

Barriers to the development of medical tourism: a scoping review from a global perspective and lessons learned for Indonesia

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Abstract

Medical tourism enhances access to specialized care, boosts economic growth, and fosters international collaboration. This is crucial for Indonesia to improve healthcare services, attract international patients, and strengthen its economy. This study aimed to identify and analyze barriers hindering medical tourism development globally and provide recommendations for Indonesia. A scoping review was conducted following Arksey and O'Malley's framework. The literature search occurred in September 2024 using PubMed and Scopus. Articles in English published between 2015 and 2024 were included. The review identified several obsta-

cles to medical tourism. Internal factors include workforce issues, organizational systems, technological limitations, inadequate facilities, and insufficient marketing. External challenges are competitive pressures, lack of supporting infrastructure, regulatory constraints, and economic circumstances. To address these, Indonesian providers should enhance staff capabilities, implement comprehensive management strategies, embrace digital technologies, improve ancillary infrastructure, and boost promotional activities. Transparent and standardized pricing for medical services is also essential. The government should integrate medical tourism policies to ensure consistency, maintain the economic situation, strengthen hospital competitiveness, and develop supporting infrastructure. These recommendations should form the basis for a detailed strategy to strengthen the competitiveness of Indonesia's medical tourism hospitals against international competitors.

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Introduction

Globalization across multiple sectors has contributed to the increasing complexity of addressing cultural needs in a diverse world. In healthcare, understanding culture and behavior is essential for providing comprehensive services and a good experience. This becomes even more crucial in medical tourism, where patients often come from a wide range of cultural backgrounds and geographic regions.¹

Medical tourism refers to the act of traveling within one's own country, either between cities or states, to seek necessary medical treatment.² This growing trend has gained popularity in Southeast Asian countries like Thailand and Malaysia, where healthcare services are more cost-effective compared to those in developed nations.³ In 2021, Thailand emerged as a prominent medical tourism destination, drawing approximately one million visitors each year and representing 90% of medical tourism in Asia.⁴ Malaysia follows closely behind, ranking second in Southeast Asia for annual medical tourism visitors, with an estimated 561 thousand people.⁵ Despite the appeal of lower-cost destinations, developed countries such as the United States, Japan, and South Korea maintain their competitiveness by leveraging advanced medical technologies.³

To facilitate medical tourism, developing countries are establishing global collaborations such as working with insurance companies, travel agents, and renowned medical institutions. Additionally, hospitals in these countries are increasingly collaborating with leading hospitals and medical schools in developed nations to enhance credibility, facilitate professional exchanges, and enable the transfer of medical technologies.⁶

Indonesia, a developing nation, shows promise in advancing medical tourism. With its internationally certified hospitals, cutting-edge medical technology, and diverse tourist attractions, Indonesia has significant potential to draw medical tourists from

both domestic and international sources.⁷ Similarly, India, another developing country, is well-positioned to become a medical tourism destination. India's advantages include internationally recognized medical professionals, state-of-the-art facilities, and highly competitive pricing.⁸

Although medical tourism is widely embraced, it still faces several obstacles. The challenges hindering the growth of medical tourism across various nations are multifaceted. In South Korea, the primary impediment to progress is the absence of effective and unified government backing. Furthermore, issues related to language proficiency and specialized training in the field of medical tourism require immediate attention.

Despite its growing popularity, medical tourism is facing several challenges. Barriers to its development in various countries are very complex. In South Korea, key barriers include the lack of efficient and centralized government support as well as the need for improvements in communication skills and specialist training in medical tourism.⁹ Other countries, such as Russia, also face additional barriers, such as underdeveloped services and infrastructure, as well as weak marketing strategies.¹⁰ Each country faces unique challenges that hinder the development of its medical tourism based on its specific characteristics. Understanding these differences is crucial for countries willing to develop their medical tourism. These insights are also important for addressing the research question regarding their relevance to Indonesia's situation.

