

Original article

A Regional Comparison of Health Tourism Destination Branding and Tourism Revenues

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Abstract

The aim of this study is to comparatively examine the relationship between countries' health tourism-oriented destination branding performance and international tourism revenues at the regional level. In this context, Medical Tourism Index (MTI) data are used to represent destination branding performance in health tourism, while international tourism revenues are employed as an indicator of economic output. Due to the lack of standardized and comparable country-level data on health tourism revenues, total tourism revenues are used as an indirect proxy. This approach is justified by the fact that health tourism constitutes an integral and increasingly significant component of overall tourism flows, and its economic contributions are generally embedded within aggregate tourism statistics reported at the national level. The study adopts a descriptive and comparative research design based on secondary data. The analysis focuses on the joint distribution of MTI scores and tourism revenues across countries and regions without implying causal relationships. The findings reveal that the relationship between destination branding performance and tourism revenues varies significantly across regions. In Europe and the Americas, countries with relatively high MTI scores, such as Spain, the United Kingdom, Canada, and the United States, also tend to exhibit higher tourism revenues, suggesting a more consistent alignment between branding performance and economic outcomes. In contrast, in other regions, similar levels of branding performance are associated with more heterogeneous and less predictable revenue patterns. In the case of Türkiye, the findings indicate a distinct profile: despite recording relatively high tourism revenues, the country's MTI-based health tourism branding performance remains at a moderate level. This divergence suggests that overall tourism revenues may be driven largely by general tourism dynamics rather than health tourism-specific branding strength. Overall, the results demonstrate that health tourism performance cannot be adequately explained by a single indicator. Instead, it reflects a multidimensional structure shaped by the interaction of destination branding, healthcare quality, infrastructure, and country image. The study highlights that reliance solely on aggregate tourism revenues as a proxy may lead to incomplete interpretations, particularly in country-specific analyses, and emphasizes the need for a more comprehensive and multidimensional evaluation framework.

Keywords: Destination Branding, Health Tourism, Medical Tourism Index, Tourism Revenues, Country Image

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INTRODUCTION

The global health tourism sector has become an integral component of countries' economic growth strategies and has evolved into a field characterized by rapidly intensifying international competition. Countries seek to attract a share of international patient flows by leveraging factors such as healthcare service quality, cost advantages, technological infrastructure, and service diversity (Bentley, 2024). However, recent studies suggest that demand for health tourism cannot be explained solely by the quality of healthcare services; rather, destination branding activities play a decisive role in shaping country image, perceptions of trust, and destination preference (Fetscherin & Stephano, 2016; Smith & Puczkó, 2014). Despite this growing recognition, the literature reveals a limited number of studies that empirically examine the influence of destination branding on country-level health tourism revenues using secondary data (Kuşat & Esen, 2022). Accordingly, the central research problem of this study is to determine the extent to which destination branding indicators are associated with countries' health tourism revenues. Health tourism is widely regarded as a strategic economic opportunity for countries due to its capacity to generate high value added, provide foreign currency inflows, and mitigate the seasonal nature of traditional tourism activities (Lunt et al., 2015; Turner, 2010). International benchmarking systems such as the Medical Tourism Index (MTI) assess countries' destination branding performance and provide comparable insights into their competitive positions within the global health tourism market (Fetscherin & Stephano, 2016). The dimensions of the MTI namely country image, tourism infrastructure, quality of healthcare services, and destination attractiveness are reported to play a critical role in international patient decision-making processes (Cham et al., 2020). In this regard, destination branding represents a multidimensional construct that extends beyond promotional activities and encompasses elements such as healthcare accreditation, perceptions of safety, patient experience, and national prestige (Kavaratzis & Ashworth, 2010). The literature indicates that a variety of factors influence the growth of health tourism. Bentley (2024) emphasizes that cost advantages and service diversity contribute to increased international patient mobility, while Lunt et al. (2015) argue that international patient decision-making processes have become increasingly complex and that destination image has emerged as a critical determinant in these decisions.

