

# Medical tourism research in Poland: a scoping review

Adrian Lubowiecki-Vikuk

*Institute of Management, SGH Warsaw School of Economics, Warsaw, Poland, and*

Anna Białk-Wolf

*Protrumed Foundation, Gdańsk, Poland*

Received 21 January 2025  
Revised 27 January 2025  
Accepted 27 January 2025

## Abstract

**Purpose** – The interest in medical tourism is due to the increasing number of scholarly publications on the subject. Polish researchers are progressively contributing to this discourse, shedding light on various research contexts within one of the prominent medical tourism destinations in Central and Eastern Europe. This article is aimed at mapping the knowledge of and outlining the directions for developing medical tourism research in Poland.

**Design/methodology/approach** – The study was conducted in the form of a bibliometric review, including performance analysis and science mapping. The analysis included texts by Polish researchers indexed in the international Web of Science and Scopus databases and the Polish BazEkon database. In addition, publications found in Google Scholar, Nauka Polska (Polish Science) and Biblioteka Nauki (Library of Science) were included. VOSviewer was used for the bibliometric analysis.

**Findings** – A total of 97 scientific publications from 2003–2023 were studied. The analysis provided an insight into the main themes of Polish researchers from the perspective of the discipline they represent. Five clusters were identified: (1) “global aspects of medical tourism,” (2) “medical tourist,” (3) “development of medical tourism,” (4) “Poland as a medical tourism destination” and (5) “medical tourism destinations worldwide.” On the one hand, an interdisciplinary approach to medical tourism makes it possible to gain broader knowledge that goes beyond one scientific discipline. On the other hand, the results show the diversity of medical tourism research and the dilemmas involved.

**Research limitations/implications** – The limitation of this article is the analysis chosen, which does not consider the scientific quality of the articles studied. Instead, we identify leading and future issues that should be of interest to researchers and used by practitioners and managers of medical tourism destinations.

**Originality/value** – The review and subsequent mapping of scientific output made it possible (1) to understand the different perspectives on the definition of medical tourism, (2) to assess the 20-year contribution of Polish researchers to the development of medical tourism research and (3) to identify key contexts for further research.

**Keywords** Bibliometric, Definition, Development, Health tourism, Poland, Research trends

**Paper type** Literature review

## Introduction

Medical tourism in Poland is quite firmly anchored in science and business. This is evident both through the initiative-taking efforts of medical service institutions that effectively cater to travelers, and through research. The medical tourism market in Poland is influenced by several factors. On one hand, it is shaped by Poland’s domestic context, while on the other it is also sensitive to global dynamics. These external and internal factors contribute to its rapid evolution. Polish researchers find these processes particularly intriguing. Poland is considered one of the preferred and selected medical tourism destinations (MTDs) in Central and Eastern Europe (CEE) (Białk-Wolf, 2022a; Lubowiecki-Vikuk and Dryglas, 2019a), alongside Czechia, Slovakia, and Hungary (Lubowiecki-Vikuk and Kurkowiak, 2017).

The aim of this article is to map knowledge of and outline directions for the development of medical tourism research in Poland. The following research questions (RQs) were identified in relation to this aim:



- RQ1. What are the basic bibliographic indicators, such as annual scientific output and the most relevant sources (journals), and who are the most prolific authors and cooperation networks in medical tourism literature in Poland?
- RQ2. What are the main directions of research on medical tourism in Poland? Which thematic map and thematic clusters are based on co-word network analysis?
- RQ3. What contribution do Polish researchers make to medical tourism studies? What should be the future directions of research?

## Literature review

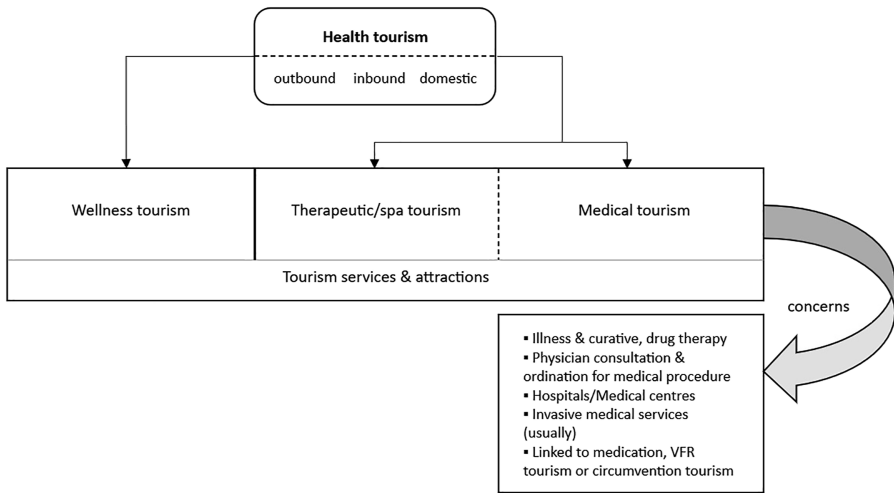
### *Polish researchers' definition of medical tourism*

In simple terms, medical tourism is understood as one of three interrelated forms of health tourism (e.g. Lubowiecki-Vikuk, 2012; Rab-Przybyłowicz, 2014), each of which has a health function (Białk-Wolf, 2022b; Borek, 2013; Klich, 2022; Rudzińska, 2017). In other words, health tourism is any kind of “travel of 24 h or more away from one’s place of residence in order to regenerate health (. . .), correct beauty, and undergo treatments and operations in clinics recruiting patients through tourism advertising” (Łęcka, 2003, pp. 174–175); and is an umbrella term for the three mentioned forms. The range of healthcare services provided in medical tourism may overlap with both therapeutic/spa tourism and wellness tourism (Dryglas, 2018).

An important feature of medical tourism is the invasive medical services provided to the patient/medical tourist (Lubowiecki-Vikuk, 2016b). However, medical tourists also use the services of psychologists or psychiatrists (Orzechowski, 2019; Rab-Przybyłowicz, 2016), which by their nature are not considered invasive services. Other non-invasive services in medical tourism include diagnosis, prevention, and rehabilitation (Lubowiecki-Vikuk and Dryglas, 2019b). The providers of medical tourism determine the framework of medical tourism. These are the locations where healthcare services are provided, typically encompassing private hospitals, medical centers, or individual medical practices. The latter, along with specialized clinics, can offer a form of medical tourism known as circumvention tourism (Bartłomiejczyk and Pollabauer, 2022), based on controversial medical services such as abortion, reproductive services (Sánchez *et al.*, 2022), euthanasia, transplantation, or oncology services. In addition, there is still an ongoing debate and dilemma (e.g. Białk-Wolf and Arent, 2018; Biernat *et al.*, 2020), on how to treat those medical tourists who use healthcare services by combining them, for example, with vacation (medication) or visits to friends and relatives’ (VFR). Overall, medical tourism serves various purposes, including seeking treatment, rehabilitation, undergoing controversial procedures, or pursuing *in vitro* procedures (IVF tourism). The inclusion of rehabilitation in this context is essential because, unlike therapeutic/spa tourism, it requires specialized training for its proper execution (Figure 1).

In the creation of niche tourism products, including medical tourism (Sánchez *et al.*, 2022), changing consumer behavior requires that the polymotivation of tourists be considered (Khalilzadeh *et al.*, 2024). The difficulty for researchers is, for example, that consumers of dental services who spend less than 24 h in another city/region/country still have to be still considered medical tourists. Although, from an economic point of view, a patient could be considered a medical tourist (Biernat *et al.*, 2020; Kachniewska, 2018), formally this type of consumer is (or is not due to imprecise statistics) classified as a day visitor.

The above dilemmas in defining the medical tourism are not unique. Connell (2013) pointed out the problems of determining what medical tourism is in general. Connell’s reflections show that most definitions (the simplest explanations) are distorted, minimalist or underdetermined. In his view, “no agreed definition of medical tourism therefore exists and no loose umbrella term is wholly adequate” (Connell, 2013, p. 5). In our view, even formulating the defining member (*definiendum*) creates a dilemma. In addition to medical tourism, there are *definiendums* such as “(medical) health-care tourism,” “medical-health-wellness tourism,”



Source(s): Authors' own work

Figure 1. Forms of health tourism, especially medical tourism

“health tourism,” “global healthcare,” “mobile patient tourism,” “medical/medi wellness tourism,” “medical travel,” “surgical tourism,” and “tourism with health benefits.”

Polish researchers also face the challenge of defining medical tourism. Although the definition is dominated by the social science perspective, especially in the discipline of economics, the perspective of fields within the medical and health sciences is also emerging. Research on medical tourism in Poland was initiated at the beginning of the 21st century. During this period, a sub-market of health tourism began to emerge. This period (2003–2023) can be divided into two decades.

In the first decade of research (2003–2013), Polish researchers emphasized that medical tourism only concerns people who travel abroad to consume selectively specific services, e.g. plastic surgery and dental services (Klich, 2008). In one approach, Mruk (2009) suggested that medical tourism could refer to the migration of doctors. Subsequently, this aspect has not been followed up in research, which may be because the World Tourism Organization (UN Tourism) does not recommend the inclusion of for-profit travel in tourism. Similarly, saving a patient’s health (Białk-Wolf, 2010) was not included in further research on medical tourism. This aspect has dominated the analysis of mobile patient flows, e.g. in cross-border healthcare (Kowalska-Bobko *et al.*, 2016). In contrast, Polish researchers have emphasized leisure aspects of medical tourism, i.e. opportunities to visit tourist facilities and attractions alone or with accompanying medical tourists. This aspect was later confirmed by foreign researchers (Baydeniz *et al.*, 2024). Polish researchers representing disciplines of economics and/or management also highlighted the business dimension of medical tourism. They emphasized the organization and handling of medical tourism traffic, pointing to price and quality, and offshoring of medical services, as leading elements of the competitiveness of private hospitals/clinics and factors attracting medical tourists to Poland (e.g. Białk-Wolf, 2010; Liberska, 2012).

