

# Evaluation of Turkey's Health Tourism Performance with the MOORA Method<sup>1</sup>

## Türkiye'nin Sağlık Turizmi Performansının MOORA Metodu ile Değerlendirilmesi

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### Abstract

In recent years, factors such as an aging population, varying illness burdens, numerous health technological breakthroughs in different regions, and ease of travel between countries have all contributed to the growth of health tourism. Adapting to this development, which promotes countries' economies, is now a must for policymakers in terms of resource allocation and strategic planning. The aim of this study is to evaluate Turkey's health tourism performance using multi-objective optimization (MOORA) based on ratio analysis, a multi-criteria decision-making method, and to reveal the current situation to contribute to the development of health tourism. In the study, 6 different indicators are used as performance criteria. The data covers 2009–2019. The MOORA-Ratio method and the MOORA-Reference Point Approach were used together. In the study, it is seen that the health tourism performance has increased gradually over the years. According to the ratio method, the best performance was achieved in 2017, and according to the reference point approach, in 2014. Suggestions were made to increase the performance of health tourism and to reach the targets determined in the strategic plan.

**Anahtar Kelimeler:** Health tourism, health tourism performance, MOORA method, multi-criteria decision making methods, Turkey.

### Öz

Son yıllarda yaşanan nüfus, değişen hastalık yükleri, farklı bölgelerdeki farklı tıbbi teknolojik gelişmeler, ülkeler arası ulaşım kolaylığı gibi faktörler sağlık turizminin gelişmesine neden olmaktadır. Ülkelerin ekonomilerine katkı sağlayan bu gelişmeye uyum sağlamak, kaynak kullanımı ve stratejik planlama açısından politika yapıcılar için kaçınılmaz hale gelmiştir. Bu çalışmanın amacı, Türkiye'nin sağlık turizmi performansını çok kriterli karar verme yöntemi olan oran analizi temeline dayanan çok amaçlı optimizasyon (MOORA) ile değerlendirmek, sağlık turizminin gelişmesine katkı sağlamak için mevcut durumu ortaya koymaktır. Çalışmada, 6 farklı performans kriteri gösterge olarak kullanılmıştır. Veriler, 2009-2019 yıllarını kapsamaktadır. Veriler elde edilirken Türkiye İstatistik Kurumu (TÜİK) veri tabanı kullanılmıştır. MOORA-Oran yöntemi ve MOORA-Referans Noktası Yaklaşımı birlikte kullanılarak çeyreklik dönemlerin performans sıralaması elde edilmiştir. Çalışmada sağlık turizmi performansının yıllar içinde giderek arttığı görülmektedir. Oran yöntemine göre en iyi performans 2017 yılında, referans noktası yaklaşımına göre ise 2014 yılında elde edilmiştir. Sağlık turizminin performansının artırılması ve stratejik planda belirlenen hedeflere ulaşılması için önerilerde bulunulmuştur.

**Keywords:** Sağlık turizmi, sağlık turizmi performansı, MOORA yöntemi, çok kriterli karar verme yöntemleri, Türkiye.

### Araştırma Makalesi

**JEL Codes:** C6, I1, H11, L83, Z32

**Submitted:** 09 / 06 / 2022

**Accepted:** 30 / 11 / 2022

<sup>1</sup> Bu çalışma, 6. International Health Sciences and Management Conference'da özet olarak sunulan bildirinin genişletilmiş halidir.

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## Introduction

The development of health tourism has significantly changed the economic balances in the world and enabled people to freely apply their preferences. Nowadays, it is clear that tourism activity is concentrated in a few countries around the world. According to the World Tourism Organization report, the top ten most preferred countries account for 40% of global tourism activity. In addition to countries such as France, Spain, the USA, China, and Italy, Turkey is also among the top ten countries visited by tourists. Furthermore, according to the report, 28% of tourist trips are done for health or religious reasons (UNWTO, 2019). Countries including the USA, India, Cuba, Singapore, Thailand, Colombia, and Turkey are frequently chosen for these health-related trips (Beladi et al., 2015).