Destination branding literature highlights country image as a fundamental factor shaping tourism preferences (Kavaratzis & Ashworth, 2010). In the context of health tourism, empirical studies demonstrate that countries with strong destination images tend to achieve higher health tourism revenues (Heung et al., 2011). Within this framework, the classifications provided by the Medical Tourism Index (MTI) are frequently utilized to assess countries' positions in the international market (Fetscherin & Stephano, 2016). Studies focusing on Türkiye indicate that the country possesses a competitive advantage particularly in areas such as hair transplantation, aesthetic surgery, dental treatments, and ophthalmology, and that the price-quality balance renders Türkiye an attractive destination for international patients (Sezgin, 2021). However, much of the existing research on Türkiye remains

largely descriptive in nature, and there is a notable lack of studies that econometrically analyze the impact of destination branding on country-level health tourism revenues. By employing internationally comparable secondary data sources (MTI, OECD), this study aims to address this gap in the literature and to contribute a new perspective to the existing body of research (Ministry of Health of the Republic of Turkey, 2019).

Destination Branding

Destination branding is defined as a strategic process centered on managing the perceptions of target audiences in order to enhance the touristic attractiveness of a country or region. Kotler and Gertner (2007) conceptualize destination branding as a holistic perception management process that involves the integrated management of elements such as brand identity, brand personality, brand image, and brand awareness. Similarly, Morgan et al. (2011) emphasize that destination branding is grounded in the effort to create a distinctive, positive, and enduring image in the minds of tourists. With the rapid global expansion of health tourism in recent years, the concept of destination branding has become a critical determinant in the international competitiveness of healthcare services. In this context, a health tourism destination is evaluated not only based on its touristic attractions but also through healthcare-specific indicators such as perceived quality, international accreditation, safety standards, cost advantages, cultural proximity, and the reputation of healthcare services (Han & Hyun, 2015). This process encompasses the development of brand identity, the formulation of consistent communication strategies, stakeholder coordination, and experience management (Dinnie, 2011).

International studies indicate that destination branding is closely associated with three fundamental dimensions: perceived quality, trust and reputation, and value perception combined with experiential Satisfaction (Snyder et al., 2013). Perceived quality shapes expectations regarding the professionalism of healthcare services and clinical outcomes, while trust and reputation are rooted in perceptions of reliability, patient safety, and institutional credibility (Büyük & Akkuş, 2024). Value perception and experiential satisfaction, in turn, determine how patients evaluate the service process, cost-effectiveness, and overall experience, directly influencing the likelihood of repeat visitation and the international competitiveness of a health tourism destination. Accordingly, the literature suggests that destination branding constitutes a multidimensional construct encompassing both touristic attractiveness and healthcare service quality (Üstün & Demir Uslu, 2022), and that when effectively managed, it can significantly enhance a destination's global health tourism revenues. The four components proposed by Anholt (2007) identity, image, promise, and experience form the theoretical backbone of destination branding and are successfully applicable within the context of health tourism.

In the context of health tourism, these components are structured around the following dimensions:

- Country reputation and perceptions of safety,

- Clinical quality of healthcare services,
- Accreditation and compliance with international standards,
- Digital visibility and promotional activities,
- Pricing strategies, and
- Touristic attractions (Smith & Puczkó, 2014).

Country Reputation and Perceptions of Safety

Country reputation and perceived safety occupy a central position in destination choice. Given that tourists face a high level of perceived risk when seeking healthcare services abroad, a destination's overall reputation and safety perception directly influence medical tourists' decision-making processes (Büyük & Akkuş, 2024). Safety and reputation are also systematically assessed in international benchmarking instruments such as the Medical Tourism Index (MTI), particularly through its "safety" and "reputation" sub-dimensions (Fetscherin & Stephano, 2016). For instance, comparative analyses of destination preferences between European countries and certain Asian destinations indicate that, even when clinical quality levels are similar, differences in perceived safety and national reputation play a decisive role in shaping demand (Heung et al., 2011).

Clinical Quality of Healthcare Services

Perceived quality constitutes one of the most tangible components of destination branding. Indicators such as clinician competence, technological infrastructure, complication rates, and the transparency of clinical outcomes reflect the level of clinical quality (Zeithaml, 1988; Smith & Puczkó, 2014). The literature demonstrates a strong relationship between clinical quality and destination choice; this relationship is supported both by survey-based studies focusing on patient perceptions and by objective indicators such as accreditation and performance metrics (Heung et al., 2011). Clinical quality may also influence a destination's pricing power, leading to higher average procedure fees as perceived value increases (Dwyer & Kim, 2003).

