

Medical Tourism Industry Analysis at the Level of European Union

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Abstract. *Medical tourism is continuously developing and nowadays represents a solid base within the healthcare sector. The Medical Tourism Index ranks 46 worldwide countries taking into consideration destination attractiveness, safety and quality of care. The study focuses on the European Union states that are part of the medical tourism ranking in order to emphasize the main characteristics of their healthcare systems in terms of: financing of the healthcare services, expenses and human resources that work in healthcare industry. The research methodology focuses on histogram in order to summarize distribution, shape and central tendency. The results show the variables' distribution in order to better understand why some European Union member states rely on medical tourism, together with the development potential that the medical tourism can have for other European Union member states in terms of best practices.*

Keywords: Medical tourism, Medical tourism index, Healthcare industry, European Union member states, Healthcare system.

Introduction

Medical Tourism Index (MTI) ranks countries as a medical tourism destination based on five main categories: medical tourism industry; country environment; medical tourism costs; medical tourism facilities; medical tourism potential. (<https://www.globalhealthcareaccreditation.com/medical-tourism-statistics-and-facts>, accessed January 2025) The higher the score is, the greater the attractiveness is as a medical tourism destination for a country.

However, this industry was greatly impacted by the COVID-19 pandemic, because of the travel restrictions to the preferred destination for medical treatment, the risk of getting the virus during the travel, potential quarantine requirements upon the return after the medical treatment, decrease in financial revenues and for some persons even the loss of the financial revenues. (<https://www.globalhealthcareaccreditation.com/medical-tourism-statistics-and-facts>, accessed January 2025)

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Literature review

A distinction between health tourism and medical tourism should be made. According to Carrera and Bridges (2006), health tourism represents “the organized travel outside one’s local environment for the maintenance, enhancement or restoration of an individual’s wellbeing in mind and body”. Medical tourism can be defined as the “organized travel outside one’s natural healthcare jurisdiction for the enhancement or restoration of the individual’s health through medical intervention” (Carrera and Bridges, 2006) Medical tourism can be bidirectional, with people traveling from developed countries to developing countries for inexpensive medical services or with people traveling from developing countries to developed countries for better treatments that

are neither available or legal in their home countries. (Chaulagain et al., 2020)

The Medical Tourism Association surveyed global health care consumers and also prospects that did not proceed with the decision. (https://cdn.prod.website-files.com/6272d3f738f67b4c8ee43a10/65a15680c5f22e9280143710_MTA%20Patient%20Survey%20Report%202024%20VF.pdf, accessed February 2025) According to the results, medical tourists place a high importance in: trust because of either better quality of care, credentials etc. (38,5%); positive reviews or testimonials (30,8%); trusted accreditation of the healthcare facility (30,8%); affordable cost (28,8%); best payment security or options (21,2%); better post-treatment follow-up (19,2%). Also, medical tourists have the following concerns: post-treatment follow-up (53,8%); traveling to the other country for medical care, whether it is safety, standards of care, distance etc. (51,9%); lack of trust or concerns in the provider, whether it's quality, complications, credibility, credentials or expertise of the provider (40,4%); hidden costs or additional costs (34,6%); lack of accreditation of the healthcare facility or concerns in trusting the local accreditation and certifications of the provider (30,8%); making payments internationally and potentially being scammed or taken advantage of (26,9%); lack of information about the process (17,3%); response time from the provider (15,4%); travel costs were too high (15,4%); difficulty in transferring costs abroad (11,5%). Regarding the patients that did not choose to travel for medical treatment, the main reasons for this decision were: treatment costs were not affordable (24,7%); concerns about hidden costs or additional costs not quoted in the price estimate (22,5%); travel associated costs were too high (21,3%); worries about potential complications (21,3%); concerns about post-treatment follow-up (20,2%); concerns about travelling in another country for medical care, whether it is safety or lack of knowledge of the health system (19,1%); concerns regarding international payments and the potential risks of fraud, exploitation or non-repayment of funds (13,5%); response time from the provider (10,1%); did not get an opportunity for teleconsultation or second opinion (9%); lack of accreditation of the healthcare facility or concerns in trusting the local accreditation and certifications of doctor and provider (9%); lack of patient testimonials or reviews (9%); difficulty in transferring payments abroad (7,9%); not satisfied with the information provided by the healthcare provider (5,6%).