While numerous studies have identified barriers to the development of medical tourism in various countries, there remains a lack of research that addresses these barriers in a global context and compares differences across countries. Some countries that have identified barriers to medical tourism development include the United Arab Emirates,^{11,12} Iran,^{13–15} Jordan,¹⁶ China,¹⁷ Taiwan,¹⁸ Indonesia,¹⁹ South Korea,⁹ Austria,²⁰ Australia,²¹ Guatemala,^{22,23} Greece,²⁴ Canada,²⁵ dan Turkey.²⁶ However, no study has examined these barriers from a global perspective or compared differences between countries with various characteristics.

This study aims to identify and analyze the key barriers hindering the development of medical tourism at the global level through a scoping approach. It also seeks to draw insights from these global challenges to inform the development of medical tourism in Indonesia.

Materials and Methods

This scoping review was conducted in accordance with the guidelines developed by Arksey and O'Malley (2005) and Levac *et al.* (2010). Based on this, five steps were taken to conduct a scoping review. The following explains these steps, as adapted in this study.

Step 1: identifying the research question

Globally, several countries have established excellent medical tourism services. However, some countries such as Indonesia, India, and Vietnam are still striving to develop their offerings and competing to provide the best services. To understand the complexities hindering the development of medical tourism on a global scale and provide recommendations for countries developing this sector, it is crucial to identify the research questions. The research question formulated is: What factors act as barriers to the development of medical tourism from a global perspective in order to serve

as a learning opportunity for Indonesia and other countries developing their medical tourism industries?

Step 2: identifying relevant studies

In this stage, a comprehensive literature search was conducted to identify relevant studies. Articles were retrieved through systematic screening of the PubMed and Scopus databases for the period 2015 to 2024. The search strategy utilized the following query: ("health tourism" OR "medical tourism" OR "wellness tourism" OR "healthcare tourism" OR "medical travel") AND ("barriers" OR "challenges" OR "hurdles" OR "limitations" OR "constraints") AND ("develop*" OR "implement*" OR "growth" OR "expand*" OR "establish*" OR "strategy*" OR "plan*").

Step 3: study selection

As illustrated in Figure 1, the initial search yielded 361 articles, of which 71 were identified as duplicates and subsequently removed. Following title-based screening, 232 articles were excluded. Additionally, one article was manually added from another source based on the research inclusion criteria, resulting in a total of 59 articles. These articles were further screened based on methodology, content relevance, and research location. During this process, 52 articles were excluded due to inconsistencies with the study criteria, leaving seven articles for in-depth analysis (Figure 1). To meet the inclusion criteria of this study, the following research question was addressed: What factors serve as barriers to the development of medical tourism in a country? The study selection was restricted to articles employing scoping literature review and narrative review methodologies. Furthermore, only studies utilizing qualitative methods and in-depth interview techniques were included. Additional exclusion criteria were applied based on the geographical location of the study, limiting the analysis to research conducted in the Asian region.

Step 4: charting data

After identifying and selecting the relevant studies, the next step involved charting the data. At this stage, the researcher systematically outlined key information essential for the development of this article. The extracted data were organized into a structured table, which included the following variables: title, journal, type of informant, number of informants, research location (country),

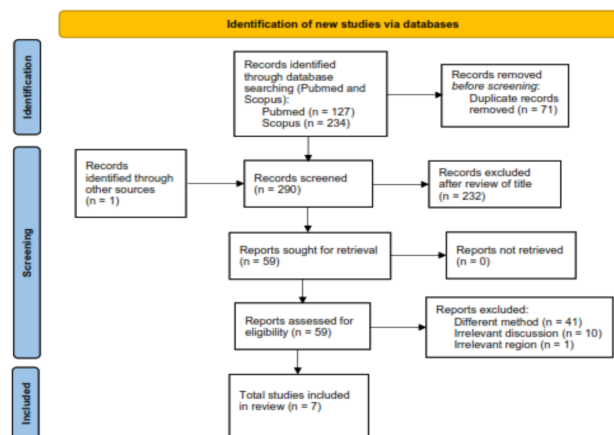


Figure 1. Study selection flowchart.

identified barriers, and source references. Subsequently, the identified barriers were categorized into two main groups: internal factors and external factors. These barriers were then systematically grouped based on the respective countries where the studies were conducted, enabling a comparative analysis of medical tourism challenges across different Asian regions.