Accreditation and International Standards

International accreditations concretize the credibility and quality promise of a destination brand. The presence of accredited healthcare institutions enhances patient trust while simultaneously reinforcing the destination's brand message (Mısırlıoğlu & Biçer, 2023). Numerous studies report a positive effect of accreditation on patient preferences and country image, highlighting accreditation as a widely emphasized indicator of reliability in marketing communications (Fetscherin & Stephano, 2016; Cham, et al., 2020).

Digital Visibility and Promotion

Contemporary literature strongly emphasizes the role of digital visibility in destination branding. Online search volumes, social media engagement, patient reviews, and website traffic can rapidly shape brand awareness and perceptions of trust (Inkinen et al., 2024). While Crooks et al. (2010) demonstrate the influence of online information sources and user-generated content on patient decision-making processes, more recent studies suggest that digital campaigns can also affect perception-based indices such as the MTI (Smith & Puczkó, 2014). Moreover, digital visibility provides a cost-effective promotional channel, thereby enhancing marketing efficiency.

Pricing Strategies

Price represents both an attractive factor in health tourism choice and a core component of brand positioning. Cost-leadership strategies may increase patient volume, whereas premium positioning that emphasizes high-quality services can raise average expenditure per patient. The literature illustrates that some destinations (e.g., India and Mexico) achieve high patient volumes through price-based competition, while others (e.g., South Korea and Singapore) attain higher revenue performance per patient by emphasizing quality and brand value (Connell, 2013; Smith & Puczkó, 2014).

Touristic Attractions

Touristic attractions offered alongside healthcare services strengthen the overall value proposition of a destination. Connell (2006) and subsequent studies emphasize that the integration of “sun, sea, and sand” attractions with medical treatments plays a significant role in destination choice, particularly within wellness and rehabilitation segments. Touristic attractions enrich the experiential dimension of the destination, thereby positively influencing brand perception (Morgan et al., 2011).

Destination branding emerges as a multidimensional construct shaped by the interaction of components such as digital visibility, accreditation, clinical quality, and country image. While digital promotion amplifies messages related to quality and accreditation, a positive country image enhances price flexibility and demand potential. The literature indicates that indices such as the MTI partially capture this multidimensionality; however, outcomes may vary depending on stakeholder perceptions (Fetscherin & Stephano, 2016; Cham et al., 2020). Studies focusing on Türkiye suggest a high branding potential driven by cost advantages and strong service capacity in specific areas of expertise. Nevertheless, strengthening digital visibility, national strategic coordination, and accreditation-related perceptions could further enhance Türkiye’s global brand value in health tourism (Gürer & Ünlüönen, 2020).

Health Tourism Economy and Factors Affecting Revenues

Health tourism revenues are influenced not only by the branding strength of a destination but also by a wide range of economic, structural, and marketing-related factors, including cost advantages,

medical specialization, government incentives, strategic policy orientations, and marketing investments (Heung et al., 2011). Reports by international organizations indicate that health tourism has gained increasing importance within global tourism and is often associated with high value-added potential. In particular, studies highlight that medical tourism contributes significantly to economic growth through foreign exchange earnings and the provision of specialized healthcare services (OECD, 2020; World Health Organization, 2015; Lunt et al., 2015). The literature also emphasizes that the economic impact of health tourism is closely linked to factors such as service quality, international patient mobility, and cost differentials across countries. The literature identifies key determinants of health tourism revenues such as the quality of healthcare services, international accreditation processes, the implementation of patient safety standards, cost-effectiveness, and cross-country price differentials (Heung et al., 2011). In addition, destination brand value and brand awareness are recognized as critical variables shaping tourist preferences, with countries possessing visible and strong brands gaining a clear competitive advantage (Govers & Go, 2016). Accessibility, geographic location, infrastructure adequacy, ease of visa procedures, and the intensity of promotional activities are considered environmental factors that facilitate demand formation (Pike, 2016). Within this context, empirical studies indicate that destination branding exerts a significant influence on health tourism revenues. In particular, destinations that have invested heavily in branding such as Thailand, South Korea, and Singapore have achieved substantial increases in international patient flows and revenue levels (Bentley, 2024). These findings suggest that strong brand positioning not only shapes tourist preferences but also possesses the capacity to transform economic performance more broadly (Özkan, 2019).

