In Turkey, the most striking city in medical tourism is İstanbul. It has more than 200 private hospitals, more than 10 university hospitals. At least 50 out of them are luxurious and modern and re equipped medically and technologically. 20 out of 30 hospitals accredited by JCI are located in Istanbul. In this regard, Istanbul is a leading country both in Turkey and abroad in terms of the health tourism (Aydın, 2009:1).

Especially as of 1990s, it is seen that important investments were made in private sector health services in addition to state health services. As a result of these developments, the number of the private health care facilities that can meet the European standards has begun to rise in Istanbul, Ankara, Antalya (Çiçek and Avderen, 2013). Also, state and private university hospitals, particularly Istanbul and Ankara, are equipped with the cutting edge technology and a great number of universities can provide advance technological service in oncological treatment, cardiovascular surgery, orthopaedics, brain surgery, paediatric surgery, plastic surgery, eye and tooth. Moreover, it is possible to perform cyber knife, robotic surgery, bone morrow and organ transplantation at these hospitals (Union of Turkish Health Provinces, 2014). Accordingly, it was concluded in the
study that health tourists receive service mostly in Istanbul, Kocaeli and Ankara. It can also be said that thermal enterprises in Ankara are active in health tourism.

Other important conclusions that were drawn from the study are;

- Health tourists receive service most in other branch and eye and oncology branches.
- About 2 million health tourists are predicted to visit Turkey by 2023.
- The number of foreign health tourists in 2013 accounts for 70% of total number of health tourists.
- The rate of health spending in 2013 is 2.3%.
- Total health tourism income is affected by the number of health tourism visitors.
- Total health tourism income is affected 2.3 units from total visitors, 3.1 units from foreign visitors, 8.6 units from Turkish visitors.
- Also, total tourism income is affected by total health tourism income. Total tourism income is affected 4.9 units from total health income.

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TÜRKİYE’DE SAĞLIK TURİZMİ ve EKONOMİK BOYUTLAR- ININ UYGULAMALI ÖRNEĞİ


Anahtar Kelimeler: Turizm, Ekonomi, Sağlık Bakımı, Sürec, Dünya, Rekabet, Endüstri