In the second decade of research (2014–2023), the definition of medical tourism by Polish researchers was also expanded. It was noted that medical tourism, in addition to foreign travel, can also include domestic travel or even, as Panasiuk (2017), pointed out, short distances from the country of residence. According to research in Poland, in addition to domestic medical tourists (Lubowiecki-Vikuk, 2021), citizens of neighboring countries, e.g. Germany, have used health services (e.g. Dryglas and Lubowiecki-Vikuk, 2019a; Lubowiecki-Vikuk and Rab-Przybyłowicz, 2015; Pforr *et al.*, 2020). Polish medical tourism is of interest to residents

of the United Kingdom, Denmark, Sweden, Norway, and other European, and non-European countries (e.g. [Białk-Wolf et al., 2016](#); [Boguszewicz-Kreft et al., 2019](#); [Dryglas and Lubowiecki-Vikuk, 2019b](#)). A considerable proportion of foreign medical tourists in Poland are Polish diaspora (e.g. [Main, 2014](#); [Mathijsen and Dzedzic, 2024](#)).

The Polish researchers' definitions of medical tourism cited in [Table A1](#) sometimes present the inadequacy of definitions of medical tourism. Some definitions of medical tourism are too broad or too narrow, i.e. the scope of the *definiens* is wider or narrower than the scope of the *definiendum*. Sometimes they are even pseudo-definitions, i.e. explaining the issue by giving an example. Some of these definitions are vague, which does not contribute to the precision of the defining member (*definiens*) medical tourism. Over the past two decades, Polish researchers' approach to explaining the concept of medical tourism has clearly evolved. Their explanations have become increasingly detailed, although certain elements continue to be duplicated.

Although the researchers' perspectives on what medical tourism is point to the scientific disciplines represented, they do not really differ much from each other. It can be argued that there is a consensus among researchers that medical tourism is related to the movement of medical tourists to obtain medical services outside their place of permanent residence. Nuances in the definition arise when some researchers try to explain *definiens* from the perspective of a medical tourist, whose intentions may vary. Researchers discuss the scope of medical services provided and their duration. Some Polish researchers focus on one or more aspects when defining medical tourism:

- (1) Economic – by pointing out the relationship between price and quality of medical services, constituting a sub-market and identifying the players in it.
- (2) Spatial – pointing out that medical tourism involves voluntary and temporary change of permanent residence. In this aspect, doubts still arise as to how much tourism is in “medical tourism” and how it differs from medical travel.
- (3) Organizational – referring to the material and technical conditions and service within healthcare and/or in connection with the tourism industry.
- (4) Marketing – highlighting the attributes of a medical tourism product or MTD.

Definitions are not the most important in science (e.g. [Butler, 2023](#)). However, it is important to try to explain what this medical tourism is. It is unlikely that the formulation of a standard, explicit or contextual definition of medical tourism will be expected ([Connell, 2013](#)). The issue of medical tourism is strongly linked to practice ([Białk-Wolf, 2019, 2022a](#)) and is constantly changing, which also influences the scope of medical services provided, their accessibility, the type of medical tourism providers, etc. The complex and entropic nature of medical tourism ([Lubowiecki-Vikuk, 2021](#)) requires researchers to define the criteria for the ontological and epistemological assumptions of medical tourism. This was attempted in the first decade of research. With the development of more mature projects (second decade), the efforts of Polish researchers are noticeable. However, they are still based on a conventional and practical understanding of medical tourism. Although most of the research approaches are interdisciplinary in nature, which should be seen as an asset, it makes it more difficult to understand the nature of medical tourism. At present, Polish and international researchers (e.g. [Mason, 2023](#); [Puczkó, 2022](#)) are unable to reach a consensus on the definition of medical tourism, which makes it difficult to set directions for research approaches.

### Methodology

Bibliometrics is used the most for performance analysis and science mapping ([Donthu et al., 2021](#); [Lim et al., 2022](#)). Although it is increasingly being used to review the literature on medical tourism (e.g. [Asa et al., 2024](#); [Campra et al., 2022](#)), to date it has not been extended to

include analysis of Polish scientific studies. To date, bibliometric analyses in the field of medical tourism have typically covered one or two international databases (Scopus and/or Web of Science, WoS) and focused on articles written exclusively in English. It seems important that the bibliometric analysis refers to relevant scientific publications, i.e. articles, monographs, chapters, or dissertations written in a language other than English.

The first step was to search for publications in the international databases Scopus, WoS and Google Scholar. The query was formulated with the keyword “medical tourism,” and the authors’ origin was restricted to “countries/regions: Poland.” In this way, a total of 72 publications were identified (after removing duplicates). At this stage, after reviewing the abstracts of the articles, 23 publications on topics unrelated to medical tourism were excluded from the results. In the next stage, additional databases were searched, such as BazEkon, Nauka Polska (Polish Science) and Biblioteka Nauki (Library of Science), using keywords in both English “medical tourism,” and Polish “turystyka medyczna.” Business guides were excluded. The result was 97 articles, which were included in the further analysis of the bibliographic data of the publications. Content analysis was conducted using VOSviewer, a robust tool for visualizing and analyzing complex bibliometric and scientometric data. VOSviewer facilitates the exploration of scholarly literature and research landscapes by creating insightful visual representations of relationships between documents, authors, keywords, and other relevant elements.

In the search of the databases, only scientific publications published up to the year 2023 were accepted for the bibliometric analysis.

## Results

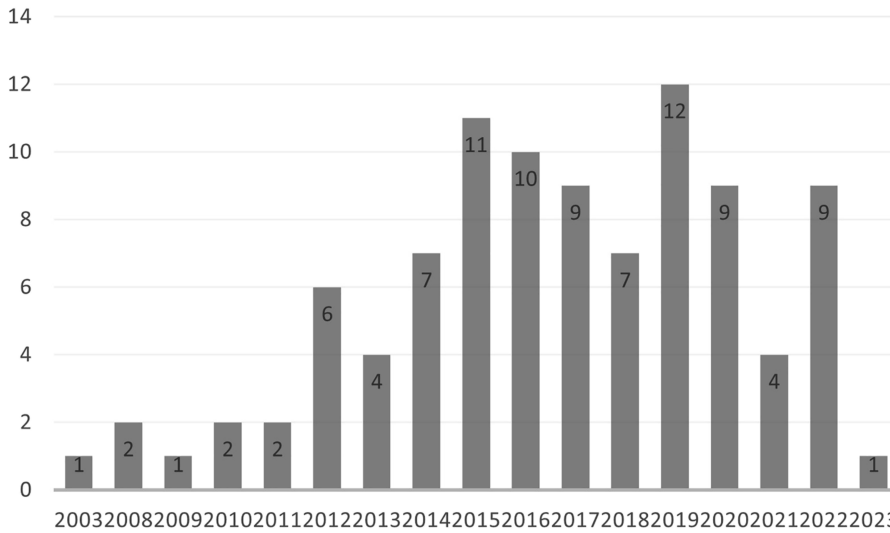
A bibliographic search of the scientific output of Polish medical tourism researchers yielded 97 publications. In the years 2003–2023, numerous articles, five monographs, and chapters and conference papers were published. Open access publications include four doctoral theses and two industry reports signed by a Polish government organization and a local government authority. In the early years of the reference period, including a four-year break (2004–2007), there were no more than two publications (Figure 2). Only from 2012 onwards did the annual number of publications start to increase, reaching 11 in 2015 and a peak of 12 in 2019.

Articles by Polish researchers can be found in a wide variety of journals, both Polish and foreign. Individual articles were published for example in *Tourism Management*, *Tourism Review*, *Globalization and Health*, and the *Journal for East European Management Studies*. Most articles by Polish researchers were published in journals such as:

- (1) *Ekonomiczne Problemy Usług-Economic Problems of Services* (University of Szczecin Press) – five articles.
- (2) *Folia Turistica* (University of Physical Education in Krakow) – four articles.
- (3) *Health Policy* (Elsevier) and *Rozprawy Naukowe Akademii Wychowania Fizycznego we Wrocławiu-Scientific Treatises of University School of Physical Education in Wrocław* – three articles in each journal.