De la Hoz-Correa et al. (2018) identified the following research clusters in medical tourism: ethical implications, service quality in health, wellness and spa, health-related effects, sensitivity issues, destination marketing and globalization policies and effects on international patients. Zarei and Maleki (2019) underline quality and patient satisfaction. King Fung Wong et al. (2024) focus on destination management (healthcare delivery and collaborative relationships) and destination marketing (used to understand the consumer behaviour of the medical tourists).

Methodology

The Medical Tourism Index 2020- 2021 ranks 46 worldwide countries based on the American perceptions related to 41 criteria. (Figure 1) Canada is recognized for fertility treatment, oncology and cardiology. Singapore is well known for cardiology, oncology and orthopedics. Dubai relies on fertility treatment, cosmetic surgery and orthopedics. Costa Rica is known for dental care, cosmetic surgery and bariatric surgery. India is a country known for cardiology, cancer treatment and orthopedics. (<https://www.globalhealthcareaccreditation.com/medical-tourism-statistics-and-facts#learn-more>, accessed February 2025).

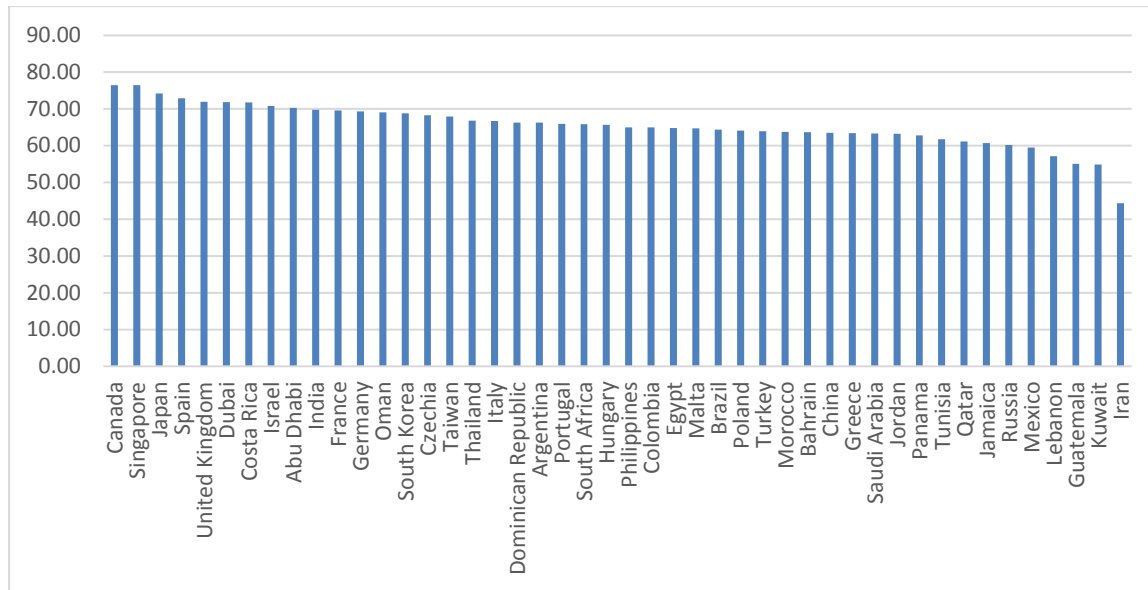


Figure 1. Medical Tourism Index- worldwide (2020-2021)

Source: Authors' own research based on https://cdn.prod.website-files.com/5d8aac42c851d2d6528d50d4/5f0df13e57906e9f895e3767_2020-2021%20Medical%20Tourism%20Index%20Overall%20Ranking.pdf, accessed February 2025.

The Medical Tourism Index 2020- 2021 ranks 10 countries that are part of the European Union. (Figure 2) Spain is a country known for fertility treatment, cosmetic surgery and oncology. France is recognized for cosmetic surgery, ophthalmology and fertility treatment. Germany is recognized for the treatments on oncology, cardiology and orthopedics. Czech Republic is well known for fertility treatment, ophthalmology and plastic surgery. Portugal is a country recognized for fertility treatment, cosmetic surgery and ophthalmology. Hungary and Poland are known for dental care, cosmetic surgery and fertility treatment. Greece is recognized for fertility treatment, cosmetic surgery and ophthalmology. (<https://www.globalhealthcareaccreditation.com/medical-tourism-statistics-and-facts#learn-more>, accessed February 2025).