Step 5: collating, summarizing, and reporting the results

The final results of the study selection process are presented in detail using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram (Figure 1). The selected articles were analyzed using a qualitative thematic analysis approach, which provided in-depth insights into various barriers hindering the development of medical tourism across different countries. The thematic synthesis of these findings led to the formulation of strategic recommendations that can be broadly applied, with a specific focus on enhancing the medical tourism sector in Indonesia.

Results

The seven included studies highlight challenges in the development of medical tourism across different countries (*Supplementary Materials, Table 1*). The findings shown that the United Arab Emirates (UAE) and South Korean were represent the development country problem, whereas Turkey, Iran, and Indonesia were represent the barriers faced by developing countries.

Most studies analyzed gathered information from key stakeholders in the medical tourism industry, including government officials, hospital administrators, healthcare professionals, scholars, patients, insurance providers, and accommodation facilities for medical tourists. Each study involved 6 to 16 participants, offering a range of perspectives. The respondent types in each study provided varied viewpoints on challenges faced by their countries in the medical tourism sector. This approach enhanced the quality of qualitative data, leading to a more comprehensive understanding. By employing this method, the research gained validity and contributed to developing evidence-based strategies for addressing obstacles in the industry.

According to most included studies examined, the primary obstacle to medical tourism's growth is the quality of human resources. Additionally, five out of seven studies identified poor infrastructure and a shortage of medical tourism facilitators as significant challenges. Other common issues, mentioned in four out of seven articles, include limited promotion or marketing efforts, as well as inconsistent regulations and the lack of a comprehensive legal framework.

The least frequently cited factors affecting the development of medical tourism included economic crises, inflation, unclear pricing, and high service costs. Among these, high service prices were identified only in the United Arab Emirates (UAE) – a developed country with a significantly high per capita income, which directly influences the cost of medical tourism services. In contrast, this issue is not a significant concern in developing countries, such as Indonesia, Iran, and Turkey, where the cost of medical tourism remains relatively cheaper than that of developed countries.

In summary, this study highlights that while barriers to medical tourism development vary across countries, several common challenges emerge, including human resource quality, infrastructure

limitations, and inadequate promotional efforts. These findings highlight the importance of tailored strategies that address country-specific needs, while drawing from global insights to support the growth of medical tourism in Indonesia.

Discussions

Analysis of barriers to medical tourism

From the findings of barriers to medical tourism in various countries can be grouped into internal and external factors. Internal factors include human resources, management system, technology, infrastructure, and promotion. External factors include level of competition, external infrastructure factors supporting medical tourism, policy factors, and economic factors (*Supplementary Materials, Table 2*).

Internal factors

Quality of human resources

The findings highlight several key challenges in medical tourism, including a lack of expertise and health workers, as well as language and communication barriers. Improving the competence of healthcare professionals, including administrative staff, is crucial for providing high-quality services and meeting the expectations of international patients¹¹⁻¹⁹. Cultural competence is emphasized as a critical factor, requiring healthcare providers to be proficient in foreign languages and capable of effectively interacting with patients from diverse backgrounds. To address these challenges, hospitals and healthcare facilities should implement targeted training programs that focus on language skills, cultural understanding, and specialized care for patients from various backgrounds.^{13,15,19,26} These programs should be implemented across the entire healthcare system and organization, not just at the individual level, to ensure consistent and high-quality care for medical tourists.²⁸

Management system: lack of accreditation for healthcare facilities

The finding shown that the quality of service is crucial for medical tourism, as it influences patients' choice of destination for medical care. Shojaei *et al.* highlighted challenges in the United Arab Emirates, including language barriers, inadequate infrastructure, and lack of competent staff, which manifest as low-quality service. Notably, hospitals often neglect post-discharge follow-up care, impacting patient outcomes and satisfaction.^{11,13,15} To attract medical tourists and develop services, international accreditation is essential, ensuring care meets global standards. Comprehensive services and equipment are vital to prevent patient transfers between hospitals, ultimately enhancing satisfaction. The absence of quality indicators in the UAE poses a significant challenge for its medical tourism sector, emphasizing the need for improved service quality to compete in the global market.