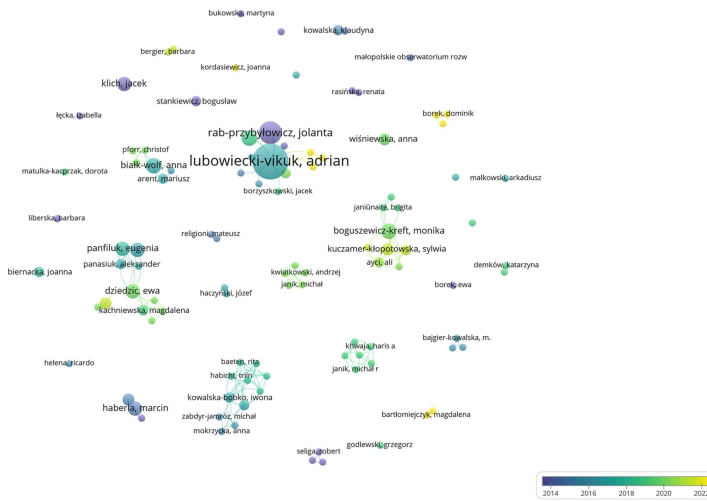
Considering the number of authors who published their own research results (empirical or theoretical), 104 individuals were identified who were affiliated with a Polish university or other institution active in the field of medical tourism. Figure 3 clearly shows the largest bubble, which means that Lubowiecki-Vikuk is the most prolific author. The authors were grouped into 38 clusters, including eight double clusters (with two co-authors) and 18 single clusters (with one author) (Figure 3).

Among the remaining 12 clusters, there were six clusters with a number of co-authors of six or more; two clusters were formed by co-authors from the field of medical sciences and four from the field of social sciences (economics or management). The last three clusters of connections between medical tourism researchers in Poland in the years 2003–2023 are



Source(s): Authors' own work

Figure 2. Number of selected publications by Polish researchers over the years (literature was collected till the end of December 2023)



Source(s): Authors' own work

Figure 3. Clusters and network of connections of medical tourism researchers from Poland in 2003–2023

created by Polish authors, including transcultural researchers – leaders collaborating with foreign researchers in the second decade of the analyzed period. Some clusters indicate the interdisciplinary nature of the collaboration between the authors. In addition to representatives of economics and management disciplines, there are also researchers from fields such as biology, health sciences, physical culture, pharmaceutical sciences, and sociology. One of the clusters under Dziedzic’s leadership had strong inter-university co-operation at national level.

Lubowiecki-Vikuk (SGH Warsaw School of Economics), Rab-Przybyłowicz (independent researcher), Białk-Wolf (Protrumed Foundation) and Boguszewicz-Kreft (WSB Merito University Gdansk) are among the leading Polish authors. According to the H-index of the Scopus database, three of the authors have a moderate international reputation, i.e. Lubowiecki-Vikuk – 9, Boguszewicz-Kreft – 5, Białk-Wolf – 2 and Dziedzic – 2.

Table 1 presents the most frequently cited publications according to Publish or Perish. Taking into consideration additional international scientific databases, they show that the most frequently cited article by a Polish researcher is the text by Mathijssen (2019). Other authors noted the first monograph in Poland on the development of a medical tourism product (Rab-Przybyłowicz, 2014). The monograph authored by Rab-Przybyłowicz was based on her doctoral thesis (Rab-Przybyłowicz, 2013). This thesis included an analysis of the development of medical tourism in Szczecin. Szczecin, along with its surrounding area in the West Pomeranian Voivodeship, holds a unique position concerning the advancement of medical tourism and its influence on structural changes within health tourism. This assertion is further supported by another dissertation (Biemacka, 2022).

Based on the visualizations generated by VOSviewer, five thematic clusters can be identified from the literature on medical tourism in Poland (Figure 4). Each cluster represents a distinct thematic area, and the use of different colors helps delineate specific discussion topics. This approach facilitates a deeper understanding of the prevalent issues within scientific discourse related to medical tourism in Poland.

The globalization and the legal frameworks facilitating cross-border treatment constitute key aspects within the first cluster “Global aspects of medical tourism” (red) of achievements in Polish research on medical tourism. This cluster pertains to legal and organizational aspects, encompassing terms such as “care,” “directive,” “implementation,” “treatment,” “health,” and “patient.” Additionally, it addresses issues related to “globalization” and “government.” This suggests that Polish literature delves into the legal framework of medical tourism, including the implementation of EU directives and the feasibility of cross-border healthcare concepts within the Polish context. The cluster directs attention to the benefits and challenges faced by patients seeking treatment outside their country of residence. Furthermore, it underscores the role of the state and globalization as factors supporting the development of Poland as an MTD. Healthcare system deficiencies play a significant role in shaping the landscape of medical tourism.

Kowalska-Bobko *et al.* (2016) as well as Sztorc (2017) deal with the implementation of the cross-border directive in Poland. They stated that the implementation of legislation regarding cost reimbursement and prior authorization in Poland is highly restrictive. Its primary objectives are either to delay public payer expenses or to discourage patients from seeking care abroad or domestically. Unfortunately, the Polish government and the Ministry of Health, as key stakeholders, appear to have neglected the potential financial advantages that could arise from promoting Poland as a health tourism destination. Meanwhile, patients and healthcare providers had limited influence on the policy-making process. The low uptake of the directive and the limited awareness surrounding it was confirmed. However, its relevance to medical tourism in Europe remains marginal (e.g. Azzopardi-Muscat *et al.*, 2018). Research by Matulka-Kacprzak (2019) on medical tourism also commenced with the cross-border directive, which allowed Poles to seek treatment funded by the Polish healthcare system in other countries. The study investigates how foreign treatment for Poles enhances accessibility, particularly in the context of cataract removal services. These services were previously difficult to obtain through treatment reimbursed by the National Health Fund in Poland. Similarly, Pforr *et al.* (2020) and Białk-Wolf (2022b) explore the effects of medical tourism on the national healthcare system. Dziedzic (2018) identifies two distinct approaches in the development of medical tourism. In the first approach, the private sector takes the lead, with the government assuming a coordinating role during the advanced stage of development. In contrast, the second approach involves the government taking the initiative in developing medical tourism and playing an active leadership role from the early stages.

**Table 1.** Citation ranking of publications by Polish researchers according to selected databases (as of 6 April 2024)

Rank	Author(s)	Year	Title	Journal/SJR 2023	Publish or Perish	Web of Science	Scopus
1	Mathijsen	2019	Home, sweet home? Understanding diasporic medical tourism behavior. Exploratory research of Polish immigrants in Belgium	Tourism Management/Q1	98	54	55
2	Lubowiecki-Vikuk	2012	Medical tourism as a form of manifestation of contemporary trends and tendencies in tourism	Ekonomiczne Problemy Usług (Economic Problems of Services*)	66	–	–
3	Łęcka	2003	New (?) trends in health tourism	Prace i Studia Geograficzne (Studies in Geography)/Q3	59	–	–
4	Rab-Przybyłowicz	2014	Medical Tourism Product**	–	51	–	–
5	Szymańska	2015	Construction of the model of health tourism innovativeness	Procedia – Social and Behavioral Sciences	47	12	–
6	Boguszewicz-Kreft <i>et al.</i>	2020	The theory of planned behavior in medical tourism: International comparison in the young consumer segment	International Journal of Environmental Research and Public Health/Q2	45	12	20
7	Białk-Wolf	2010	The potential of development of medical tourism	Ekonomiczne Problemy Usług (Economic Problems of Services*)	42	–	–
8	Lubowiecki-Vikuk and Rab-Przybyłowicz	2015	Selected aspects of the functioning of the medical tourism market in Poland	Folia Turistica	38	–	–
9	Lubowiecki-Vikuk and Dryglas	2019	Medical tourism services and medical tourism destinations in Central and Eastern Europe – the opinion of Britons and Germans	Economic Research-Ekonomska Istrazivanja/Q2	35	11	17

(continued)



Boguszewicz-Kreft *et al.* (2019) discovered that the willingness to purchase medical services varies based on the country of service origin, the country's influence, and the consumer's background. However, this study had limitations, including a sample of 264 young respondents (students) from three countries, whose health needs may not have reflected real-world demand for medical services. The theory of planned behavior, which predicts human behavior based on intentions, was validated by Boguszewicz-Kreft *et al.* (2020) on the medical tourism market. Notably, a consumer's country of origin significantly influences their intention to use medical tourism services. Furthermore, risk perception plays a crucial role (Boguszewicz-Kreft *et al.*, 2022). Respondents' attitudes toward medical tourism services correlate strongly with the perceived risk. This correlation is moderated by risk awareness, risk aversion, and gender. It can be assumed that the age and experience of respondents could impact the research outcomes in the field of medical tourism. Kordasiewicz (2022) asserts that a multidimensional approach to the client—considering their expectations and requirements—is decisive for the success of medical services. This study examines organizational maturity, emphasizing how important it is for medical tourism. The experiences of individual purchasers of medical tourism services and their links to marketing factors are a subject addressed in Lubowiecki-Vikuk's (2021) monograph. This made it possible to identify segments on the Polish medical tourism market (Lubowiecki-Vikuk, 2021, 2024a) that refer to the publications of international researchers.

The consumer perspective is also the starting point of Main's (2014) research, who argues that the principal reasons for medical travel to Poland of Polish women migrants are the lower costs of private treatment, the easy access to specialized healthcare, and personal comfort derived from linguistic and cultural competency. Mathijssen (2019) found a similar approach when researching the Polish diaspora in Belgium. Four motivational factors affect these behaviors: time availability, relative cost, shopping for the best quality, and cultural affinity. The Polish diaspora was also the subject of a quantitative study by Mathijssen and Dzedzic (2024). Contrary to previous research suggesting that diasporic medical tourism responded mostly to cultural factors, this research confirmed that both commercial and non-commercial factors were important for behavioral intention.