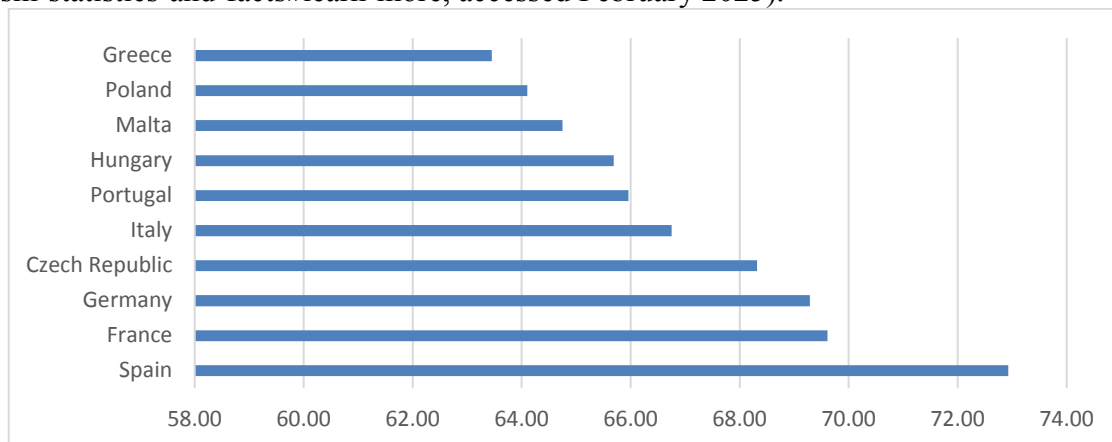


Figure 2. Medical Tourism Index- EU countries rank (2020-2021)

Source: Authors' own research based on https://cdn.prod.website-files.com/5d8aac42c851d2d6528d50d4/5f0df13e57906e9f895e3767_2020-2021%20Medical%20Tourism%20Index%20Overall%20Ranking.pdf, accessed February 2025.

Based on the availability of data, for each of the EU-27 member states, some variables were chosen as part of the analysis, from Eurostat database for the year 2021. The variables of analysis are: financing of the healthcare services, expenses in this sector and human resources that work in healthcare industry. (Table 1)

Table 1. Variables for Medical Tourism Industry Analysis at the Level of European Union

Variables
Healthcare spending by all providers at the level of the EU member states (2021) – million euro
Financing of healthcare services at the level of the EU member states (2021)- million euro
Availability of physicians expressed in per 100000 inhabitants at the level of the EU member states (2021)
Availability of nurses expressed in per 100000 inhabitants at the level of the EU member states (2021)

Source: The author' own processing data.

Results and discussions

The histogram was used to determine the dispersion of data and to analyze healthcare spending by all providers at the level of the EU member states for the year 2021. (Figure 3) Thus, in the class 0,0- 100000 million euros, 23 states fall. In the class 100000,1- 200000 million euros, Spain and Italy fall. In the class 200000,1- 400000 million euros, France falls. Germany falls into the 400000,1- 500000 million euro class.

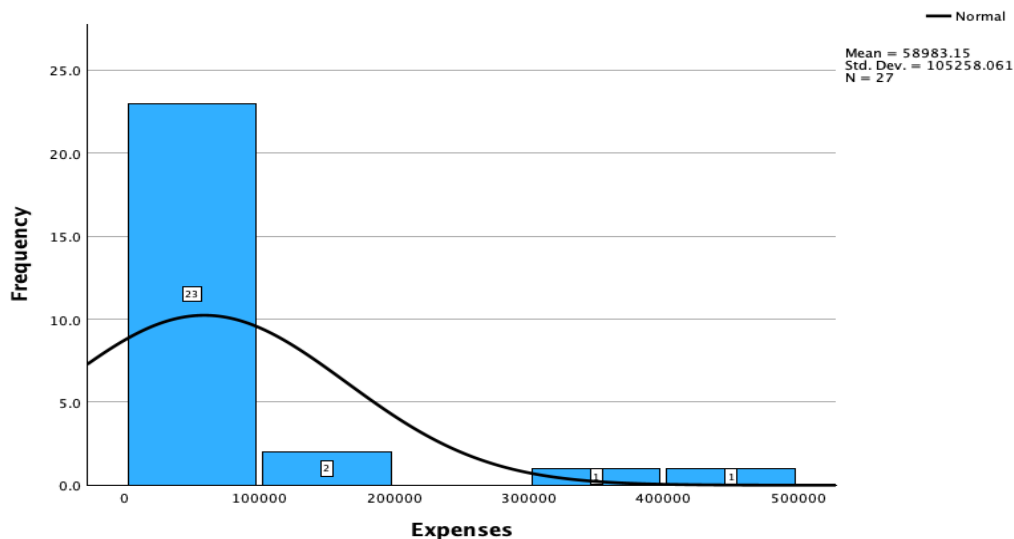


Figure 3. Healthcare spending by all providers at the level of the EU member states (2021) – million euro

Source: Authors' own research with SPSS 30.00 software for Mac, based on data from EUROSTAT.