Health tourism thus reflects the multidimensional nature of factors shaping destination choice and revenue performance, emphasizing the interactive functioning of components such as country image, clinical quality, price advantage, touristic attractions, and accessibility. The literature consistently highlights country image and perceived safety as fundamental determinants of health tourism preferences (Dalahmetoğlu & Çılgınoğlu, 2021). A strong country image enhances trust in the destination during healthcare decision-making processes characterized by high perceived risk, thereby directly influencing patient flows (Fetscherin & Stephano, 2016). Another key determinant is the quality of medical care and healthcare infrastructure. International accreditations, advanced medical technologies, specialized physician capacity, and low complication rates are identified as revenue-enhancing factors, as they increase both patient satisfaction and a destination's pricing power (Heung et al., 2011; Connell, 2013). Service cost also represents a critical economic factor influencing health tourism demand. While low-cost strategies tend to increase patient volume, high-quality service positioning contributes to higher per-patient revenues (Okur & Ergül, 2025). Moreover, touristic attractions particularly in thermal and wellness Tourism are regarded as complementary elements that strengthen the destination's perceived value (Smith & Puczko, 2014). Finally, accessibility, shaped by flight connectivity, geographic proximity, and visa facilitation, emerges as a significant determinant

affecting demand decisions (Dwyer & Kim, 2003; Heung et al., 2011). Overall, the literature demonstrates that these factors operate in interaction with one another and collectively form an integrated structure with destination branding, thereby shaping health tourism revenues in a holistic manner (Cham et al., 2020; Inkinen et al., 2024).

MATERIALS and METHODS

Research Aim and Design

The aim of this study is to examine how countries' health tourism-oriented branding and perception performance, as represented by Medical Tourism Index (MTI) scores, is distributed alongside international tourism revenues across countries and regions. The study seeks to comparatively identify the position of destinations with strong health tourism branding in terms of their overall tourism revenue performance. Given the limited availability of comparable and regularly published country-level data on health tourism revenues, overall international tourism revenues are employed as a proxy indicator of health tourism capacity and international attractiveness. The study follows a quantitative approach and is structured as a comparative descriptive analysis using secondary data. Accordingly, no causal or inferential statistical tests are conducted, and the analysis focuses on assessing countries' relative positions through numerical comparisons.

Data Sources and Variables

Two primary data sources were employed in the study:

Medical Tourism Index (MTI) Data

The MTI is a composite index measuring countries' perceived attractiveness as health tourism destinations. It is based on multidimensional components including country image and perceived safety, quality of healthcare services, cost competitiveness, the presence of international accreditation, patient experience, and touristic attractiveness (Medical Tourism Association, 2020).

OECD International Tourism Revenue Data

This indicator, obtained from OECD tourism statistics, represents the total tourism revenues generated from foreign visitors. Since health tourism-specific revenue data are not consistently available in a standardized format for all countries, overall tourism revenues are considered an indirect economic output representing health tourism performance (OECD, 2021)

Data Analysis Approach

Analysis is based on a descriptive comparative approach in which countries' MTI scores and tourism revenues are jointly evaluated through regional tables and country-level comparisons. Countries were grouped into five regions Asia-Pacific, Europe, Middle East, Americas, and Africa. Within each region, MTI scores were ranked and interpreted alongside tourism revenues. For countries lacking

revenue data, the corresponding cells were marked as “data not available,” and comparisons were conducted solely using available information.

RESULTS and DISCUSSION

In this section presents a comparative descriptive analysis of countries’ Medical Tourism Index (MTI) scores across regions. The findings aim to illustrate the relative positioning of countries and regions in terms of health tourism-oriented destination branding performance. No causal or inferential interpretations are made; the results are limited to the descriptive comparison of MTI distributions (Medical Tourism Association, 2020).

Medical Tourism Index (MTI) Scores in the Asia-Pacific Region

Table 1. Medical Tourism Index (MTI) Scores of Countries in the Asia-Pacific Region

| Country (Asia-Pacific) | MTI Score |
|-------------------------------|------------------|
| Singapore | 76.43 |
| Japan | 74.23 |
| India | 69.80 |
| South Korea | 68.81 |
| Malaysia | 68.15 |
| Thailand | 67.95 |
| Vietnam | 62.50 |
| Philippines | 61.90 |
| Indonesia | 61.50 |
| China | 60.80 |
| Sri Lanka | 60.25 |
| Bangladesh | 59.95 |

The Asia-Pacific region demonstrates a leading position in terms of average MTI scores. Countries such as Singapore (76.43) and Japan (74.23) rank among the highest globally. This pattern indicates that these destinations perform strongly in key dimensions of health tourism destination branding, including perceived quality, technological capacity, and reliability. The relatively high MTI scores observed in these countries suggest a branding structure that is commonly associated with premium healthcare services and higher-spending patient segments. Accordingly, the distribution of MTI scores in the region reflects a clustering of destinations positioned in the upper tier of health tourism branding performance.