The next cluster "Development of medical tourism" (blue) encompasses papers that describe medical tourism as a form of health tourism, emphasizing the factors contributing to its development. These papers rely on illustrative examples and draw from global literature. Among the earliest studies on this topic, dating back to 2010 (Białk-Wolf, 2010), the level of knowledge at that time can be observed. Subsequent papers frequently reference this foundational work (Wiśniewska, 2020). The most recent study, conducted in 2020, further contributes to our understanding of medical tourism. The monograph of Biernat *et al.* (2020) provides valuable insights for policymakers, healthcare professionals, and researchers interested in understanding the multifaceted nature of medical tourism. They emphasize a crucial fact, that there are no uniform definitions and international measurement standards that hinder the assessment of the magnitude of this trend and any comparisons between individual countries.

Additionally, research related to innovation can also be incorporated within this domain. In line with expectations, the financial impact of innovations is a crucial measure when assessing the effects of health tourism. This finding emerged from research on the innovativeness of health tourism services (Panfiluk and Szymańska, 2017).

An interesting area of research in this cluster is the work that highlights the controversial aspects of medical tourism. Although not grounded in primary data, these considerations are intriguing from a theoretical standpoint (Kowalska, 2016). Research has shown that the most important factors in the development of controversial aspects of medical tourism are regulations, advances in the field of transport and information and communication technology, medical developments, and lifestyle changes. The most significant areas of controversy concern abortion tourism, transplant tourism, euthanasia tourism, and reproductive tourism (Machnik and Lubowiecki-Vikuk, 2020). However, in addition to the areas mentioned, other

manifestations of medical tourism, such as dental, surgical, or pharmaceutical tourism, can also be observed due to economic, religious, cultural, social, and moral factors (Lubowiecki-Vikuk, 2024a). A separate area is devoted to articles addressing current trends in medical tourism (Borek *et al.*, 2023; Rab-Przybyłowicz, 2016; Sánchez *et al.*, 2022), while, given the dynamic situation in the market, they are relevant for a limited time.

Destination management and the state of medical tourism in various regions fall within the scope of the fourth cluster (green) “Poland as a medical tourism destination.” Most studies analyze Poland as an MTD. Among those that focus on individual regions, the largest number of studies concentrate on the West Pomeranian Voivodeship (Biernacka, 2022; Rab-Przybyłowicz, 2013). Additionally, two studies specifically explore the Pomeranian Voivodeship (Białk-Wolf, 2014, 2019). When considering the first area, it is worth noting works assessing Poland’s attractiveness in the opinion of foreign tourists (Dryglas and Lubowiecki-Vikuk, 2019a, b). The study’s findings indicate that tourists from Western Europe are currently more interested in utilizing medical services in CEE countries than in the past. Out of CEE countries, Poland was the most frequently chosen destination for medical tourism (MTD). Associations with Poland as an MTD are influenced by socio-demographic factors such as age and nationality. Before visiting Poland, the respondents perceived the country through the prism of medical attributes, whereas after the visit, they perceived it through the prism of non-medical attributes. The study conducted by Kachniewska (2018) on motivators of participation in inbound medical tourism to Poland revealed that variations in patients’ motivating factors significantly impact their attitudes toward the role and quality of tourism agents’ services. The research identified three primary components—treatment-related, economic, and travel-related—that explain patients’ motivation to travel for medical treatment. Lubowiecki-Vikuk and Dryglas (2019a) showed that foreign patients express an interest in medical tourism services which are not limited to major cities but extend to locations within 100 kilometers of an airport. All CEE countries can also be regarded as destinations. The results indicated that the chosen destinations and medical services vary depending on gender, age, and nationality (Lubowiecki-Vikuk and Dryglas, 2019b).

The cooperation in the regions is discussed in the context of clusters (e.g. Haberla and Kuźmińska-Haberla, 2015). These works represent theoretical reflections on the advantages of this form of cooperation, which are difficult to deny. However, the conclusions they contain appear to diverge from the actual actions of medical institutions in Poland, as these institutions have not yet taken concrete steps in this direction.

Polish authors’ studies infrequently incorporate case studies of medical tourism development in other countries. However, the study by Bajgier-Kowalska *et al.* (2016) on South Korea stands out as an exception. When examining the international determinants of medical tourism development in South Korea, particular emphasis is placed on government support. Strategic intervention through promotional tools can make MTDs more competitive. South Korea, an intriguing country, is becoming increasingly important in the field of medical tourism. This article serves as the basis for identifying the fifth cluster, “Medical tourism destinations worldwide”, of medical tourism research among Polish authors. This cluster is highlighted in purple.

## Discussion

The number of publications by Polish researchers over the 20 years analyzed is at a similar level to other countries, such as China. The increase in publications is visible in the second decade of this period (2014–2023), especially in 2019, as in the case of Chinese medical tourism researchers (Li *et al.*, 2023; Zhong *et al.*, 2023). Comparable results were obtained from the analysis of bibliographic data of international publications, except that, apart from 2017 and the 2019, the highest increase in publications was recorded in 2021 (Dhakate *et al.*, 2023; Habibi *et al.*, 2022). It can be assumed that the COVID-19 pandemic and the consequences (e.g. lockdown, limited or suspended tourist traffic, sanitary regime and

limited work of doctors) severely limited the possibilities of Polish researchers to conduct empirical research, which could have resulted in a decline in the number of publications after 2020.

Polish medical tourism researchers rarely publish research results in international scientific journals, which certainly translates into a small number of citations. On the one hand, there is a need for closer international cooperation, especially in the years 2014–2023, and for joint research in which medical tourism in Poland will be a context for solving serious scientific problems. On the other hand, not all of the published articles are considered to make a serious contribution to medical tourism research. Some published studies appear to be fragmentary or causal in nature (Lubowiecki-Vikuk, 2016a). They are not supported by robust conclusions derived, for example, from a systematic literature review, or the methodology is quite sparse.

Polish medical tourism researchers come from the fields of economics, management, or medicine and health sciences. This is a worldwide manifestation of collaboration between researchers in the health sciences and other researchers in tourism research (Wen *et al.*, 2024). Considering international and leading researchers in this field, and geographers (e.g. Valorie A. Crooks, John Connell and Meghann Ormond) who study the spatial dimension of medical tourism in the socio-economic context, Polish researchers emphasize more the business or health dimension of medical tourism. These two dimensions may be an appropriate direction for further research on medical tourism, where the research gap will concern economics, management or health sciences, and the context will be the conditions for the development of medical tourism in Poland.

Bibliometrics is no substitute for extensive reading (e.g. Donthu *et al.*, 2021) on medical tourism research (Campra *et al.*, 2022; Dhakate *et al.*, 2023). When focusing on the content analysis of articles, certain regularities can be observed. The content analysis of the articles reveals that medical tourism, as a research topic, is approached in two distinct ways. On one hand, authors examine this tendency itself; on the other hand, they utilize medical tourism as an illustrative example in other contexts. The second approach entails several risks, but this does not automatically imply that the research lacks value. As emphasized by Matulka-Kacprzak (2019), medical tourism is highly complex. These connections are evident in the works of Klich (2022) and Białk-Wolf (2022b). However, studying the trends in this domain in isolation from the broader context and practice may yield inconclusive results. It is crucial to consider factors such as the medical industry, tourism, cultural context, ethics, research methodology, and the specific role of respondents' experiences.

The lack of definitional consistency is not merely a theoretical concern; it results in specific variations in research outcomes and has practical implications. Relying on inaccurate data leads to false or, at the very least, inadequate conclusions. Quoting unverified sources is also a problem. Additionally, data related to the number of tourists presents a well-recognized challenge (Białk-Wolf and Arent, 2018). The next important observation is that most of the research focuses on medical inbound tourism. However, there are exceptions. For instance, Matulka-Kacprzak (2019) and, to some extent, Klich (2022) and Białk-Wolf (2022b), address this phenomenon by considering international flows.

#### *Recommendations for future research*

Directions for further research follow directly or indirectly from the clusters identified, with some overlap.

In line with the trend of research on the tourism economy in the context of sustainable development, Polish researchers also discuss sustainable health tourism (Szromek *et al.*, 2023), including medical tourism (Lubowiecki-Vikuk and Machnik, 2020; Machnik and Lubowiecki-Vikuk, 2020; Wiśniewska, 2021). They try to create conceptual models of sustainable medical tourism based on innovation, embedding the development of medical tourism and its products in social, economic, and environmental conditions. At the present stage, this topic has not been sufficiently researched by Polish economists and requires further

serious study. This is important because, for example, the Polish medical tourism business can be a framework for discussions in this direction. Poland is a specific context of (contested) ethical, moral, religious, economic, legal, and socio-cultural obligations of entities operating in the medical tourism market to maintain a balance between medical tourists, the local community, employees of the medical tourism industry, and the environment. Many questions arise, such as to what extent does the medical tourism industry contribute to health inequalities in society? How is the medical tourism industry moving towards a more sustainable and resilient industry?

The second direction of medical tourism research is the experience of a medical tourist (Dabaghi *et al.*, 2022). Polish researchers representing the management discipline also began to try to resolve this issue (Lubowiecki-Vikuk, 2021, 2022). This is a forward-looking direction, as the components of a medical tourist's holistic experience may constantly change (e.g. touchpoints), especially if the stages before, during and after the experience are considered (Cham *et al.*, 2022). Moreover, emotions would need to be captured in the holistic medical tourist experience (e.g. Rasoolimanesh *et al.*, 2025). The transformation of experience is an additional factor in answering the question: How will the components of a medical tourist's holistic experience change over time, and how can this experience be measured taking into account the medical tourist's emotions? To what extent does the measurement of the holistic experience of medical tourists and their emotions translate into effective customer experience management?