UNWTO defines health tourism as a kind of tourism that helps to promote physical, intellectual and spiritual health, medical activities and activities in a healthy environment that enhances people's ability to satisfy their own needs and contributes to society (UNWTO, 2018). Health tourism refers to individual national and international travel to receive health services and to improve their level of health care (Rodrigues et al., 2017). The movement of products and services between different countries has also ensured the international movement of individuals and eased their access to healthcare services. This movement provided a large financial potential and significantly contributed to health tourism growth (Lunt et al., 2011). Moreover, globalization, cost differences in healthcare, natural thermal resources, technology and transport developments, the increase in the elderly population, the introduction of regulations and a growing number of accredited health institutes in recent years are playing a major role in health tourism development (Connel, 2008). High-priced national health services cause individuals to prefer cheaper, quality-standard health care services (Salmon, 2008). Furthermore, long waiting times and the restriction of some treatments the culture and entertainment sector allow the development of health tourism (Omay and Cengiz, 2012). The cost differences arising from exchange rates and other reasons between countries and the continuation of the problems related to the supply of health services show that health tourism will grow even more (Turner, 2007). Public and private health insurance institutions, health institutions and policy makers in developed countries see the increasing health costs in other countries as an opportunity (Aydın and Karahmet, 2017).

The number of tourists visiting Turkey continues to increase day by day. According to data in recent years, more than 50 million tourists visited the country in 2019. In 2017 it was 37 million and in 2018 it was around 46 million. Approximately 65 percent of tourists come from European countries (UNWTO, 2021). Evaluating the overall tourism performance of countries, Assaf and Joiassen (2012) suggested that Turkey is the fourth highest performing tourism country after Switzerland, France, and Spain. Turkey is ranked 6th among the world's most-visited countries. However, in terms of tourism income, it is not among the top 10 countries (UNWTO, 2019). Thanks to the foreign exchange contribution that it gives the country, health tourism is highly important for the economy. Health tourism minimizes tourism's seasonality and plays an essential role in the sustainability of tourist activities throughout the year. For this reason, it is of great economic importance to ensure health tourism mobility in every month of the year, together with other tourism areas (SATURK, 2017). Individuals coming within the scope of health tourism provide an average of 6 to 7 times more income than individuals coming to other types of tourism. While health tourists in Turkey spend approximately \$675 on average, it is seen that this expenditure is much higher in developed countries. For this reason, the quality of health tourists who will receive service in Turkey is of great importance in terms of income generation. Identifying target markets with high income potential, developing products and services for this market, and giving importance to branding are factors that will increase tourism revenues (Tengilimoğlu, 2021). The inconsistency between the number of tourists in Turkey and the income generated leads decision-makers to review policies. Health and medical tourism is a dynamic and unpredictable sector. It is said that tourism income has a high positive correlation with the number of incoming health tourists and total health tourism income (Korkmaz et al., 2014). By focusing on health tourism, Turkey will be able to expand its trade volume and market share by expanding the health tourism sector (Omay and Cengiz, 2012). Although Turkey is one of the few countries in the world that offers both tourism and health tourism, the country's inability to reach a sufficient level of income, as well as the higher income of health tourism compared to other types of tourism, has prompted policymakers to develop health tourism policies and strategies. To develop policies and strategies for health tourism, first of all, the current situation should be revealed. Firstly, the present situation must be revealed to establish policies and plans for health tourism.

When examining the literature, there are studies that use various methodologies and criteria to assess tourism performance. For instance, In the study of Zoponuidis et al., (2010), the tourism performance of the countries in the Mediterranean region was measured with the PROMETHEE II method. Thirteen different quantitative and qualitative criteria were examined, and the countries' performance was ranked. In the study of Diaz and Rodriguez (2016), tourism performance and sustainability of tourism regions in Spain were statistically evaluated according to certain criteria. There are indicators such as tourist expenditures, tourism income, satisfaction, and quality among the criteria. İlban and Yıldırım (2017) evaluated the performance of tourism destinations of 15 countries with the TOPSIS method. In the study, international tourism expenditures, international tourism income, number of international inbound tourists, number of international outbound tourists were used as performance criteria. Durkalic et al. (2019) evaluated the tourism performance

of 19 countries and ranked the countries with the PROMETHEE-GAIA method. In the study, 8 different criteria were used. When we look at the studies on health tourism; Merdivenci and Karakaş (2020) evaluated the organizations providing services in the health tourism sector with the fuzzy DEMATEL method and revealed the factors affecting health tourism. Bulut and Durur (2017) evaluated Turkey's health tourism performance with the TOPSIS method. The number of international patients, the inflation rate, the average of the service sector confidence index, the number of international visitors dwelling abroad, and the number of international visitors residing abroad were all utilized as tourism income performance criteria in the study. Some studies evaluated the health tourism potential and current situation in terms of its strengths and weaknesses (Görener, 2016).