The histogram was used to determine the dispersion of data and to analyze the financing of health services through all financing schemes, at the level of the EU member states, for the year 2021. (Figure 4) Thus, in the class 0,0- 100000 million euros, 23 states fall. In the class 100000,1- 200000 million euros, Spain and Italy fall. In the class 200000,1- 400000 million euros, France falls. Germany falls into the 400000,1- 500000 million euro class.

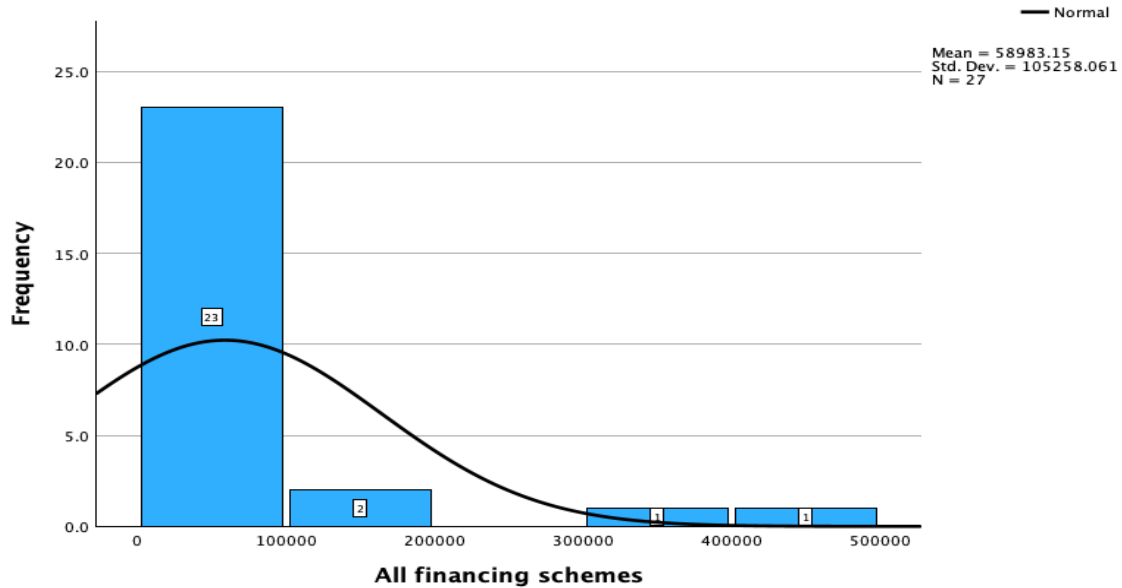


Figure 4. Financing of healthcare services at the level of the EU member states (2021)- million euro

Source: Authors' own research with SPSS 30.00 software for Mac, based on data from EUROSTAT.

The histogram was used to determine the dispersion of data and to analyze availability of the physicians expressed in per 100000 inhabitants at the level of the EU member states, for the year 2021. (Figure 5) Thus, based on the availability of data, in the class 0,0- 50000, 13 states fall: Austria, Czechia, Belgium, Hungary, Bulgaria, Slovakia, Croatia, Lithuania, Slovenia, Latvia, Cyprus, Estonia, Malta. In the class 50000,1- 100000, Romania, Netherlands, Greece and Portugal fall. In the class 100000,1- 200000, Poland falls. Italy, France and Spain fall into the 200000,1- 300000 class. Germany falls into the 300000,1- 400000 class.

