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Multi-dimensional Analysis of Medical and Wellness Tourism as a Sector of National Economy: Current Challenges, and Future Perspectives

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ABSTRACT

Relevance. Medical and wellness tourism plays a significant role in contemporary economics by shaping regional markets, attracting substantial financial resources, and fostering innovative developments in national healthcare systems. **The purpose** of the study is to reveal the mechanisms underlying the operation of medical tourism, and formulates practical recommendations for market participants. **Research Methods.** The author uses a combination of theoretical-analytic and empirical approaches: review of scientific literature and systematic analysis of publications and statistical materials; conceptual data modeling combined with exploration of raw data (ERD); use of Python programming tools for hypothesis testing, detecting trends and qualitative evaluation of prospective development of the industry. **Scientific Novelty.** The paper presents new definitions and detailed comparison of various stages of development of medical tourism, highlighting contemporary risk factors and approaches to the integration of technologies that shape the circumstances for increasing the competitiveness of countries in the medical tourism market. **Main Results.** Stages of transformation and dynamics of medical tourism's development were established including cross-cultural dimensions and digitalizing of medical tourism. **Practical Value.** The article provides recommendations on shaping an effective strategy for medical tourism, optimizing legislation, enhancing marketing strategies, among other aspects. T**he findings** can be useful for government bodies, leaders of medical institutions, and professionals in the field of medical tourism.

Keywords: medical tourism; wellness tourism; economic impact of medical tourism; stakeholders of medical tourism; cross-cultural aspects of medical tourism; tourism economy; healthcare economics; digitalization in tourism; artificial intelligence in medicine

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INTRODUCTION

Medical and wellness tourism has become an important component of the regional and sectoral economy of the Russian Federation. Since the mid-1950s, this industry has gone through revised requirements, which reflect society's perceptions of its positive and negative aspects. The concept of medical tourism has undergone significant transformations: new classes and forms have emerged, revealing challenges and defining roles of market participants influenced by cultural differences and specific economic conditions of various countries.

According to the data for 2024 of the International Medical Travel Association (IMTA), the annual growth rate of the industry is 15–25 per cent generated over USD 100 billion for the global economy.[1] Among the most popular destinations are Thailand, Mexico, India, Turkey, Malaysia, Costa Rica, and Singapore, with the majority of tourists coming from the USA, Canada, the UK, and Western European countries. Despite the active development and strengthening of the Russian Federation role in this segment, one cannot ignore the existence of a number of major problems, which impede its further effective growth.

CIS countries traditionally prevail with over 80 per cent of the total volume in the geographical structure of inbound medical tourist flows. The rest are the citizens of BRICS countries, Western Europe, Turkey, and the USA. Uzbekistan takes the leading positions: 5 million people, with China to follow up with 259 thousand people (*Fig. 1*).

According to official data from the Russian Ministry of Health, between 2021 and 2025, Russian medical institutions provided services to 21.5 million foreign citizens, with total revenues generated within the healthcare sector reaching 1.2 billion USD and an average transaction value of approximately 55.81 USD. This relatively low figure can be explained by several key factors:

- A diverse array of services being offered beyond standard treatment packages requested by patients seeking budget-friendly options.
- Numerous smaller transactions balancing out infrequent high-value payments for expensive surgical interventions or specialized treatments.
- Misleading statistical data arising from the classification of migrant workers as medical tourists, given that these individuals often benefit from free emergency care under Federal Law No. 323-FZ dated 21.11.2011 "On the Fundamentals of Protecting the Health of Citizens in the Russian Federation".[2]

Another factor impairing the accuracy of statistics concerns situations involving planned arrivals of citizens from CIS countries into the Russian Federation, particularly those traveling with children requiring emergency medical attention. These individuals intentionally seek help at reputable state-run medical institutions, confident in receiving guaranteed essential care based on Federal Law No. 323-FZ dated November 21, 2011 («On the Fundamentals of Protecting the Health of Citizens in the Russian Federation»). Given that commercial patients are not tracked separately, this creates significant obstacles to objectively assessing the genuine impact of the industry on Russia's economy.

Therefore, the present circumstances necessitate, first and foremost, rigorous tracking of the cumulative economic impact derived from treating medical tourists, encompassing associated offerings such as lodging accommodations, transportation, and touristic services. Secondly, it also requires a comprehensive approach, which implies the clarification and development of corresponding definitions and terminology both on an international and domestic scale, taking into account the multiple influence on the economy, infrastructure, and social sphere.