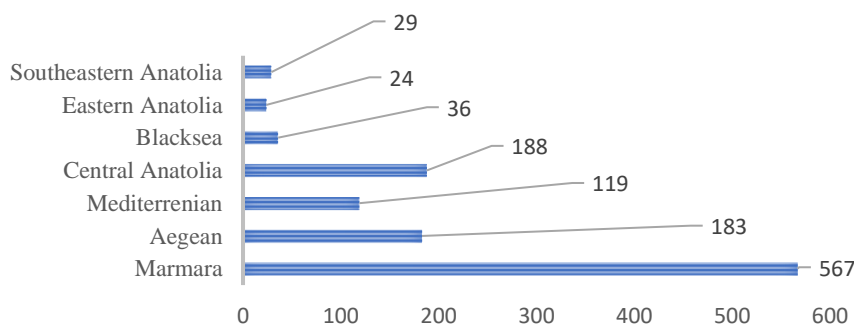
In this study, the current situation of health tourism in Turkey is discussed. With MOORA, which is one of the multi-criteria decision-making methods, the health tourism performance evaluation of between 2009-2019 was made with quantitative indicators. The aim of the study is to measure whether the indicators used affect the health tourism performance and to investigate in which year the health tourism performance is the highest. It is thought that the evaluation of health tourism performance with the MOORA method for the first time will contribute to the literature. The findings from the study are available to improve health tourism performance to policy makers, the tourism and health sector, tourism researchers, etc. it is expected to be a guide.

## 1. Background

Turkey is one of the few countries with the potential to provide services, thanks to its opportunities in medical, thermal, geriatric, and disability tourism within the context of health tourism. According to Peters and Sauer (2011), it is the third most recommended health tourism country by institutions that act as intermediaries in international medical tourism.

Health tourists are classified differently in Turkey. Medical tourists refer to those who travel to a location other than their home for medical treatment. Patients receiving services within the scope of tourist health refers to those who must obtain health care services unexpectedly while on vacation, at a congress, or at a symposium. Patients from countries with bilateral agreements in the field of health refer to individuals who come in line with agreements with some countries. Patients from countries that have an agreement with social security institutions refer to individuals who come as a result of agreements made by social security institutions (SATURK, 2017). While total tourism income was approximately \$26 billion in 2017, it increased to \$34.5 billion in 2019. While health tourism income was approximately \$827 million in 2017, it surpassed \$1 billion in 2019 and accounted for 3.08 % of tourism income (TUIK, 2021).

The Marmara region has 50 percent of the facilities with a health tourism authorization certificate, while the Aegean and Central Anatolia regions have 32 percent. With 2%, the Eastern Anatolia region has the fewest authorization certificates (Figure 1).



**Figure 1. Regional Distribution of Health Facilities with Health Tourism Authorization Certificate**

Health facilities and intermediary institutions engaged in international health tourism in Turkey are necessary to get a certificate of authorization by satisfying the specified competency standards (International Regulation on Health Tourism and Tourist Health, 2017). As of April 6, 2021, the total number of health facilities that have obtained permission certificates is 1146. Considering the distribution of health facilities according to their types, it is seen that the ones with authorization certificates are mostly in private hospitals with 328 (Table 1). There are 189 intermediary institutions with health tourism authorization certificates (General Directorate of Health Services, 2021).

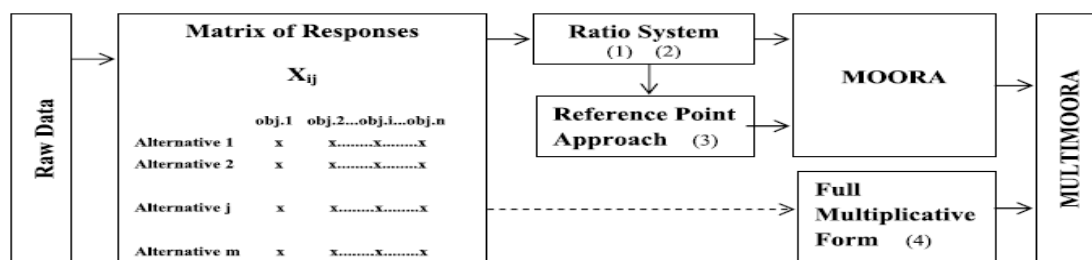
**Table 1. Types of Healthcare Facilities with Health Tourism Authorization Certificate**

Facility Type	Number	%
Public Oral and Dental Health	14	1,23
Private Oral and Dental Health	183	15,96
Public Hospital	120	10,48
Public University Hospital	31	2,7
Private Hospital	328	28,62
Foundation University Hospital	24	2,09
Private Practice	265	23,13
Special Genetic Diseases Diagnosis Center	2	0,17
Private Imaging Center	3	0,27
Private Women's Health and Reproductive Center	2	0,17
Private Medical Center / Polyclinic / Home Care / Dialysis Center / PTR	174	15,18
<b>Total</b>	<b>1146</b>	<b>100</b>