The third area of emerging issues in medical tourism research is "perceived value" (Chhabra *et al.*, 2021) and "destination image" (Cham *et al.*, 2022). The image of Poland as a MTD and the attributes of this image were analyzed both from the perspective of medical tourists' opinions, including from Germany and the UK (Dryglas and Lubowiecki-Vikuk, 2019a), as well as from the perspective of international medical tourism experts (Lubowiecki-Vikuk, 2021). Other studies focused on the perception of the city of Krakow as a MTD, which resulted in the recognition of medical tourism as a strategic tourism product of Krakow (Lubowiecki-Vikuk and Dryglas, 2019a). However, knowledge among domestic and foreign medical tourists about the role of brand image and trust in the hospital/clinic brand and the Polish MTD is still limited. However, "perceived value," exclusively as a benefit in the form of value for money (affordability), was the subject of research on the determinants of diasporic medical tourism using the example of Polish people living in Belgium (Mathijssen and Mathijssen, 2020), who reported savings on dental treatment and orthodontics (Mathijssen, 2019). The full scope of "value perception" requires further research, to understand how domestic and foreign medical tourists perceive the benefits and burdens of choosing a specific medical tourism offer, including the role of non-medical support services.

The fourth direction of research on medical tourism may be informal communication between consumers (medical tourists) via the Internet (eWOM) (Mason, 2023), which has not attracted the interest of Polish researchers so far. Attention should also be paid to the *robotic-WOM* to determine the effectiveness of the communication.

The COVID-19 pandemic played a key role in advancing digital health and the adoption of new technologies, especially telemedicine. Notably, these developments have significantly impacted medical tourism (Chhabra *et al.*, 2021). Consequently, a key area for exploration in the field of medical tourism pertains to its potential growth facilitated by the increasing digitization of healthcare services and the use of artificial intelligence (AI) (e.g. Ediansyah *et al.*, 2023). So far, Polish medical tourism researchers have not addressed the ethical and safety issues, and other challenges of using AI in medical tourism. An important question is: How might AI impact healthcare in a specific MTD?

The above-mentioned directions of research on medical tourism do not exhaust the list of research gaps that have not yet been addressed. Most of them relate to marketing and management in medical tourism (Lubowiecki-Vikuk, 2024b), which is a challenge for Polish researchers representing this discipline. Key issues are the supply side of the medical tourism market (Ediansyah *et al.*, 2023), such as implementing resilience strategies (Mohammadipour

and Mazroui Nasrabadi, 2024) and improving the efficiency of processes to increase the satisfaction of medical tourists, doctors, staff and owners, while ensuring sustainability.

It is also recommended that researchers use mixed methods more often in research projects or, in the case of quantitative research, validated measurement scales (e.g. Alp and Yılmaz, 2024; Ghosh and Mandal, 2019; Lubowiecki-Vikuk, 2022). Generalizing about medical tourism is essential for the development of medical tourism research.

### Limitations

A limitation of this article is the nature of the analysis conducted, which does not refer to the scientific quality of the articles selected, a consequence of the method used.

### Conclusions

This review uses bibliometric analysis to map current knowledge arising from publications of Polish researchers. Medical tourism is an area of interest for people in various scientific disciplines, especially the social sciences. This interdisciplinary approach to research does not lend itself to a single, universally accepted definition of medical tourism. Terminological issues are still the subject of lively academic debate and international research. Nevertheless, Poland is an example of an MTD where research is being conducted into the image of the destination and the characteristics that determine its attractiveness. Issues concerning the Polish diaspora play an important part in the worldwide study of medical tourism. This group of medical tourists constitutes a distinct segment with specific characteristics. However, the research findings related to Poland can be applied to diasporas from other countries, as the distinguishing characteristics of this segment are believed to be universal.

This review of publications from the past 20 years sheds light on how academic efforts have progressed, and the challenges arising and research tasks necessary for the future. There is no doubt that Polish researchers need to delve deeper into the difficult issues surrounding the controversial issue of medical tourism. According to research by de la Hoz-Correa *et al.* (2018, p. 207), the sphere of “sensitive practices in medical tourism” including assisted reproduction, will be among the most relevant themes in the future. However, this poses a particular challenge in a country such as Poland, where right-wing views and the strong role of the Catholic Church significantly impact women’s reproductive issues.

There are also practical implications of our review. Firstly, they provide a coherent picture of the medical tourism market in Poland, where the most important groups of medical tourists come from Germany, the United Kingdom, and the Polish diaspora. These groups are the most frequently studied by Polish researchers. Clinics wishing to serve foreign patients should therefore focus on these markets. Secondly, the results of the research can provide valuable information on consumer behavior in the market. In particular, the research work included in the second cluster, “Medical tourist,” has a practical dimension here. Knowing the motivations of patients and the factors that influence the choice of destination means that the product range can be tailored more effectively. Understanding the factors contributing to the development of medical tourism, as described in the work included in the third cluster, “Development of medical tourism,” makes it easier for local and regional governments to support the development of this form of tourism. Another important practical implication stems from the research on destinations (fourth cluster “Poland as a medical tourism destination”). These are useful for those dealing with promotion and building clusters. With knowledge from research on this topic, it is easier to avoid mistakes that prevent effective cooperation. Finally, this article identifies areas of research on medical tourism, which can provide valuable guidance to those dealing with the issue in practice, by pointing out important sources of information of interest.

Research on medical tourism in Poland is aligned with global trends in tourism research. Polish researchers explore the relationship between medical tourism and sustainable

development, design medical tourist experiences, and investigate the impact of artificial intelligence on medical tourism. However, compared to global research (de la Hoz-Correa *et al.*, 2018), Polish studies on medical tourism are less frequently connected to healthcare and ethics. This discrepancy may be attributed to broader cultural factors. Polish scholarly research rarely includes case studies on the development of medical tourism in foreign countries.

## References

- Alp, G. and Yılmaz, Y. (2024), "Medical tourism destination image: scale development", *International Journal of Tourism Research*, Vol. 26 No. 4, e2723, doi: [10.1002/itr.2723](https://doi.org/10.1002/itr.2723).
- Asa, G.A., Fauk, N.K., McLean, C. and Ward, P.R. (2024), "Medical tourism among Indonesians: a scoping review", *BMC Health Services Research*, Vol. 24 No. 1, p. 49, doi: [10.1186/s12913-023-10528-1](https://doi.org/10.1186/s12913-023-10528-1).
- Azzopardi-Muscat, N., Baeten, R., Clemens, T., Habicht, T., Keskimäki, I., Kowalska-Bobko, I., Sagan, A. and van Ginneken, E. (2018), "The role of the 2011 patients' rights in cross-border health care directive in shaping seven national health systems: looking beyond patient mobility", *Health Policy*, Vol. 122 No. 3, pp. 279-283, doi: [10.1016/j.healthpol.2017.12.010](https://doi.org/10.1016/j.healthpol.2017.12.010).
- Bajgier-Kowalska, M., Tracz, M. and Wałach, K. (2016), "Global determinants of the development of medical tourism in South Korea", *Studies of the Industrial Geography Commission of the Polish Geographical Society*, Vol. 30 No. 4, pp. 119-132, doi: [10.24917/20801653.304.9](https://doi.org/10.24917/20801653.304.9).
- Bartłomiejczyk, M. and Pollabauer, S. (2022), "Communication needs in circumvention medical tourism: multilingual websites of abortion clinics", *Linguistica Silesiana*, Vol. 43, pp. 237-256, doi: [10.24425/linsi.2022.141226](https://doi.org/10.24425/linsi.2022.141226).
- Baydeniz, E., Çılğınoğlu, H. and Valeri, M. (2024), "Impact of health tourism visitor experiences on behavioral intention", *Journal of Organizational Change Management*, Vol. 37 No. 5, pp. 1133-1153, doi: [10.1108/JOCM-09-2023-0381](https://doi.org/10.1108/JOCM-09-2023-0381).
- Białk-Wolf, A. (2010), "The potential of development of medical tourism", *Ekonomiczne Problemy Usług*, Vol. 591 No. 53, pp. 653-662, [in Polish].
- Białk-Wolf, A. (2014), *Medical Tourism: Development Perspectives in the Pomeranian Voivodship*, [in Polish], available at: <http://www.gdansk4u.pl/uploads/TurystykaMedycznaRaport.pdf> (accessed 27 July 2024).
- Białk-Wolf, A. (2019), "Destination Pomerania. Swedish medical tourists in Poland", in Kirsch, F.-M., Ljungbo, K. and Borg, E. (Eds), *Medicinturism. Gränsöverskridande Sjukvård I Teori Och Praktik*, Gidlunds, Möklinta, pp. 128-153, [in Swedish].
- Białk-Wolf, A. (2022a), "A case study: Poland as a destination for medical tourism", in Asefi, M. (Ed.), *Praxisbuch Medizintourismus: Grundlagen, Potenziale, Umsetzung*, Medizinisch Wissenschaftliche Verlagsgesellschaft, Berlin, pp. 49-54, [in German] doi: [10.32745/9783954667321](https://doi.org/10.32745/9783954667321).
- Białk-Wolf, A. (2022b), "The relationship between public health and medical tourism", in Nunkoo, R., Wen, J. and Kozak, M. (Eds), *Handbook on Tourism, Public Health and Wellbeing*, pp. 15-35, doi: [10.4337/9781800378308.00008](https://doi.org/10.4337/9781800378308.00008).
- Białk-Wolf, A. and Arent, M. (2018), "Medical tourists in Poland in the international context", *Zeszyty Naukowe. Turystyka i Rekreacja*, Vol. 1 No. 21, pp. 99-111, [in Polish].
- Białk-Wolf, A., Arent, M. and Buziewicz, A. (2016), *Analysis of the Supply of Health Tourism in Poland, POT*, Warszawa, [in Polish].
- Biernacka, J. (2022), "Influence of medical tourism on structural changes in health tourism in the West Pomeranian Voivodeship", [in Polish], Doctoral Dissertation, West Pomeranian University of Technology in Szczecin, available at: <https://oa.zut.edu.pl/items/e9210d2f-3e5e-42c7-9e38-7acd0a4af0d2> (accessed 27 July 2024).
- Biernat, E., Ćwiklińska, J., Dziedzic, E., Kachniewska, M. and Zawistowska, H. (2020), *Medical Tourism: Selected Issues*, SGH, Warszawa, [in Polish].