Medical Tourism Index (MTI) Scores in the European Region

Table 2. Medical Tourism Index (MTI) Scores of Countries in the European Region

| Country (Europe) | MTI Score |
|------------------|-----------|
| Spain | 72.93 |
| United Kingdom | 71.92 |
| France | 69.61 |
| Germany | 69.29 |
| Czech Republic | 68.32 |
| Switzerland | 67.75 |
| Türkiye | 63.91 |
| Malta | 64.75 |
| Poland | 64.10 |
| Russia | 60.17 |

An examination of MTI scores across European countries shows that values range between 60.17 and 72.93. Türkiye's score falls below those of Spain (72.93), the United Kingdom (71.92), France (69.61), Germany (69.29), the Czech Republic (68.32), and Switzerland (67.75). In contrast, Türkiye's MTI score is positioned slightly above or close to those of Russia (60.17) and Poland (64.10), and remains comparable to that of Malta (64.75). This distribution quantitatively demonstrates that Türkiye occupies a mid-level position among European countries in terms of MTI scores, while countries in the upper segment display distinctly higher values.

Medical Tourism Index (MTI) Scores in the Middle East Region

Table 3. Medical Tourism Index (MTI) Scores of Countries in the Middle East Region

| Country (Middle East) | MTI Score |
|-----------------------|-----------|
| Dubai (UAE) | 71.85 |
| Israel | 70.78 |
| Abu Dhabi (UAE) | 70.26 |
| Oman | 69.03 |
| Jordan | 62.70 |
| Lebanon | 61.40 |
| Kuwait | 60.80 |
| Qatar | 60.20 |
| Bahrain | 59.80 |
| Saudi Arabia | 59.50 |

The Middle East region demonstrates relatively strong destination branding performance, particularly in destinations such as Dubai (71.85), Israel (70.78), and Abu Dhabi (70.26). These destinations record high MTI scores, which coincide with substantial investments in advanced medical technologies, the presence of international healthcare accreditations, and strong institutional support structures. Branding efforts in the Gulf region are largely characterized by a focus on luxury positioning and technological sophistication, a pattern commonly associated with destinations targeting higher-end

healthcare segments. Although other Gulf countries such as Kuwait, Qatar, and Saudi Arabia exhibit comparatively lower MTI scores, the overall distribution suggests that the region is undergoing an active and evolving destination branding process.

Medical Tourism Index (MTI) Scores in the America

Table 4. Medical Tourism Index (MTI) Scores of Countries in the America

| Country (America) | MTI Score |
|---------------------------|------------------|
| Canada | 76.47 |
| Costa Rica | 71.73 |
| Dominican Republic | 66.32 |
| Argentina | 66.26 |
| Colombia | 64.95 |
| Brazil | 64.35 |
| Panama | 62.77 |
| Jamaica | 60.74 |
| Mexico | 59.47 |
| United States | 70.40 |

The America region stands out as one of the regions with the highest average MTI levels, featuring several high-scoring destinations such as Canada (76.47), Costa Rica (71.73), the United States (70.40), the Dominican Republic (66.32), and Argentina (66.26). Destinations in the region generally exhibit branding profiles characterized by strong ethical standards, advanced technological capacity, and high levels of perceived reliability. Canada's leading position highlights its perceptual prominence in this context. Costa Rica's relatively high score (71.73) reflects a positioning commonly associated with the combination of maintained quality standards and competitive cost structures.

In contrast, several Latin American countries such as Mexico (59.47), Colombia (64.95), and Brazil (64.35) tend to emphasize geographic proximity (particularly to the U.S. market) and cost-oriented positioning in their destination branding approaches. Overall, the distribution of MTI scores across the America region indicates diverse branding profiles and strategic orientations among countries, rather than a uniform pattern of performance.