Management system: hospitals have limited collaboration with insurance providers offering international coverage

Medical tourism hospitals must actively collaborate with insurance providers offering international coverage to make their services accessible to patients in various countries. Such partnerships can reduce or eliminate out-of-pocket expenses for patients undergoing treatment. This approach benefits international and domestic patients seeking care in other cities or regions. The growth of med-

ical tourism is driven by commercial and corporate insurance. Therefore, it is important for a medical tourism hospital to ensure its services are covered by insurance, especially international insurance.^{11,19,27}

Technology: lack of digitalization and technological advancements

The emergence of Artificial Intelligence (AI), the Internet of Things (IoT), robotics, automation, virtual reality, cloud solutions, and big data analytics has disrupted the medical tourism industry. Advancements in technology and digitalization provide easy access to information. Patients can now directly communicate with hospitals to obtain up-to-date information, enhancing their decision-making when selecting medical tourism destinations.¹⁹ In some countries, medical procedures can be remotely performed. Collaboration between hospitals at national and international levels enables medical tourists to access health services more seamlessly. For countries aiming to be medical tourism hubs, investing in cutting-edge technologies should be a priority. Such innovations serve as a competitive advantage and enhance patient trust by showcasing a commitment to world-class care.^{15,27}

Infrastructure: inadequate infrastructure

The findings highlight that infrastructure plays a crucial role in medical tourism development, encompassing core facilities like hospitals and clinics, as well as supporting infrastructure such as international airports and accommodations.^{13,26} Developing countries like Indonesia and Iran face challenges due to limited health-care facilities and professionals, impacting service quality and accessibility.^{15,19} In contrast, developed nations like the UAE and South Korea, despite advanced infrastructure, encounter issues related to interconnectivity between medical and tourism service providers.^{15,19} Okasha *et al.* noted that while the UAE has high-end medical facilities, limited renowned specialists hinder its competitiveness in attracting international patients.²⁷ Thailand has successfully positioned itself as a leading medical tourism destination by integrating modern hospitals, skilled professionals, affordable costs, and seamless infrastructure.²⁹ These findings suggest that countries aiming to enhance their medical tourism sector must address infrastructure gaps by improving facility capacity, ensuring interconnectivity between services, and fostering collaboration between healthcare and tourism stakeholders to enhance global competitiveness.

Pricing and promotion: lack of price transparency

In this review, Supriadi *et al.* identified price ambiguity as a significant barrier to medical tourism. Momeni *et al.* reported that in Iran, doctors and healthcare providers often charge patients more than actual costs without regulatory oversight. Digital information is crucial for cost transparency, covering medical treatment and travel expenses. Momeni *et al.* emphasized the importance of providing services in English to improve accessibility. Supervision by authorized institutions is vital for regulating prices and protecting patients from exploitation. Lack of consumer trust can affect hospitals' growth and income from medical tourists.^{13,19} Digital platforms can enhance transparency by providing real-time cost estimates, allowing patients to make informed decisions. Offering multilingual services, particularly in English, can improve accessibility. Effective supervision by authorized institutions is essential to regulate pricing, prevent unethical practices, and foster consumer trust, supporting hospital growth. Addressing these challenges through pricing regulations, digital transparency initiatives,

and improved consumer protection will strengthen medical tourism competitiveness and enhance patient confidence in cross-border healthcare.