- Boguszewicz-Kreft, M. (2017), "The consumer's perspective in medical tourism: identification of research gaps", *Handel Wewnętrzny*, Vol. 5 No. 370, pp. 63-71.
- Boguszewicz-Kreft, M., Sokołowska, K., Magier-Łakomy, E. and Janiūnaitė, B. (2019), "The country of origin of services and consumers as the determinants of purchase intentions in medical tourism", *Journal of East European Management Studies*, Vol. 24 No. 3, pp. 466-483, doi: [10.5771/0949-6181-2019-3-466](https://doi.org/10.5771/0949-6181-2019-3-466).
- Boguszewicz-Kreft, M., Kuczamer-Kłopotowska, S., Kozłowski, A., Ayci, A. and Abuhashesh, M. (2020), "The theory of planned behaviour in medical tourism: international comparison in the young consumer segment", *International Journal of Environmental Research and Public Health*, Vol. 17 No. 5, p. 1626, doi: [10.3390/ijerph17051626](https://doi.org/10.3390/ijerph17051626).
- Boguszewicz-Kreft, M., Kuczamer-Kłopotowska, S. and Kozłowski, A. (2022), "The role and importance of perceived risk in medical tourism. Applying the theory of planned behaviour", *PLoS ONE*, Vol. 17 No. 1, e0262137, doi: [10.1371/journal.pone.0262137](https://doi.org/10.1371/journal.pone.0262137).
- Borek, E. (2013), "Medical tourism in Europe and in Poland – present status, development barriers, perspectives and recommendations concerning the development of medical tourism in Poland", *Public Health and Governance*, Vol. 11 No. 4, pp. 333-348, doi: [10.4467/20842627OZ.14.033.2172](https://doi.org/10.4467/20842627OZ.14.033.2172).
- Borek, D., Bugajska, M. and Raniszewski, S. (2023), "Innovative trends in health tourism – medical, legal and organizational aspects", *Scientific Papers of Silesian University of Technology Organization and Management Series*, Vol. 172, pp. 25-40, doi: [10.29119/1641-3466.2023.172.2](https://doi.org/10.29119/1641-3466.2023.172.2).
- Butler, R. (2023), "Rethinking tourism: why and who?", *Worldwide Hospitality and Tourism Themes*, Vol. 15 No. 6, pp. 602-607, doi: [10.1108/WHATT-09-2023-0108](https://doi.org/10.1108/WHATT-09-2023-0108).
- Campra, M., Riva, P., Oricchio, G. and Brescia, V. (2022), "Bibliometrix analysis of medical tourism", *Health Services Management Research*, Vol. 35 No. 3, pp. 172-188, doi: [10.1177/09514848211011738](https://doi.org/10.1177/09514848211011738).
- Cham, T., Lim, Y. and Sigala, M. (2022), "Marketing and social influences, hospital branding, and medical tourists' behavioural intention: before- and after-service consumption perspective", *International Journal of Tourism Research*, Vol. 24 No. 1, pp. 140-157, doi: [10.1002/jtr.2489](https://doi.org/10.1002/jtr.2489).
- Chhabra, A., Munjal, M., Mishra, P.C., Singh, K., Das, D., Kuhar, N. and Vats, M. (2021), "Medical tourism in the COVID-19 era: opportunities, challenges and the way ahead", *Worldwide Hospitality and Tourism Themes*, Vol. 13 No. 5, pp. 660-665, doi: [10.1108/WHATT-05-2021-0078](https://doi.org/10.1108/WHATT-05-2021-0078).
- Connell, J. (2013), "Contemporary medical tourism: conceptualisation, culture and commodification", *Tourism Management*, Vol. 34, pp. 1-13, doi: [10.1016/j.tourman.2012.05.009](https://doi.org/10.1016/j.tourman.2012.05.009).
- Dabaghi, H., Saieda Ardakani, S. and Tabataba'i-Nasab, S.M. (2022), "Customer experience management in medical tourism (case study: Iranian hospital's medical tourists)", *Journal of Islamic Marketing*, Vol. 13 No. 1, pp. 198-226, doi: [10.1108/JIMA-04-2020-0092](https://doi.org/10.1108/JIMA-04-2020-0092).
- de la Hoz-Correa, A., Muñoz-Leiva, F. and Bakucz, M. (2018), "Past themes and future trends in medical tourism research: a co-word analysis", *Tourism Management*, Vol. 65, pp. 200-211, doi: [10.1016/j.tourman.2017.10.001](https://doi.org/10.1016/j.tourman.2017.10.001).
- Dhakate, N., Joshi, R., Ali, F. and Kumar, S. (2023), "Current knowledge and future research directions of medical tourism: insights from a bibliometric analysis", *Asia Pacific Journal of Tourism Research*, Vol. 28 No. 8, pp. 889-906, doi: [10.1080/10941665.2023.2276848](https://doi.org/10.1080/10941665.2023.2276848).
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N. and Lim, W.M. (2021), "How to conduct a bibliometric analysis: an overview and guidelines", *Journal of Business Research*, Vol. 133, pp. 285-296, doi: [10.1016/j.jbusres.2021.04.070](https://doi.org/10.1016/j.jbusres.2021.04.070).
- Dryglas, D. (2018), *Designing a Health Tourism Product Structure Model in the Process of Marketing Management*, PWN, Warsaw.
- Dryglas, D. and Lubowiecki-Vikuk, A. (2019a), "Image of Poland as perceived by German and British medical tourists", *Tourism Review*, Vol. 74 No. 4, pp. 861-871, doi: [10.1108/TR-07-2018-0105](https://doi.org/10.1108/TR-07-2018-0105).

- Dryglas, D. and Lubowiecki-Vikuk, A. (2019b), "The attractiveness of Poland as a medical tourism destination from the perspective of German and British consumers", *Entrepreneurial Business and Economics Review*, Vol. 7 No. 2, pp. 45-62, doi: [10.15678/EBER.2019.070203](https://doi.org/10.15678/EBER.2019.070203).
- Dziedzic, E. (2018), "Competitiveness of medical tourism offers and government policy", *Folia Turistica*, Vol. 48, pp. 61-85, doi: [10.5604/01.3001.0012.7692](https://doi.org/10.5604/01.3001.0012.7692).
- Ediansyah, Arief, M., Hamsal, M. and Abdinagoro, S.B. (2023), "A decade of medical tourism research: looking back to moving forward", *Journal of Hospitality and Tourism Insights*, Vol. 6 No. 5, pp. 2158-2172, doi: [10.1108/JHTI-06-2022-0250](https://doi.org/10.1108/JHTI-06-2022-0250).
- Ghosh, T. and Mandal, S. (2019), "Medical tourism experience: conceptualization, scale development, and validation", *Journal of Travel Research*, Vol. 58 No. 8, pp. 1288-1301, doi: [10.1177/0047287518813469](https://doi.org/10.1177/0047287518813469).
- Haberla, M. and Kuźmińska-Haberla, A. (2015), "Expectations of Lower Silesia medical entities with regard to medical tourism cluster in the light of empirical studies", *Problemy Zarządzania, Finansów i Marketingu*, Vol. 867 No. 40, pp. 271-278, doi: [10.18276/pzfm.2015.40-22](https://doi.org/10.18276/pzfm.2015.40-22).
- Habibi, A., Mousavi, M., Jamali, S.M. and Ale Ebrahim, N. (2022), "A bibliometric study of medical tourism", *Anatolia*, Vol. 33 No. 3, pp. 415-425, doi: [10.1080/13032917.2021.1954042](https://doi.org/10.1080/13032917.2021.1954042).
- Kachniewska, M. (2018), "Motivations for participation in incoming medical tourism to Poland", *Biuletyn KPZK PAN*, Vol. 269, pp. 27-42.
- Khalilzadeh, J., Kozak, M. and Chiappa, G.del. (2024), "Tourism motivation: a complex adaptive system", *Journal of Destination Marketing and Management*, Vol. 31, 100861, doi: [10.1016/j.jdmm.2024.100861](https://doi.org/10.1016/j.jdmm.2024.100861).
- Klich, J. (2008), "The globalization of health services", *Gospodarka Narodowa-The Polish Journal of Economics*, Vol. 223 No. 4, pp. 21-40, doi: [10.33119/GN/101301](https://doi.org/10.33119/GN/101301).
- Klich, J. (2022), "The framework for investigating globalization's impact on health systems", *Horyzonty Polityki*, Vol. 13 No. 42, pp. 155-169, doi: [10.35765/hp.2209](https://doi.org/10.35765/hp.2209).
- Kordasiewicz, J. (2022), "Quality policy in creating organizational maturity in a medical tourism enterprise", *Marketing of Scientific and Research Organizations*, Vol. 43 No. 1, pp. 95-128, doi: [10.2478/minib-2022-0005](https://doi.org/10.2478/minib-2022-0005).
- Kowalska, K. (2016), "Controversial travels of medical tourism", *Folia Turistica*, Vol. 40, pp. 71-84, [in Polish], doi: [10.5604/01.3001.0010.4019](https://doi.org/10.5604/01.3001.0010.4019).
- Kowalska-Bobko, I., Mokrzycka, A., Sagan, A., Włodarczyk, W.C. and Zabdyr-Jamróż, M. (2016), "Implementation of the cross-border healthcare directive in Poland: how not to encourage patients to seek care abroad?", *Health Policy*, Vol. 120 No. 11, pp. 1233-1239, doi: [10.1016/j.healthpol.2016.07.011](https://doi.org/10.1016/j.healthpol.2016.07.011).
- Łęcka, I. (2003), "New (?) trends in health tourism", *Prace I Studia Geograficzne*, Vol. 32, pp. 173-190, [in Polish].
- Li, H., Du, Y., Xue, T. and Lewis Jenkins, C. (2023), "Chinese medical tourism: review and research agenda", *Journal of Quality Assurance in Hospitality and Tourism*, Vol. 24 No. 5, pp. 663-687, doi: [10.1080/1528008X.2022.2073939](https://doi.org/10.1080/1528008X.2022.2073939).
- Liberska, B. (2012), "Globalization and offshoring of medical services", *Public Health and Governance*, Vol. 10 No. 3, pp. 127-132, [in Polish] doi: [10.4467/20842627OZ.13.014.1162](https://doi.org/10.4467/20842627OZ.13.014.1162).
- Lim, W.M., Kumar, S. and Ali, F. (2022), "Advancing knowledge through literature reviews: 'what', 'why', and 'how to contribute'", *The Service Industries Journal*, Vol. 42 Nos. 7-8, pp. 481-513, doi: [10.1080/02642069.2022.2047941](https://doi.org/10.1080/02642069.2022.2047941).
- Lubowiecki-Vikuk, A. (2012), "Medical tourism as a form of manifestation of contemporary trends and tendencies in tourism", *Ekonomiczne Problemy Usług*, Vol. 84, pp. 553-568, [in Polish].
- Lubowiecki-Vikuk, A. (2016a), "Medical tourism: a scientific view from Poland", *Medical Tourism Magazine*, available at: <https://www.magazine.medicaltourism.com/article/scientific-view-polish-researchers-medical-tourism-poland> (accessed 27 July 2024).