Private health facilities are preferred by 83.2 percent of international patients receiving health treatment. Health tourists apply to health institutions that have international accreditation certificates ten times more than those that do not. Orthopedics and traumatology, internal medicine, ENT, gynecology, and obstetrics are among the most prominent clinics. The majority of applications are made to the emergency medicine service for the health services provided within the scope of the tourist's health. July, August, and September are the most preferred months for health tourists (Kaya et al., 2013). It indicates that most medical travel occurs during the summer months. In the context of medical tourism, international patients prefer health facilities in Istanbul, Antalya, and Ankara for tourism purposes (Kaya et al., 2013). When looking at the health services provided by private health facilities within the context of health tourism, ophthalmology, cancer, cardiology, orthopedics and traumatology, plastic surgery, neurosurgery, and oral and dental health are prioritized (Korkmaz et al., 2014). The fact that private and public hospitals in Turkey have a high level of health technology, are internationally accredited, and place a great value on worldwide promotional efforts explains why there is such high demand. Tourists who come to receive health services are mostly from Libya, Germany, and Iraq in the case of medical tourists, and Russia, Germany, and England in the case of tourist health (TÜRSAB, 2014). To ensure that Turkey remains one of the preferred countries for health tourism, the projected number of tourists arriving under the scope of health tourism for 2023 has been determined at 1.5 million, with a health tourism income of \$ 10 billion (Ministry of Health, 2019).

## 2. Method

In the study, the MOORA method was used. Brauers and Zavadskas (2006) described their method as multi-objective optimization of many alternatives. MOORA is said to have a high level of reliability compared to other methods. (Chakraborty, 2011). In the literature some studies use different approaches such as the ratio method, reference point approach, importance coefficient, and full multiplicative form (Görener et al., 2013). (Figure 2.). In general, the ratio method and the reference point approach are used together, but some studies use just one method (Kalibatás and Turskis, 2008).



**Figure 2. Diagram of MULTIMOORA**

Turkey's health tourism performance is ranked quarterly in this study, which used both the ratio method and the reference point approach. By analyzing various criteria to evaluate the level of performance, performance indicators provide quantitative value (Parida and Kumar, 2006). According to reports, there is no widely accepted standard evaluation method for assessing the variables that impact tourism performance (Merdivenci and Karakaş, 2020). For this reason, while determining the performance criteria, studies on tourism and health tourism performance (Bulut and Durur, 2007; Diaz and Rodriguez, 2016; Durkalic et al. 2019; İlban and Yıldırım, 2017) and the targets set by the Ministry of Health for health tourism (Ministry of Health, 2019) were taken as reference. The study's data covers 2009-2019. The data was extracted from the TUIK database. The Microsoft Excel program was used to perform the analysis.

### 2.1. Ratio Method

$i= 1,2,3,\dots,m$  represents the number of alternatives,  $j=1,2,3,\dots,n$  represents the number of criteria. The normalization process (Equation 1) is performed by dividing the sum of the squares of each alternative by the square root of the criteria.

$$x_{ij}^* = \frac{x_{ij}}{\sqrt{\sum_i^m x_{ij}^2}} \quad (1)$$

$x_{ij}$  = response of alternative  $j$  to objective  $i$ ,  $j = 1, 2, \dots, m$ ;  $m$  the number of alternatives,  $i=1,2, \dots, n$ ;  $n$  the number of objectives.

Following this, performance criteria are established depending on the objective functions (maximum or minimum). These responses are added in the case of maximizing and subtracted in the case of minimization for optimization. In other words, Equation 2 is applied to the criteria to maximize  $j=1,2,\dots,g$  and to minimize  $j=g+1,g+2,\dots,n$  ;

$$y_i^* = \sum_{j=1}^g x_{ij}^* - \sum_{j=g+1}^n x_{ij}^* \quad (2)$$

$y_i^*$ : the normalized assessment of alternative  $j$  with respect to all objectives.

According to the ratio method, performance ranking is obtained by ranking the  $y_i^*$ 's from maximum to minimum.

### 2.2. Reference Point Approach

In addition to the ratio method, in this approach the reference points ( $r_j$ ) are determined for each criteria; if the aim is maximization, the maximum points, and if the goal is minimization, the minimum points. Equation 3 is used to measure the distances between these determined points for each  $x_{ij}^*$ .

$$r_j - x_{ij}^* \quad (3)$$

The "Tchebycheff Min-Max Metric" (Equation 4) function is used on the newly created matrix to obtain the data for sorting.

$$\min_i \{ \max_j (|r_j - x_{ij}^*|) \} \quad (4)$$

The MOORA steps followed in the study are shown in Figure 3.