Pricing and promotion: high service costs

The findings indicate that high healthcare costs and non-standardized pricing present major barriers to medical tourism in developed countries like the UAE. Not only the cost of medical services but also the high price of hotels, travel costs, and other accommodations are important factors that affect the development of medical tourism in the UAE.^{11,27} Government intervention is crucial in regulating service pricing and ensuring cost transparency for international patients. Addressing high accommodation and travel costs through incentives, subsidies, or partnerships with hospitality and transportation sectors could improve medical tourism accessibility. Developing comprehensive packages integrating affordable medical care, accommodation, and transportation may attract more international patients. Strengthening public-private partnerships to offer competitive pricing models will be essential in making the UAE a more attractive medical tourism destination.

Pricing and promotion: insufficient promotion/advertising

Lack of marketing of medical tourism causes medical tourism destinations to be unknown. Bulatovic and Iankova noted that in the UAE, the general public is unaware of medical tourism opportunities due to insufficient advertising of these destinations. This issue is closely related to a lack of brand awareness. Hospitals should focus on building a strong brand and image to attract medical tourists. Similarly, Momeni *et al.* pointed out that while various specialized care options are available in Tabriz, Iran, the lack of a strong brand poses challenges in marketing the services and products that can be provided.^{11,13}

Promotion in the global market or in neighboring countries is a key factor in attracting medical tourists, as highlighted by Rokni *et al.* Although South Korea offers high-quality medicines and high technology, Rokni *et al.* mentioned that this does not seem to be enough to convince and attract foreign patients because they can find the same quality in other countries. To address this issue, Rokni *et al.* emphasized the need for a comprehensive global marketing strategy. Additionally, Momeni *et al.* suggested that establishing medical tourism agencies in target markets, particularly in neighboring countries, could be an effective marketing strategy.^{9,13}

Evidence suggests that extensive advertising and marketing efforts can reduce coping risks and enhance an organization's resilience. Medical tourism hospitals are encouraged to increase their presence by actively promoting and introducing medical tourism service facilities and products they have.³⁰

The findings highlight the critical role of marketing in medical tourism, addressing challenges and strategies. Key points include increasing public awareness through advertising, emphasizing strong branding, and overcoming promotion challenges. A global marketing approach is necessary to compete and attract foreign patients.^{11,13} The findings suggest focusing on target markets, especially neighboring countries, by establishing medical tourism agencies. Extensive advertising and marketing efforts are recommended to reduce risks and enhance organizational resilience.^{9,13} The research encourages medical tourism hospitals to promote their facilities and services to increase market presence, emphasizing strategic marketing and branding.³⁰ Success in medical tourism requires integrating high-quality medical care with effective marketing and branding. Healthcare providers should consider reallocating resources to prioritize these efforts.

External factor

Management system: lack of strategic planning

A fundamental challenge in developing medical tourism is the lack of strategic planning at the policymaking level. This includes national strategic planning by the government and initiatives by medical tourism organizations and hospitals. Implementing medical tourism requires a clear roadmap, from building a health service industry to supporting industries like pharmaceuticals, medical devices, insurance, accommodation, travel, media, and branding. Such comprehensive planning will impact both costs and quality of services provided to medical tourists.^{9,13,15} Malaysia, in the Malaysia Healthcare Travel Council (MHTC) Blueprint 2021–2025, focuses on building a Fertility Hub to meet demand in the Asia-Pacific market and developing Elderly Care services to position itself as a top retirement choice.³¹ Thailand's Strategic Plans for Developing Thailand as an International Medical Hub emphasize wellness and herbal/Thai medicine. For effective medical tourism development, countries must leverage their unique strengths and opportunities. Focusing on centers of excellence can attract both national and international medical.³² Ganguli and Ebrahim emphasize the importance of developing a national strategy with clear direction, integrated planning, and a policy framework for strategic priority programs.³³