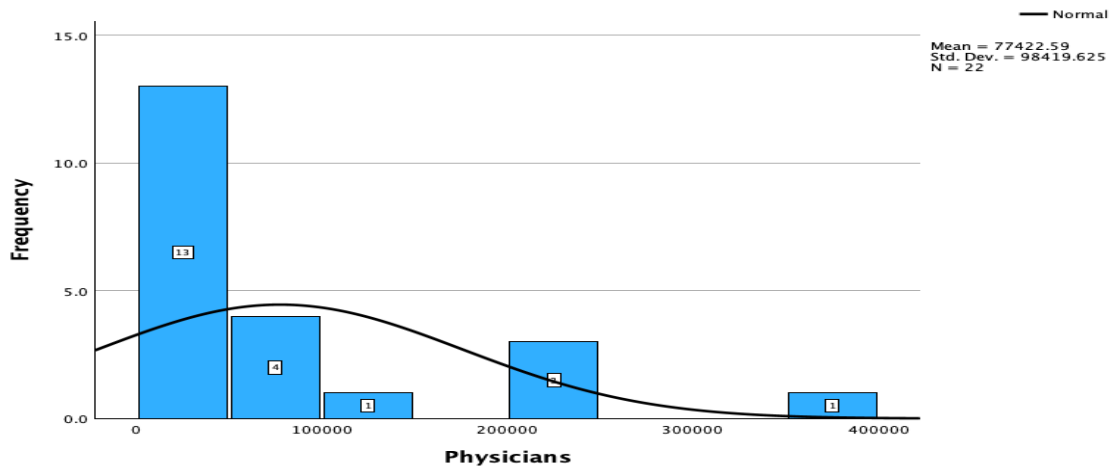


Figure 5. Availability of physicians expressed in per 100000 inhabitants at the level of the EU member states (2021)

Source: Authors' own research with SPSS 30.00 software for Mac, based on data from EUROSTAT.

The histogram was used to determine the dispersion of data and to analyze availability of the nurses expressed in per 100000 inhabitants at the level of the EU member states, for the year 2021. (Figure 6) Thus, based on the availability of data, in the class 0,0- 50000, 6 states fall:

Hungary, Slovakia, Lithuania, Romania, Estonia and Latvia. In the class 50000,1- 100000, Austria, Finland and Czech Republic fall. In the class 100000,1- 150000, Belgium falls. Netherlands falls into the 150000,1- 200000 class. Spain falls into the 300000,1- 350000 class.

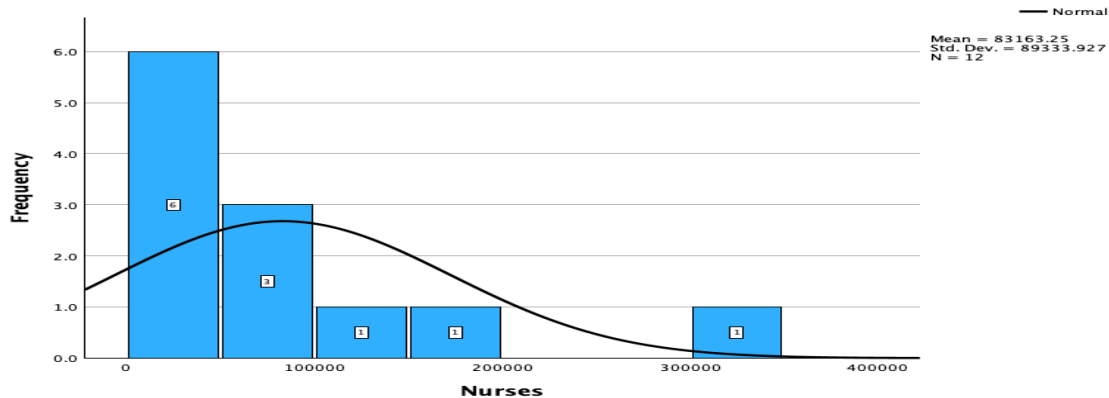


Figure 6. Availability of nurses expressed in per 100000 inhabitants at the level of the EU member states (2021)

Source: Authors' own research with SPSS 30.00 software for Mac, based on data from EUROSTAT.

Conclusions

In conclusion, the European Union countries that are part of the Medical Tourism Index 2020-2021, mainly Spain, France and Germany have the most important healthcare spending by all providers, the highest financing of health services through all financing schemes, the highest number of physicians expressed in per 100000 inhabitants and the highest number of nurses expressed in per 100000 inhabitants. However, these are not the only aspects that count for the choice of a medical tourism destination. According to other studies that complete our research, the patient experience is also very important and the trust that providers should build around is a must. Also, the country image and perceived quality of medical tourism facilities/ services have an important weight in the patient decision for medical tourism. (Chaulagain et al., 2021)

The limitations of the research can come from limited geographical scope and methodological shortcomings. In order to address these limitations, future research can focus on a larger sample of countries as main destinations for medical tourism or can focus also on the ethical aspects, such as medical tourism for illegal organ trade or trafficking.

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