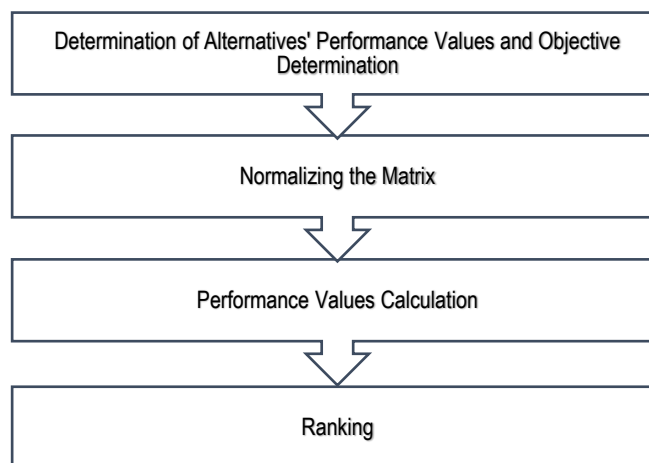


Figure 3. MOORA Application Steps

### 3. Results

Table 2 presents an overview of the performance criteria that were chosen.

**Table 2. Performance Indicators**

Indicators		Aim of the Indicator
<b>K1</b>	Share of Domestic Health Tourism Expenditures in Total Tourism Expenditures (%)	Maximum
<b>K2</b>	The share of the Number of Persons with Health and Medical Reasons in the Total Number of Tourists (%)	Maximum
<b>K3</b>	Number of Persons with Purpose of Departure for Health and Medical Reasons Share in Total Number of Outgoing Tourists (%)	Minimum
<b>K4</b>	Share of Health Tourism Incomes in Total Tourism Incomes (%)	Maximum
<b>K5</b>	Share of Health Tourism Expenses in Total Tourism Expenditures (%)	Minimum
<b>K6</b>	Share of Number of Trips for Health Purposes in Total Number of Trips (%)	Maximum

**K1:** It represents the share of expenditures made as a result of domestic travels for health purposes in total travel expenditures (TUIK, 2021).

**K2:** It represents the share of the number of persons with the purpose of arrival for health and medical reasons in the total number of tourists (TUIK, 2021).

**K3:** It expresses the share of the number of people with health and medical reasons for the purpose of travel in the total number of outgoing tourists. (TUIK, 2021).

**K4:** It represents the share of health tourism revenues in total tourism incomes (TUIK, 2021).

**K5:** It represents the share of health tourism expenses in total tourism expenditures (TUIK, 2021).

**K6:** It represents the share of the number of trips for health purposes in the total number of trips (TUIK, 2021).

It is aimed at minimizing the K3 and K5 values of performance indicators because they have a negative impact on tourism performance and at maximizing the other criteria because they have a positive impact on tourism performance. The decision matrix created with quarterly data is given in Table 3. Equation 1 was applied to these values and normalization was performed.

**Table 3. Decision Matrix**

	<b>K1(+)</b>	<b>K2(+)</b>	<b>K3(-)</b>	<b>K4(+)</b>	<b>K5(-)</b>	<b>K6(+)</b>
<b>2009</b>	4,6146	0,6294	0,5548	1,7846	0,7323	8,0016
<b>2010</b>	4,1808	0,4943	0,3148	1,7384	0,6784	7,7339
<b>2011</b>	3,3841	0,5183	0,2021	1,7373	0,3864	5,9599
<b>2012</b>	3,1958	0,5930	0,3883	2,1645	0,5189	7,3201
<b>2013</b>	3,1047	0,6818	0,1969	2,3922	0,3571	7,7716
<b>2014</b>	3,7800	1,0012	0,1392	2,4421	0,4227	8,3756
<b>2015</b>	3,5085	0,8655	0,1429	2,0296	0,3928	6,6335
<b>2016</b>	3,3898	1,2032	0,1178	3,2362	0,3924	6,3378
<b>2017</b>	3,6078	1,1219	0,1112	3,1477	0,1821	5,8201
<b>2018</b>	3,3608	1,2092	0,1632	2,9252	0,5796	4,6048
<b>2019</b>	4,4820	1,2767	0,1467	3,0854	0,4111	4,5968

The  $y_i^*$  values were calculated by applying the Equation 2 formula to the values obtained as a result of normalization. They were ranked from maximum to minimum, and a performance ranking was obtained using the ratio method (Table 3.).