Supporting infrastructure: weak of supporting infrastructure

This review highlight that medical tourism relies not only on healthcare facilities but also on supporting infrastructure such as hotels, transportation, and tourism services. Countries such as Turkey face challenges related to accessibility and transportation infrastructure, which hinder the growth of medical tourism. This is in contrast to Penang, Malaysia. The city is considered very good in terms of transportation vehicles.^{11,15,19}

Supporting infrastructure: lack of medical tourism facilitators

This review showed that medical tourism requires quality services and extensive marketing efforts. Respondents from Bulatovic and Iankova emphasized the need for specialized travel agencies to accelerate medical tourism growth. The absence of formal medical tourism facilitators in Iran led to brokers, who created dissatisfaction among medical tourists by convincing patients to undergo unnecessary procedures for more commission. To address this, medical tourism hospitals should collaborate with established medical travel agents or create their own. For example, Bumrungrad International Hospital in Thailand appointed a dedicated travel agent in Indonesia to guide Indonesian medical tourists to their facilities. These facilitators can foster cooperation across sectors such as airlines, airports, hotels, tourist destinations, and hospitals, ensuring a seamless experience for medical tourists.^{11,26} This role includes tour planning and arranging travel logistics and accommodation. Thailand has demonstrated the importance of Medical Travel Facilitators (MTFs) in managing these aspects for medical tourists. By handling logistics, MTFs help create a seamless travel experience, avoiding potential disruptions to medical procedures due to travel issues.³⁴

Policy: regulatory inconsistency and lack of a supportive legal system

Regulations and policies are crucial for successful medical tourism development. A study by Cavmak D. and Cavmak S.

showed Turkey's medical tourism regulations haven't aligned with international standards. Developed countries like South Korea face regulatory inconsistencies, including lack of international cooperation, reimbursement and insurance discrepancies, and unclear institutional responsibilities.^{9,26} Policy incentives, such as tax reductions for medical devices, special medical treatment visas, and hospital service promotion, significantly stimulate medical tourism growth, especially in the private sector. Supriadi *et al.* identified high import taxes on medical devices in Indonesia as a major factor in rising healthcare costs. Comparing with Malaysia and Thailand, tax incentives make CT scan and MRI services more affordable.¹⁹ Supriadi *et al.* also highlighted barriers to medical tourism in Indonesia, including unclear visas for medical tourists, ambiguous legal frameworks, and limited hospital marketing capacity.¹⁹ Government policies can facilitate medical tourism expansion through incentives, lower import tariffs, increased depreciation rates for medical equipment, and financial exemptions.³⁵ For example, Malaysia offers 100% income tax exemption for eligible capital expenditures over five years, aiming to attract investment, enhance infrastructure, and integrate advanced medical technology.³⁶

Competition: competition between countries

Competition in medical tourism is a double-edged sword. It can drive organizations to improve performance and enhance offerings, fostering a positive image of hospitals and countries in the international market.² However, intense competition can pose a threat to the development of medical tourism in certain regions such as the UAE. Countries with established international reputations in medical tourism, like Turkey, Thailand, Singapore, India, Iran, Russia, and Balkan countries, are key competitors that challenge the UAE's market.^{9,11} Supriadi *et al.* highlighted that well-established destinations like Malaysia, Thailand, and Singapore challenge Indonesia in attracting medical tourists. Rokni *et al.* emphasized the importance of countries identifying their competitive advantages to allocate resources effectively.^{9,19} For instance, South Korea focused on competitive prices and specialized cancer services, key areas over their competitors. South Korea also increased its competitiveness by linking wellness tourism with medical tourism.³⁷

Economy: inflation and economic crisis

Inflation and economic crises significantly impact medical tourism. Okasha *et al.* reported a substantial decline in medical tourism in 2021, with a 70% decrease in medical tourists due to the pandemic. Many patients canceled departures because of travel restrictions and increasing health costs. During crises, countries prioritize themselves, affecting nations whose health systems rely on imported goods. Inflation and economic crises have led to rising prices for medicines and medical devices, increasing healthcare costs.²⁷ Economic crises profoundly impact healthcare workers and health infrastructure. With limited resources, time, and funding, it is essential to allocate these to the most critical populations. Restrictions on these resources can significantly affect medical tourism, particularly if the crisis includes travel restrictions between countries, as seen during the COVID-19 pandemic.³⁸