Within the scope of the research study, 1535 scientific articles indexed in the Scopus bibliographic database were analysed, which covered medical tourism for the period of 1952–2020 (prior to the COVID-19 pandemic). The author developed an ERD data model, conducted analysis, and

[1] URL: https://www.medicaltourismassociation.com/

[2] URL: https://minzdrav.gov.ru/documents/7025-federalnyy-z%C 2%AD

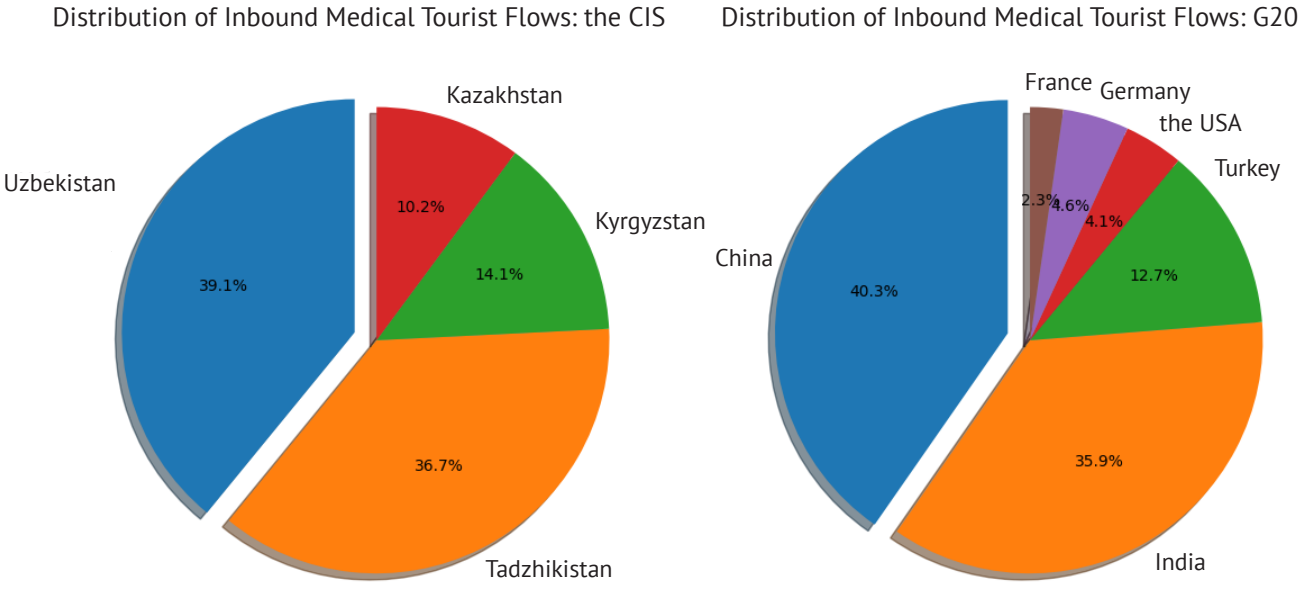

Fig. 1. **Distribution of Inbound Medical Tourist Flows**

Source: compiled by the author on URL: https://minzdrav.gov.ru

performed statistical hypothesis testing using the Python[3] programming language for data processing and visualization. Additionally, hypothesis testing using F-statistics in Analysis of Variance (ANOVA) was carried out to compare mean values across multiple data groups and identify any statistically significant differences between them. This step is crucial for validating conclusions regarding how specific factors influence observed phenomena.

In the course of the research work, a major increase was revealed in the number of publications on this topic from 2015 to 2018, reflecting growing interest in medical tourism and the emergence of a new paradigm for understanding such travel patterns (*Fig. 2*).

Consequently, the following hypotheses were formulated concerning the dependence between the frequency of mentions of various terms, which are characteristics of medical tourism (specifically, "sustainable"), and the publication years of the corresponding scientific articles:

Null Hypothesis (H0): The frequency of mentions of the term 'sustainable' in the sections 'Author Keyword' and 'Index Keywords' is independent of the article publication year.

Alternative Hypothesis (H1): There is a positive correlation between the frequency of mentions of the term 'medical tourism' in the sections 'Author Keyword' and 'Index Keywords', and the article publication year. Confirming H1 will indicate changes in the conceptualization of 'medical tourism' and shifts in the scientific research paradigm driven by advances in science and emerging trends in medical tourism.