- Lubowiecki-Vikuk, A. (2016b), "Participation in medical tourism versus physical activity of patients after liposuction: what are the concerns about health and quality of life?", *Physical Culture and Sport. Studies and Research*, Vol. 69 No. 1, pp. 29-42, doi: [10.1515/pcssr-2015-0027](https://doi.org/10.1515/pcssr-2015-0027).
- Lubowiecki-Vikuk, A. (2021), *Consumers' Perceptions of Marketing Composition in Medical Tourism Supply Entities*, SGH, Warszawa, [in Polish].
- Lubowiecki-Vikuk, A. (2022), "Medical tourism experience", in Buhalis, D. (Ed.), *Encyclopedia of Tourism Management and Marketing*, Edward Elgar Publishing, pp. 173-176, doi: [10.4337/9781800377486.medical.tourism.experience](https://doi.org/10.4337/9781800377486.medical.tourism.experience).
- Lubowiecki-Vikuk, A. (2024a), "Medical tourism market segmentation", in Ratten, V. (Ed.), *International Encyclopedia of Business Management*, Elsevier, doi: [10.1016/B978-0-443-13701-3.00013-X](https://doi.org/10.1016/B978-0-443-13701-3.00013-X).
- Lubowiecki-Vikuk, A. (2024b), "Medical tourism marketing", in Ratten, V. (Ed.), *International Encyclopedia of Business Management*, Elsevier, doi: [10.1016/B978-0-443-13701-3.00012-8](https://doi.org/10.1016/B978-0-443-13701-3.00012-8).
- Lubowiecki-Vikuk, A. and Dryglas, D. (2019a), "Central and Eastern Europe as a medical tourism destination: a case study of Poland", *Almatourism – Journal of Tourism, Culture and Territorial Development*, Vol. 10 No. 19, pp. 25-43, doi: [10.6092/issn.2036-5195/8199](https://doi.org/10.6092/issn.2036-5195/8199).
- Lubowiecki-Vikuk, A. and Dryglas, D. (2019b), "Medical tourism services and medical tourism destinations in Central and Eastern Europe – the opinion of Britons and Germans", *Economic Research-Ekonomska Istrazivanja*, Vol. 32 No. 1, pp. 1256-1274, doi: [10.1080/1331677X.2019.1627892](https://doi.org/10.1080/1331677X.2019.1627892).
- Lubowiecki-Vikuk, A. and Kurkowiak, J. (2017), "Medical tourism potential of Central and Eastern Europe: attempt at classification", *CBU International Conference Proceedings 2017*, Vol. 5, pp. 286-293, doi: [10.12955/cbup.v5.940](https://doi.org/10.12955/cbup.v5.940).
- Lubowiecki-Vikuk, A. and Machnik, A. (2020), "Sustainable medical tourism: conceptual framework", in Leal Filho, W., Wall, T., Azul, A., Brandli, L. and Özuyar, P. (Eds), *Good Health and Well-Being. Encyclopedia of the UN Sustainable Development Goals*, Springer, Cham, doi: [10.1007/978-3-319-69627-0\\_112-1](https://doi.org/10.1007/978-3-319-69627-0_112-1).
- Lubowiecki-Vikuk, A. and Rab-Przybyłowicz, J. (2015), "Selected aspects of the functioning of the medical tourism market in Poland", *Folia Turistica*, Vol. 34, pp. 85-107, [in Polish].
- Machnik, A. and Lubowiecki-Vikuk, A. (2020), "Innovations in medical tourism against the paradigm of sustainable development background", in Ratten, V., Álvarez-García, J. and de la Cruz del Río-Rama, M. (Eds), *Entrepreneurship, Innovation and Inequality: Exploring Territorial Dynamics and Development*, Routledge, London, pp. 132-160, doi: [10.4324/9780429292583-9](https://doi.org/10.4324/9780429292583-9).
- Main, I. (2014), "Medical travels of Polish female migrants in Europe", *Czech Sociological Review*, Vol. 50 No. 6, pp. 897-918, doi: [10.13060/00380288.2014.50.6.147](https://doi.org/10.13060/00380288.2014.50.6.147).
- Mason, A. (2023), "Medical tourism and communication", in *Oxford Research Encyclopedia of Communication*, Oxford University Press, doi: [10.1093/acrefore/9780190228613.013.1461](https://doi.org/10.1093/acrefore/9780190228613.013.1461).
- Mathijssen, A. (2019), "Home, sweet home? Understanding diasporic medical tourism behaviour. Exploratory research of Polish immigrants in Belgium", *Tourism Management*, Vol. 72, pp. 373-385, doi: [10.1016/j.tourman.2018.12.009](https://doi.org/10.1016/j.tourman.2018.12.009).
- Mathijssen, A. and Dziedzic, E. (2024), "Diasporic medical tourism: examining tourists' profiles, antecedents and behavioural intention", *European Journal of Tourism Research*, Vol. 37, p. 3702, doi: [10.54055/ejtr.v37i.3010](https://doi.org/10.54055/ejtr.v37i.3010).
- Mathijssen, A. and Mathijssen, F.P. (2020), "Diasporic medical tourism: a scoping review of quantitative and qualitative evidence", *Globalization and Health*, Vol. 16 No. 1, p. 27, doi: [10.1186/s12992-020-00550-x](https://doi.org/10.1186/s12992-020-00550-x).
- Matulka-Kacprzak, D. (2019), "The impact of medical tourism on the availability and quality of healthcare in Poland", Doctoral Dissertation, University of Warsaw. [in Polish].
- Mohammadipour, E. and Mazroui Nasrabadi, E. (2024), "An investigation into resilience strategies in the medical tourism supply chain", *Turyzm/Tourism*, Vol. 34 No. 2, pp. 7-34, doi: [10.18778/0867-5856.34.2.01](https://doi.org/10.18778/0867-5856.34.2.01).
- Mruk, H. (2009), *Marketing of Medical Practices in the Healthcare Market*, Wolters Kluwer, [in Polish].