Implications for Indonesia

Indonesia can gain insights by understanding challenges other countries face. Turkey, Iran, and Indonesia likely have similar barriers as developing countries. These include inadequate infrastructure, insufficient promotion, regulatory inconsistency, lack of a supportive legal system, and human resource quality issues. By

understanding barriers encountered by countries with similar characteristics, Indonesia can identify key focus areas and develop strategies to prevent resource misallocation. This approach enables prioritizing initiatives that address critical challenges while aligning with the country's strategic objectives for medical tourism industry development.

Lesson learned for the development of Indonesia's medical tourism

According to the Indonesian Health Survey or Survey Kesehatan Indonesia (SKI), approximately 0.1% of households in Indonesia have sought medical treatment abroad in the last three years, with Malaysia being the top destination compared to Singapore, the United Arab Emirates, South Korea, and Thailand. Indonesian tourists' annual healthcare spending abroad is estimated at US\$385.7 million, with an average healthcare expenditure of around \$108.96 per trip, representing 4.12% of total spending. Given current conditions, policymakers need to restructure policies to prevent medical tourism outflow and stimulate domestic medical tourism growth. The government's role is crucial in developing policies that enhance healthcare service quality within the country and encourage citizens to seek treatment domestically.³⁹

Based on studies of medical tourism barriers in various countries, several lessons can be applied to develop medical tourism in Indonesia. These lessons fall into two main categories: first, lessons for internal stakeholders, particularly hospitals and healthcare providers involved in medical tourism; and second, lessons for external stakeholders, including the government and related entities such as medical tourism travel agencies, associations, and other organizations that play a significant role in implementing and promoting medical tourism. To strengthen the development of medical tourism in Indonesia, several lessons can be drawn from both medical tourism organizers (hospital management) and the government. It is essential for medical tourism organizers to focus on developing human resource competencies. Second is the development of a management system based on proper planning, excellent services, and expanding cooperation networks. Third, the importance of developing digital-based technology, such as telemedicine or patient management systems, should be prioritized to support the implementation of medical tourism. Fourth, it is important to strengthen infrastructure to support medical tourism services. Fifth, we promote and provide integrated price clarity for all the services.

For the government, policies related to medical tourism must align with other national policies to ensure consistency and avoid legal conflicts. Economic conditions need to be maintained, especially regarding inflation rate and potential for economic crisis. The government must play an active role in strengthening hospital competitiveness through measures like tax incentives, fiscal policies, and streamlined visa processes. Furthermore, the government should enhance supporting infrastructure, including medical travel agencies, transport facilities, and visa services, vital for facilitating medical tourism growth.

Study limitation

Although this study offers valuable insights, it has several limitations that need to be considered, which may not capture more recent challenges or changes in the field. Another limitation of this study is the amount of available literature. The amount of relevant literature on this topic is still limited, which can cause an information bias. The articles analyzed in this study span the last 10 years, which may not fully account for recent policy changes or shifts in the medical tourism landscape in the countries under consideration.

Conclusions

The identification of barriers to medical tourism implementation reveals two main categories: internal and external. Internal factors include human resource challenges, inadequate management systems, technological limitations, insufficient infrastructure, and marketing issues like lack of promotion and unclear pricing. External factors include policy support and consistency, maintaining healthy economic conditions, and efforts to strengthen competitiveness by providing ease in taxation and visa processes for medical tourists. These factors collectively influence the growth and success of medical tourism. However, further research is required to analyze Indonesia's specific context to identify challenges and opportunities for developing effective strategies for further development.

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Online supplementary materials

Table 1. The results of the analysis of global studies on barriers to the development of medical tourism.

Table 2. Barriers to the development of medical tourism in various Asian countries.