The alternative hypothesis was confirmed as follows: the conducted ANOVA analysis (based on Fisher's F-test) showed that the computed F-statistic was 25,224.215 with a corresponding p-value below 0.001 ($p < 0.001$), indicating strong evidence against the null hypothesis (H0). Additionally, this finding was corroborated by another non-parametric test — the Kruskal-Wallis test — which yielded an H-statistic of 269.106 and a similarly negligible p-value (< 0.001). Both methods collectively establish a statistically significant association between the frequency of mentioning the term «sustainable» and the publication year of the articles. Essentially, a clear correlation exists between the chosen keywords and evolving

[3] Python is used in science and research with libraries for data analysis (pandas, NumPy, SciPy, Matplotlib etc).

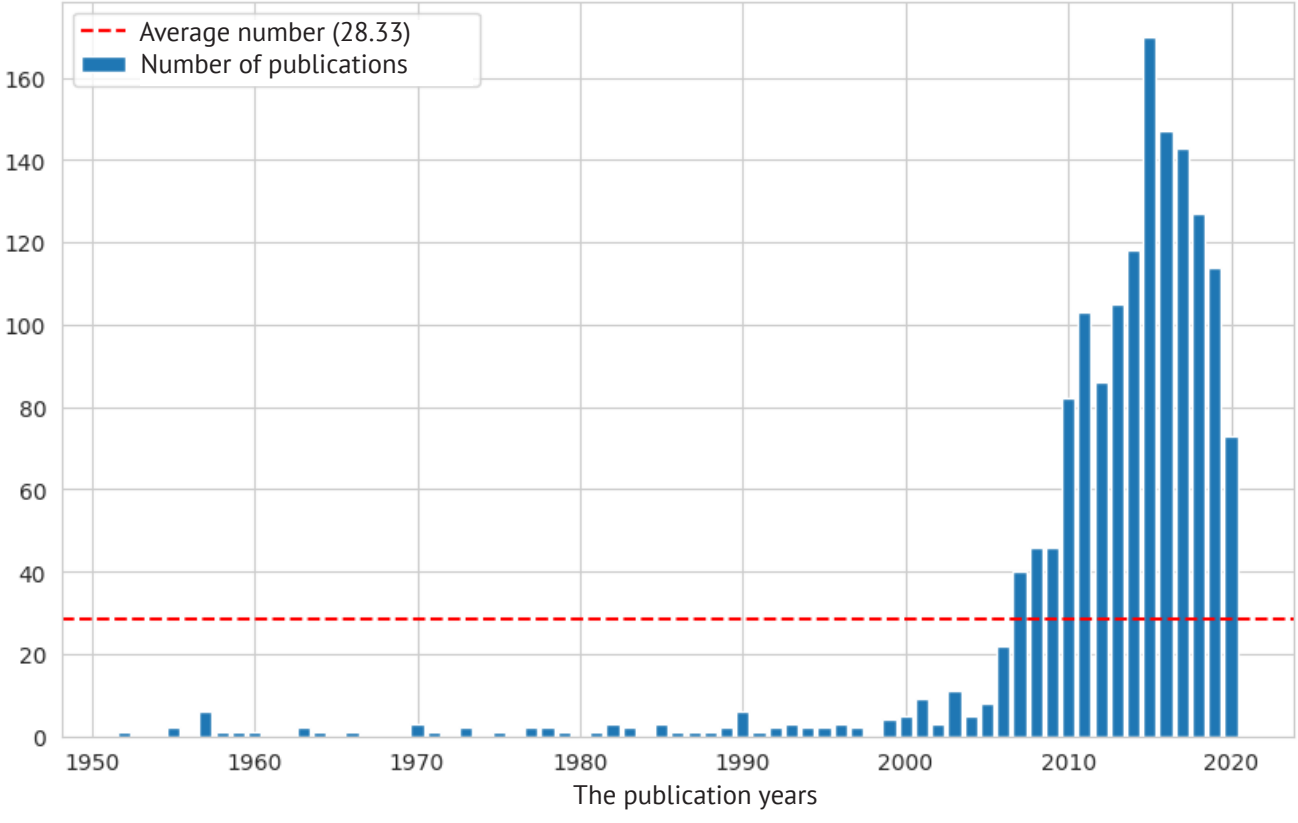

Fig. 2. **Number of Publications on Medical Tourism Indexed in the Scopus Database**

Source: compiled by the author using the Python programming language.

scientific interest in medical tourism venues.