**Table 4. Normalized Values and Ranking by Ratio Method**

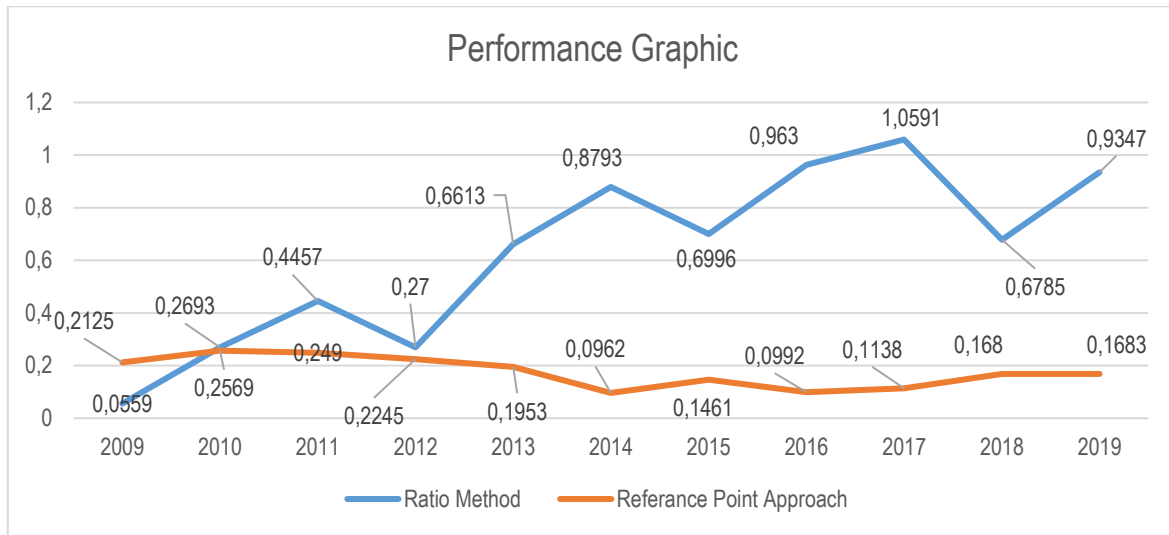
	K1(+)	K2(+)	K3(-)	K4(+)	K5(-)	K6(+)	$y_i^*$	Ratio Method Ranking
<b>2009</b>	0,3736	0,2066	0,6400	0,2161	0,4570	0,3565	0,0559	11
<b>2010</b>	0,3385	0,1623	0,3632	0,2105	0,4234	0,3445	0,2693	10
<b>2011</b>	0,2740	0,1702	0,2332	0,2104	0,2411	0,2655	0,4457	8
<b>2012</b>	0,2587	0,1947	0,4479	0,2622	0,3238	0,3261	0,2700	9
<b>2013</b>	0,2514	0,2239	0,2271	0,2897	0,2228	0,3462	0,6613	7
<b>2014</b>	0,3060	0,3287	0,1606	0,2958	0,2638	0,3731	0,8793	4
<b>2015</b>	0,2840	0,2842	0,1648	0,2458	0,2451	0,2955	0,6996	5
<b>2016</b>	0,2744	0,3951	0,1359	0,3919	0,2449	0,2823	0,9630	2
<b>2017</b>	0,2921	0,3684	0,1283	0,3812	0,1136	0,2593	1,0591	1
<b>2018</b>	0,2721	0,3970	0,1883	0,3543	0,3617	0,2051	0,6785	6
<b>2019</b>	0,3629	0,4192	0,1693	0,3737	0,2566	0,2048	0,9347	3
<b>Reference Point</b>	0,3736	0,4192	0,1283	0,3919	0,1136	0,3731		

To rank using the reference point approach, the maximum value for the criteria to be maximized is from the values in Table 4. and the minimum values for the criteria to be minimized are specified as reference points (Table 4.). The defined reference points and data were applied to Equation 3. Equation 4 was applied to these obtained values, yielding a ranking based on the reference point approach (Table 5).