Medical Tourism Index (MTI) Scores in the Africa Region

Table 5. Medical Tourism Index (MTI) Scores of Countries in the Africa Region

| Country (Africa) | MTI Score |
|-------------------------|------------------|
| South Africa | 63.20 |
| Morocco | 61.85 |
| Egypt | 58.70 |
| Tunisia | 58.20 |
| Nigeria | 57.80 |
| Kenya | 57.50 |

African countries display relatively lower average destination branding performance as reflected in MTI scores, with South Africa (63.20) recording the highest value within the region. This pattern may be associated with comparatively weaker performance in certain MTI components, such as perceived safety and infrastructure-related indicators. In this context, destination branding efforts in African countries are often discussed in relation to the potential role of strengthening international quality accreditation and related standards as part of broader branding and positioning strategies.

Regional Comparison: Medical Tourism Index (MTI) Scores and Tourism Revenues (OECD)

Below, MTI scores and tourism revenues are jointly presented in regional comparative tables. Due to data availability constraints, this comparison is conducted only for the Europe and America regions, where country-level international tourism revenue data for 2021 (USD) are available. For other regions, comparable and complete tourism revenue data could not be obtained; therefore, those regions are excluded from the MTI–revenue comparison.

Table 6. Europe-MTI Scores and Tourism Revenues (2021)

| Country | MTI Score | Tourism Revenue (2021, Million USD) |
|----------------|-----------|-------------------------------------|
| Spain | 72.93 | 34,533.7 |
| United Kingdom | 71.92 | 40,110.5 |
| France | 69.61 | 44,912.3 |
| Germany | 69.29 | 22,718.1 |
| Czechia | 68.32 | 3,356.5 |
| Switzerland | 67.75 | 12,096.0 |
| Malta | 64.75 | 771.9 |
| Poland | 64.10 | 10,165.8 |
| Türkiye | 63.91 | 28,789.7 |
| Russia | 60.17 | ~16,947* |

*Russia data correspond to 2019 due to the unavailability of 2021 data caused by the war.

In the European region, countries with relatively high MTI scores such as Spain, the United Kingdom, France, and Germany also record high tourism revenues, making Europe the region where the joint distribution of MTI scores and tourism revenues is most clearly observable. Türkiye, despite occupying a mid-level position in the regional MTI ranking, is among the countries generating high tourism revenues.

When MTI scores and tourism revenues of European countries are compared with those of Türkiye, European countries generally exhibit higher MTI scores than Türkiye. In contrast, Türkiye's total tourism revenues exceed those of many countries in the region. This pattern indicates that while destination branding performance related to health tourism appears to be stronger in several European countries, Türkiye demonstrates a differentiated profile in which high overall tourism revenues coexist with relatively lower health tourism-oriented branding indicators. Among European destinations with high MTI scores such as Spain, the United Kingdom, France, and Germany a more balanced alignment between MTI scores and tourism revenues is observed. In contrast, in the case of Türkiye, the

coexistence of high tourism revenues with an MTI score below the regional average suggests scope for further development in health tourism-oriented destination branding and perceived quality.

Table 7. America-MTI Scores and Tourism Revenues (2021)

| Country | MTI Score | Tourism Revenue (2021, Million USD) |
|---------------|-----------|-------------------------------------|
| Canada | 76.47 | 15,007.1 |
| United States | 70.40 | 84,169.0 |
| Costa Rica | 71.73 | 1,834.3 |
| Colombia | 64.95 | 3,054.4 |
| Brazil | 64.35 | 3,004.9 |
| Mexico | 59.47 | 21,508.6 |

In the America region, countries such as Canada, the United States, and Costa Rica each exhibiting relatively high MTI scores also record high tourism revenues. This pattern indicates a close co-distribution between destination branding performance, as reflected by MTI scores, and tourism revenues within the region.

Joint Evaluation of MTI Scores and Tourism Revenue Levels (2020-2021)

An examination of the data presented in Table 7 indicates that countries with high MTI scores do not always exhibit high tourism revenues, while some countries generate substantial tourism revenues despite ranking lower in MTI performance. This pattern suggests that health tourism performance cannot be explained solely by conventional tourism revenue levels. Countries such as Spain, the United Kingdom, France, and Germany display both high tourism revenues and high MTI scores. These countries share several common characteristics, including strong healthcare infrastructure, high levels of international accreditation, well-established brand recognition and trust, and a longstanding presence as global tourism destinations. This distribution highlights the relevance of branding, trust, quality, and a robust healthcare system in shaping health tourism performance. Türkiye and Russia, by contrast, exemplify countries with relatively high tourism revenues but comparatively lower MTI scores. Türkiye records high tourism revenues; however, with an MTI score of 63.91, it remains below the European regional average. Similarly, despite relatively high tourism revenues, Russia ranks toward the lower end of the MTI distribution with a score of 60.17. This divergence indicates that further development may be needed in terms of international healthcare branding and global perceptions of quality in these countries.