Examining keywords popular in a specific period reveals shifting priorities and trends in this area. For instance, in 1952, prominent keywords included «medical tourism,» «stakeholder interaction,» «sustainable tourism,» «travel,» «USA,» «financial management,» «medical assistance,» «hospital management,» «human beings,» «international cooperation,» and «organization and administration,» highlighting early-stage research focuses.

Interestingly, the keyword «India» consistently ranked among the top ten most frequent terms throughout the period 1952–2020, illustrating robust growth in Indian medical and wellness tourism sectors. Since the 1950s, the USA remains a leading provider of medical services globally and a dominant source of outbound medical travelers, underscoring historic patterns: different countries emerge as focal points for medical tourists depending on changing economic landscapes and globalization demands.

Since 2015, there has been a noticeable rise in studies focusing on wellness tourism, signaling increased awareness of health-promoting lifestyles and preventative measures, especially post-COVID-19. This trend further reinforces the integration of wellness into broader discussions around medical tourism (see *Table*).

FREQUENCY OF KEY WORD USAGE BY YEARS

The transformation of the industry was visualised in view of the following aspects:

- participants or stakeholders (**medical tourism — stakeholders**);
- the separation of medical (health) and wellness (spa or wellness) tourism (**medical tourism — tourism segments**);
- cross-cultural evolution and national peculiarities of individual states, using examples of leading and developing countries, participants of the world market (**medical tourism — cross-cultural aspect**);

Table

Frequency of Key Word Usage by Years

Key words	Frequency of mentions	Year
In the authors' articles		
Medical tourism	1102	2011
Tourism	685	2012
Sustainable tourism	635	2009
Stakeholders networking	632	2009
Health tourism	131	2014
Medical travel	50	2015
Wellness travel	46	2015
Globalization	29	2013
India	28	2014
Healthcare	25	2013
In mass media publications		
Travel	1662	2013
United States	1558	2013
Human	1262	2012
Humans	1106	2013
Health care delivery	825	2013
International cooperation	788	2013
Medical tourism	778	2014
Delivery of healthcare	774	2013
Management	750	2013
Internationality	746	2013

Source: compiled by the author using the Python programming language.