**Table 5. Ranking by Reference Point Approach**

	K1(+)	K2(+)	K3(-)	K4(+)	K5(-)	K6(+)	Max.	Reference Point Approach Ranking
<b>2009</b>	0,0000	0,2125	-0,5117	0,1758	-0,3434	0,0167	0,2125	8
<b>2010</b>	0,0351	0,2569	-0,2349	0,1814	-0,3098	0,0286	0,2569	11
<b>2011</b>	0,0996	0,2490	-0,1049	0,1815	-0,1275	0,1076	0,2490	10
<b>2012</b>	0,1149	0,2245	-0,3196	0,1298	-0,2102	0,0470	0,2245	9
<b>2013</b>	0,1222	0,1953	-0,0988	0,1022	-0,1092	0,0269	0,1953	7
<b>2014</b>	0,0676	0,0904	-0,0323	0,0962	-0,1502	0,0000	0,0962	1
<b>2015</b>	0,0896	0,1350	-0,0366	0,1461	-0,1315	0,0776	0,1461	4
<b>2016</b>	0,0992	0,0241	-0,0076	0,0000	-0,1313	0,0908	0,0992	2
<b>2017</b>	0,0815	0,0508	0,0000	0,0107	0,0000	0,1138	0,1138	3
<b>2018</b>	0,1015	0,0222	-0,0601	0,0377	-0,2481	0,1680	0,1680	5
<b>2019</b>	0,0107	0,0000	-0,0410	0,0183	-0,1429	0,1683	0,1683	6
<b>Reference Point</b>	0,3736	0,4192	0,1283	0,3919	0,1136	0,3731		

A performance graph was created over years with the rankings obtained from the ratio method and reference point approach. It is observed that the performance of health tourism tends to increase over the years. According to the ratio analysis, the best performance is obtained in 2017 ( $y_i^* = 1,0591$ ) and the best performance was obtained in 2014 (max.=0,092) according to the reference point approach. The lowest level of performance was observed in 2009 ( $y_i^* = 0,0559$ ) according to the ratio method and in 2010 (max.=0,2569) according to the reference point approach. According to the ratio point approach, the first 3 years with the best performance are 2017, 2016 and 2019, respectively. According to the reference point approach, the first 3 years with the best performance are 2014, 2016 and 2017, respectively.



Graphic 1. Performance Graphic

#### 4. Discussion

The aim of the present research was to evaluate Turkey's health tourism performance on certain criteria and evaluate it based on year. Low and high-performance year were attempted to be determined, and suggestions were made in light of the findings so that health tourism performance. The study's multi-criteria decision-making method and performance criteria examine health tourism performance from a different perspective than previous studies. At the same time, using data on domestic and foreign health tourism provides a more comprehensive evaluation of health tourism performance.

This study has found that generally Turkey's health tourism is developing and an increase in the number of tourists and income is observed. The findings in the study show that the first three years of the best performance according to the ratio method are 2017, 2016, and 2019, respectively. The years with the lowest performance are 2009, 2010 and 2012, respectively. Although the findings of the study show that there is an increasing trend in health tourism performance, it shows that this increase is not yet sufficient to reach the targets determined in the strategic plan. These results are in line with those of previous studies. In the study of Cetin (2022), in which he evaluated tourism performance with a different method, it was seen that the years with the highest performance covered a similar period. Şengül and Çora (2020) state that although important steps have been taken in the health tourism sector in the last decade, Turkey's health tourism performance is still in a development stage where it cannot reach the desired level. With its many characteristics, Turkey is one of the world's and Europe's major tourism destinations (accredited health institution, price advantage, natural resources, geographical location, etc.). The findings show that health tourism performance has still not reached the aims of both the number of incoming health tourists and the health tourism income set by the politicians. According to Cavmak and Cavmak (2020), challenges to the development of health tourism include a lack of manpower despite numerous opportunities, a negative corporate image, and health tourists' dissatisfaction with the quality of care, regulations, and other factors. In addition, although it has sufficient infrastructure in terms of health system and technology, the lack of promotion and marketing activities is among the reasons why health tourism performance is not at a sufficient level. Al-Natour (2020) states that reasons such as the language barrier, the lack of sufficient resources, and the image of the country hinder the development of health tourism. It is recommended that the Ministry of Culture and Tourism, the Ministry of Economy, and the Ministry of Health collaborate on the development of health tourism and that the managers of the industry and members of civil society meet on common ground in the strategic center of the city (Üstün and Demir Uslu, 2022). It is emphasized that a system should be established where the tourists, evaluated within the scope of health tourism, can easily access information about health institutions so that they can go to hospitals and clinics in the country and abroad without any problems. In addition, the opinion that it would be beneficial to educate people about the importance of continuity of treatment and cooperation between domestic and foreign hospitals comes to the fore (Sarman and Sarman, 2021). In another study on medical tourism, it is stated that the importance given to infrastructure, health investments, and digitalization are strong sides; Inadequacy of laws and regulations and legal uncertainties in case of a possible malpractice case were emphasized as weaknesses (Küçükali et al., 2022). It is thought that health tourism policies should be improved for tourism performance to progress in line with the determined strategic targets.