- Orzechowski, R. (2019), "Applying reminiscence therapy among seniors in medical tourism", *Folia Turistica*, Vol. 52, pp. 187-200, doi: [10.5604/01.3001.0013.3005](https://doi.org/10.5604/01.3001.0013.3005).
- Panasiuk, A. (2017), "Health tourism in an economic perspective", in Szymańska, E., Dziedzic, E., Panasiuk, A., Panfiluk, E. and Rutkowski, A. (Eds), *Innowacje W Turystyce Zdrowotnej*, Difin, Warszawa, pp. 68-100, [in Polish].
- Panfiluk, E. and Szymańska, E. (2017), "The measurement of the innovativeness of health tourism services using an adequacy matrix title of the article", *Entrepreneurship and Sustainability Issues*, Vol. 4 No. 4, pp. 400-420, doi: [10.9770/jesi.2017.4.4\(1\)](https://doi.org/10.9770/jesi.2017.4.4(1)).
- Pffor, C., Locher, C., Volgger, M. and Bialk-Wolf, A. (2020), "The nexus between medical tourism and health policy: a comparative case analysis of Australia, Germany, Italy and Poland", *International Journal of Tourism Policy*, Vol. 10 No. 3, pp. 244-261, doi: [10.1504/ijtp.2020.111289](https://doi.org/10.1504/ijtp.2020.111289).
- Puczkó, L. (2022), "Medical tourism", in Buhalis, D. (Ed.), *Encyclopedia of Tourism Management and Marketing*, Edward Elgar Publishing, pp. 166-169, doi: [10.4337/9781800377486.medical.tourism](https://doi.org/10.4337/9781800377486.medical.tourism).
- Rab-Przybyłowicz, J. (2013), "Creating a medical tourism product in Szczecin", [in Polish], Doctoral Dissertation, University of Szczecin, available at: <https://nauka-polska.pl/#/profile/research?id=272823&k=oeo7u> (accessed 27 July 2024).
- Rab-Przybyłowicz, J. (2014), *Medical Tourism Product*, Difin, Warszawa, [in Polish].
- Rab-Przybyłowicz, J. (2016), "Trends and socio-economic aspects of medical tourism development in Poland", *Studia Periegetica*, Vol. 2 No. 16, pp. 99-118.
- Rasoolimaneh, S.M., Gannon, M., Taheri, B. and Mikulić, J. (2025), "Assessing a model of customer rage: does customer entitlement moderate relationships between rage emotions, expressions and behaviors?", *Journal of Travel Research*, Vol. 64 No. 2, pp. 462-484, doi: [10.1177/00472875231213992](https://doi.org/10.1177/00472875231213992).
- Rudzińska, M. (2017), "Personnel function in human capital management in health units of the medical tourism sector", [in Polish], Doctoral Dissertation, Medical University of Lodz, available at: <https://naukiozdrowiu.umed.lodz.pl/wp-content/uploads/2017/05/Streszczenie-Rozprawy-Doktorskiej-Magdalena-Rudzi%C5%84ska.pdf> (accessed 27 July 2024).
- Sánchez, M., Sousa, B., Veloso, C. and Lubowiecki-Vikuk, A. (2022), "Trends and segmentation of medical tourism: an approach to reproductive tourism", in *Advances in Tourism, Technology and Systems: Selected Papers from ICOTTS 2021*, Vol. 1, pp. 223-233, doi: [10.1007/978-981-19-1040-1\\_19](https://doi.org/10.1007/978-981-19-1040-1_19).
- Szromek, A.R., Puciato, D., Markiewicz-Patkowska, J.I. and Colmekcioglu, N. (2023), "Health tourism enterprises and adaptation for sustainable development", *International Journal of Contemporary Hospitality Management*, Vol. 35 No. 1, pp. 1-25, doi: [10.1108/IJCHM-01-2022-0060](https://doi.org/10.1108/IJCHM-01-2022-0060).
- Sztorc, M. (2017), "Cross-border medical tourism in the context of legal regulations", *Problemy Transportu i Logistyki*, Vol. 4 No. 40, pp. 121-132, doi: [10.18276/ptl.2017.40-11](https://doi.org/10.18276/ptl.2017.40-11).
- Wen, J., Kozak, M. and Hu, F. (2024), "Tourism research", in Ratten, V. (Ed.), *International Encyclopedia of Business Management*, Elsevier, doi: [10.1016/B978-0-443-13701-3.00388-1](https://doi.org/10.1016/B978-0-443-13701-3.00388-1).
- Wiśniewska, A. (2020), *Enterprise in Medical Tourism: Directions for Development*, Difin, Warszawa, [in Polish].
- Wiśniewska, A. (2021), "Sustainable development and management of medical tourism companies in Poland", *International Journal of Management and Economics*, Vol. 57 No. 2, pp. 151-160, doi: [10.2478/ijme-2021-0010](https://doi.org/10.2478/ijme-2021-0010).
- Zhong, L., Sun, S., Law, R., Li, X. and Deng, B. (2023), "Health tourism in China: a 40-year bibliometric analysis", *Tourism Review*, Vol. 78 No. 1, pp. 203-217, doi: [10.1108/TR-03-2022-0112](https://doi.org/10.1108/TR-03-2022-0112).

**Corresponding author**

Adrian Lubowiecki-Vikuk can be contacted at: [alubow@sgh.waw.pl](mailto:alubow@sgh.waw.pl)

**Table A1.** Chronological explication of the term “medical tourism”: the perspective of Polish researchers and the discipline of science they represent

Year	Author(s)	Discipline of science	Medical tourism
2007	Szalonka	Economics	Organization [by tour operators] of visits to doctors' and dentists' surgeries
2008	Klich	Economics	People moving to other countries (to another continent) to acquire [exemplify consumption of] quality health services at a competitive price, including plastic surgery, dentistry, and eye surgery
2008	Prochorowicz	Economics	Nothing more than combining treatment with tourism
2008	Puchnarewicz	Social and economic geography	Voluntary travel of people outside their own country to obtain professional medical care
2009	Mruk	Management	Organizing therapeutic tourist stays of patients from other countries in Poland, [because of] the ease of movement in space; [it concerns] the migration of patients and doctors between different points in space
2010	Białk-Wolf	Economics	Voluntary traveling abroad with the intent to make use of medical treatment for the purpose of preserving life, enhancing quality of life, or improving one's appearance; because of lower cost, better quality, or the inaccessibility of some procedure at the place of residence (resulting from a lack of personnel, knowledge, technical equipment and procedures, or long waiting times or legal limitations) often combined with sightseeing in the visited place (...) concerns only the international aspect
2010	Lubowiecki-Vikuk	Physical culture science	A deliberate human activity in which travelers (medical tourists) seek to use health services in their own country or abroad to maintain (or improve) their health and/or aesthetic appearance, sometimes combined with relaxation, physical and mental regeneration, sightseeing, and entertainment
2012	Liberska	Economics	A form of offshoring of medical services, i.e. providing healthcare to foreigners in lower-cost countries
2013	Borek	Medical sciences	When consumers choose to travel across national borders for different types of medical services, e.g. dental treatments, aesthetic medicine, plastic surgery, surgical procedures, and infertility treatment
2014	Rab-Przybyłowicz	Economics	A form of travel away from the place of permanent residence, the main purpose of which is the improvement of health or body aesthetics, rehabilitation, or renewal of psychophysical strength under the care of a specialist in an office, clinic, or hospital, combined with a wide range of alternative leisure activities in each city or region. However, this trip should include at least one overnight stay and last no longer than 12 months
2015	Niezgoda and Kowalska	Economics	Related to the health situation of the emitting and receiving country, but also due to the general increase in social mobility, the opening of borders, and the development of tourism as a social trend

*(continued)*

**Table A1.** Continued

Year	Author(s)	Discipline of science	Medical tourism
2017	Panasiuk	Economics, management	The health tourism sub-market, which also includes medical tourism related to infertility treatment, as well as aesthetic medicine procedures, and abortion tourism, and is developing over very short distances, including cross-border trips and even within a country
2018	Dziedzic	Economics	The field of action of the private sector, (...) is located at the interface between two distinct activities: medicine (and more broadly: healthcare) and tourism
2019	Matulka-Kacprzak	Management	<ul style="list-style-type: none"> <li>• Narrow approach: voluntary departure from the place of permanent residence for a continuous period of not more than one year to obtain (at home or abroad) healthcare requiring specialized medical intervention and highly qualified medical staff, provided by public and private healthcare facilities</li> <li>• Broad approach: this trip may be combined with traditional leisure, sightseeing, and physical and mental regeneration</li> </ul>
2020	Biernat* and Kachniewska**	Physical culture science*, management**	Any temporary stay away from the place of residence (in and outside the country), to maintain and restore health and/or to obtain the aesthetic appearance of one's own body – combined with rest, recuperation of physical and mental strength, sightseeing, and discovering tourist attractions and entertainment; does not exclude day trips or persons receiving cross-border care
2020	Wiśniewska	Economics, management	Travel (alone or with an accompanying person) to another region or country to undergo a planned medical procedure to improve physical appearance, enhance quality of life, or save health, due to the price of the service in question, the unavailability of the service in the country for technological reasons, or due to legal restrictions or excessive waiting time for the medical procedure
2021	Lubowiecki-Vikuk	Management	<ul style="list-style-type: none"> <li>• The social dimension: taking into account the need to alleviate the stress of treatment, it is a deliberate act by a medical tourist to seek, away from their usual place of residence, usually private health services in order to maintain (or improve) their health and/or the aesthetic appearance of their body; this aspect of healthcare in the broadest sense can be combined with leisure and tourist experiences – typical behavior of accompanying persons</li> <li>• The business dimension: a business activity in which private healthcare facilities, equipped with medical equipment and suitably arranged infrastructure, and having the facilities of specialized medical staff, express their willingness to provide healthcare services, either individually or as a package, to domestic and foreign patients – medical tourists – for a fee</li> </ul>

**Source(s):** Based on [Lubowiecki-Vikuk \(2021, p. 26–27, p. 65–66\)](#), [Mruk \(2009, p. 32\)](#)