Countries such as Czechia, Poland, and Malta present a different profile. Although their tourism revenues are lower than those of Türkiye, their MTI scores are more balanced, generally ranging between 65 and 68. These countries benefit from comparatively cost-effective healthcare services, regulatory frameworks aligned with European Union standards, and a perception of reliability in medical services. This pattern underscores that revenue levels alone do not determine MTI performance; rather, sustained quality standards and regulatory alignment play a critical role. Overall, MTI scores reflect not tourism revenue magnitude but indicators related to healthcare quality, infrastructure, destination safety,

and health system branding. In this context, Türkiye’s position despite strong tourism revenues yet trailing Europe’s leading countries in MTI performance suggests scope for further development in health tourism branding, quality accreditation, international trust perception, and non-price-based competitive factors. In this context, Türkiye also holds strong potential to emerge as a rising star in the global medical tourism market in the coming years, particularly through improvements in branding, accreditation, and international perception.

Table 8. MTI Scores and Tourism Revenues by Country and Region (2020-2021)

| Country | Region | MTI Score | Tourism Revenue 2020 (USD, million) | Tourism Revenue 2021 (USD, million) |
|-----------------------|--------------|-----------|--|--|
| Canada | America | 76.47 | 14,164.7 | 15,007.1 |
| Costa Rica | America | 71.73 | 1,464.3 | 1,834.3 |
| Colombia | America | 64.95 | 1,931.8 | 3,054.4 |
| Brazil | America | 64.35 | 3,099.1 | 3,004.9 |
| Mexico | America | 59.47 | 12,132.6 | 21,508.6 |
| Spain | Europe | 72.93 | 18,507.0 | 34,533.7 |
| United Kingdom | Europe | 71.92 | 32,383.4 | 40,110.5 |
| France | Europe | 69.61 | 35,754.1 | 44,912.3 |
| Germany | Europe | 69.29 | 22,240.8 | 22,718.1 |
| Czechia | Europe | 68.32 | 3,850.2 | 3,356.5 |
| Switzerland | Europe | 67.75 | 10,028.1 | 12,096.0 |
| Malta | Europe | 64.75 | 391.5 | 771.9 |
| Poland | Europe | 64.10 | 8,803.9 | 10,165.8 |
| Türkiye | Europe | 63.91 | 13,566.9 | 28,789.7 |
| Japan | Asia-Pacific | 74.23 | 11,507.5 | 5,355.6 |
| South Korea | Asia-Pacific | 68.81 | 11,523.7 | 11,431.6 |
| Indonesia | Asia-Pacific | 61.50 | 3,602.4 | 547.8 |
| Saudi Arabia | Middle East | 59.50 | 4,645.4 | 4,639.3 |
| South Africa | Africa | 63.20 | 2,716.6 | 2,113.4 |
| Morocco | Africa | 61.85 | 4,512.8 | 4,670.1 |

In this study, the table constructed to compare regions’ health tourism performance is scaled using three core indicators. Medical Tourism Index (MTI) levels are transformed into a qualitative classification based on reference ranges commonly cited in the literature. MTI is a composite indicator calculated on a 0–100 scale. For the purposes of analysis, MTI values are categorized as follows: scores between 80–100 are classified as “very high,” 70–80 as “high,” 60–70 as “moderately high,” 50–60 as “moderate,” and below 50 as “low.” This verbal classification is derived from the average MTI scores of regions and is presented as a qualitative scale to facilitate comparative assessment.

Given that destination branding strength represents a multidimensional construct rather than a single quantitative indicator, it is operationalized in this study through a qualitative scale grounded in quality and visibility indicators widely used in the international health tourism literature.