## Conclusions

Countries are looking for alternatives in the global market by assessing the returns of various investments to increase their income. Developing countries have moved their investments into tourism, and they are working in a variety of ways to reveal their potential and expand their present services to profit from tourism. Countries that constantly monitor gaps in the market and continue to work in this direction find themselves in a very competitive situation as technology advances. The production and consumption of health services at the international level, and in this context, the international circulation of patients has always been a phenomenon throughout history. Especially in recent years, the development of information and health technology, along with the globalization process, has increased this circulation and created a serious market focused on the label of health tourism. Health tourism has become a rapidly developing sector and its contribution to the economy is undeniable. Turkey, with its geographical location, diversity of natural and human resources, health system, and infrastructure, is a country with a high potential both in the field of tourism and in the field of health tourism. Turkey is a potential country that geographically close countries may seek out because of its tourist and healthcare opportunities in Europe. For this potential to be used most efficiently, first, steps should be taken to ensure that health tourism becomes a sector that has continuity throughout the country. Politicians and decision makers need to create various activities and activity areas to attract health tourists to the country. The contribution of health tourism to the economy is quite high thanks to the foreign exchange input it provides to the country. For this reason, it is important to ensure health tourism mobility in every month of the year together with other tourism areas. Along with health tourism, winter tourism, sports tourism, science tourism etc. It should be aimed to increase the number of tourists by expanding activities in tourism areas such as winter tourism, sports tourism, and scientific tourism, among others. Because of the country's geographical position, appropriate investments and incentives should be encouraged to carry out tourism activities throughout the year. According to the present study, we can infer that the health and tourism sectors need to act together. It is suggested that the target group be identified, and that marketing and promotion efforts aimed at improving the country's image be extended. First and foremost, the core audience should be identified, and marketing and promotional efforts should be focused on these individuals. Arrangements should be made to increase bilateral cooperation with national and international health institutions, insurance organizations, and tourism companies. It is recommended that the necessary training be provided by the institutions for the health and tourism personnel to overcome the language barrier. It is thought that reaching a sufficient level in terms of quantity and quality of internationally accredited organizations will make a positive contribution to the performance of health tourism. Medical tourists provide more income to the country than other tourists. For this reason, the number of tourists should be increased by increasing the international recognition of medical tourism and thermal tourism activity areas, together with individuals who receive services within the scope of tourist health. To bring natural resources and thermal facilities to health tourism, it is recommended that necessary arrangements be made by taking expert opinions. It is essential that appropriate arrangements be made by seeking professional advice to introduce natural resources and thermal facilities to health tourism. To compete with other countries in the global health tourism market, it is necessary to make significant investments. Long and short-term goals should be developed in this competitive market, and a strategic plan should be established by defining priorities. Marketing strategies and research related to health tourism should be given due importance. Advertising, promotion, and public relations activities related to health tourism should be given wide coverage in the international arena. Cooperation with international insurance companies and tourism companies is important for increasing the number of tourists. It is thought that it will be beneficial to carry health insurance, which has an important role in health services, to the international dimension and to highlight the applications for potential health tourism users in marketing strategies. To bring natural resources and thermal facilities to health tourism, it is recommended to gain new health and tourism facilities with expert opinions and necessary feasibility studies. Considering the aging population, it is expected that the growth of healthy life campuses for the elderly population, as well as the enhancement of personnel's ability to provide service in terms of quantity and quality, would improve health tourism's performance. Today, it is known that decision-makers and policymakers act with an evidence-based approach in the policy-making process. Creating new policies and strategies, justifying these policies and strategies, and sharing them with the public are also important in terms of a transparent management approach. For this reason, it is thought that the study will be a reference source for policies to be created for health tourism, creating an action plan and determining strategic goals.

## Limitations and future research

There are several limitations to the research. A single country's health tourism performance was evaluated within a certain time frame in the research. Furthermore, health tourism performance indicators were chosen in accordance with the country's strategic objectives for the development of health tourism. The findings cannot be generalized to other countries. Notwithstanding these limitations, the study makes an important contribution to health tourism sector. The findings of this study have several important implications for future practice. Further research may make international comparisons using the common tourism data of different countries. It can be evaluated performance by expanding the time interval and determining different health tourism performance indicators, and method. It may be evaluated using macro and micro scale indicators to assess a country's health tourism performance.

## Acknowledgments

This study was presented as a summary at the IHMC 2021 congress.

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