Conclusion

This study offers a comparative descriptive examination of health tourism-oriented destination branding performance, as reflected by Medical Tourism Index (MTI) scores, together with international

tourism revenues across regions. By jointly considering these indicators, the study contributes to the literature by demonstrating how branding-related performance and revenue outcomes coexist across different national and regional contexts, without implying causal relationships. The findings are broadly consistent with prior research emphasizing the multidimensional nature of health tourism performance. Connell (2013) highlights that health tourism potential is shaped not only by healthcare service quality but also by tourism infrastructure and broader economic conditions. Similarly, Han and Hyun (2015) suggest that higher MTI scores may be associated with stronger health tourism revenue performance, while also noting that high branding scores do not always coincide with favorable revenue outcomes. The present study aligns with these observations by revealing both convergent and divergent patterns between MTI scores and tourism revenues across countries. From a regional perspective, Europe and America exhibit a relatively more consistent alignment between higher MTI scores and higher tourism revenues. Countries such as Spain, the United Kingdom, France, Germany, Canada, and the United States tend to display both strong destinations branding profiles and substantial tourism revenue levels. This pattern suggests that in these regions, branding attributes related to healthcare quality, accreditation, institutional trust, and destination reputation tend to coexist with robust tourism demand. In contrast, other regions display more heterogeneous patterns. In the Asia-Pacific region, several countries maintain relatively high MTI scores while experiencing notable variability in tourism revenues during the study period. This divergence is particularly evident in cases such as Japan and Indonesia, where high MTI scores coexist with declines in tourism revenues in 2021. Such patterns point to the influence of contextual and period-specific factors, including the COVID-19 pandemic, international travel restrictions, and broader economic disruptions, which may affect tourism revenues independently of branding performance. Similarly, the Middle East shows a concentration of high MTI scores in certain destinations, while Africa exhibits comparatively lower average MTI values, reflecting differences in perceived safety, infrastructure, and accreditation-related indicators. Cost has frequently been emphasized as a key determinant in the health tourism literature. Yorulmaz (2025) demonstrates that differences in treatment costs across countries have a significant impact on international patient mobility. The study indicates that cost advantages provide a competitive edge, particularly for developing countries, and serve as a fundamental determinant in destination choice. However, the findings of the present study suggest that health tourism performance cannot be explained solely by cost-based factors. Indeed, it has been observed that in some countries, despite having cost advantages, destination branding performance and tourism revenues do not develop at the same level.

The case of Türkiye illustrates a distinct profile within the European region. Despite recording strong tourism revenue growth in 2021, Türkiye's MTI score remains below the regional average. This divergence indicates that high overall tourism revenues do not necessarily correspond to strong health tourism-oriented branding performance. Rather, MTI appears to capture dimensions related to healthcare quality, infrastructure, destination safety, and health system branding that are not fully

reflected by aggregate tourism income alone. Conversely, countries such as Czechia, Poland, and Malta display relatively balanced MTI scores despite more modest tourism revenue levels, underscoring the role of regulatory alignment, perceived reliability, and sustainable quality standards in shaping branding performance. Taken together, the findings demonstrate that health tourism performance cannot be adequately evaluated through a single indicator. MTI scores and tourism revenues provide complementary, rather than interchangeable, perspectives. While tourism revenues reflect overall demand and economic scale, MTI scores offer insight into branding-related attributes specific to health tourism. These results highlight the importance of adopting a multidimensional and comparative approach when assessing health tourism performance and caution against generalized interpretations based solely on isolated indicators. This study has certain limitations. The analysis relies on secondary data and is constrained by the limited availability of comparable country-level health tourism revenue statistics. As a result, overall tourism revenues are used as an indirect proxy for economic performance; however, this approach may not fully capture the specific dynamics of health tourism, particularly in country-level interpretations where general tourism performance may overshadow health tourism activities. Future research may extend this work by incorporating longitudinal analyses, alternative branding indices, or qualitative insights from policymakers and industry stakeholders to further explore the dynamics between destination branding and health tourism outcomes.

In conclusion, the study shows that MTI scores and tourism revenues exhibit varying patterns of co-distribution across countries and regions. These findings reinforce that health tourism performance is shaped by a complex interplay of branding, quality, infrastructure, and contextual factors, and should therefore be evaluated using a multidimensional analytical framework rather than relying solely on aggregate tourism indicators.

Additional Declaration

Author Contributions

In this study, the contribution of the authors was equal; both authors contributed equally to the development of the research idea, data analysis, writing and proofreading stages.

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Responsible Artificial Intelligence Statement

This study used artificial intelligence–based tools, such as ChatGPT (OpenAI), solely for language editing, improving readability, and providing formatting support.

Conflicts of Interest

The authors declare that there are no conflicts of interest related to the publication of this study.

Ethics Approval

This study does not require ethics committee approval as it does not involve any direct application on human or animal subjects.

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