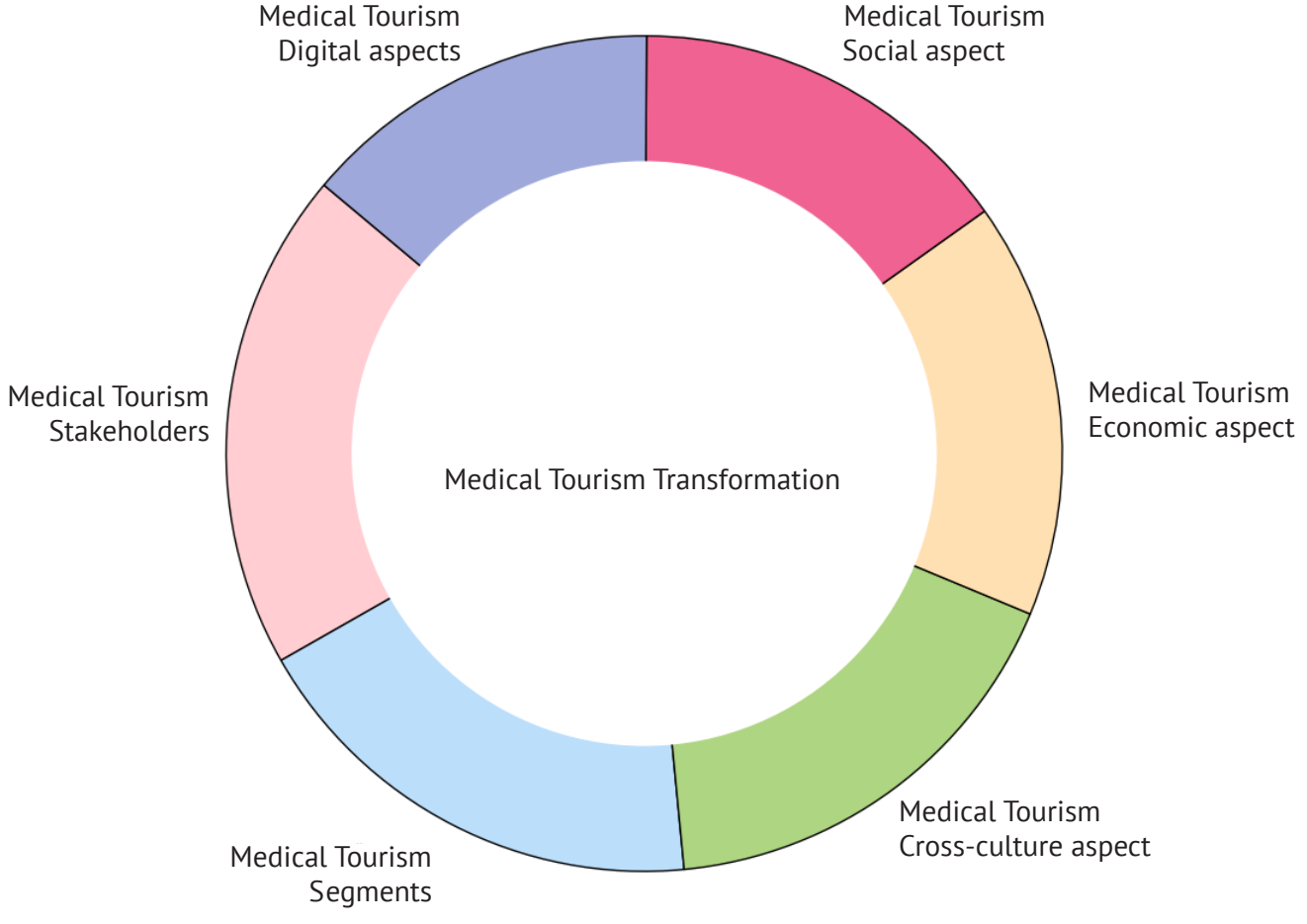

Fig. 3. **Comprehensive Analysis of Medical Tourism Aspects**

Source: compiled by the author using the Python programming language.

- impact on economic indicators (revenues from international medical tourism, infrastructure and service costs, tax contributions, and contribution to GDP) (**medical tourism — economic aspect**);
- assessment of the influence on the healthcare system, the level of accessibility, and the quality of medical services rendered to medical tourists and local citizens (**medical tourism — social aspect**);
- digitalization in medical and tourist services, primarily the impact of AI (**medical tourism — digital aspect**) (*Fig. 3*).

RESULTS AND DISCUSSION

The abovementioned aspects of medical tourism were analysed in the context of three transformation stages: traditional and commercial stages, as well as the modern trend-stage determined by the strengthening role of technologies and the transition to a hybrid format.

Traditional Phase. Initially, medical tourism entailed journeys undertaken by physicians to impoverished or developing regions primarily for humanitarian missions (aid-based tourism). During this phase, doctors typically volunteered part-time at local clinics, conducting surgeries and offering consultation services. This stage predominantly reflected the mobility of medical practitioners: in the 1970s-1990s, teams from advanced economies traveled to other countries to provide medical expertise, conduct surgeries, and offer consultations to government leaders and affluent individuals.

Commercial Phase (from 1985 to the present time). Global political and macroeconomic shifts triggered the formation of medical tourism as an

independent industry, rendering diverse services for patients. A disintegration occurred within this sphere for inbound, outbound, and domestic tourism, which laid the foundation for shaping a new class of consumers of such services. From 2012–2015, wellness tourism acquired a synonymous meaning with health tourism and the closely related health-resort tourism (our research work does not examine in detail this direction).

Digital or Technological Phase (from 2019 to the present time). The role of technological solutions increased after the COVID-19 pandemic. Nowadays, patients have the opportunity to undergo consultations and diagnostics online, and doctors can perform surgeries with the AI assistance.

STAKEHOLDER AND SEGMENT ASPECTS OF MEDICAL TOURISM

Since 2020, a tendency has become apparent, that people travel beyond their country or region of residence to obtain medical care [1, 2]. There exist outbound, domestic, and inbound wellness tourism (therapeutic, or health resort-based and wellness tourism to improve health) [3, 4]. The author of the given article classifies two main categories: the first one travels to large cities to receive high-tech medical services, meanwhile the second one leaves metropolises seeking consultation with renowned medical specialists in regional locations or pursuing affordable therapeutic solutions. Medical tourism, often combined with wellness tourism, represents one of the fastest-growing segments in the global healthcare industry, valued at billions of US dollars annually. Patients go abroad for treatment "in search of added value" [5, 6].

The terms "medical tourism" and "healthcare tourism" are used interchangeably. The latter is rather a generalized concept, covering such areas as thermal wellness, spa-wellness tours, and tourism for the elderly and for disabled. Medical services within this domain encompass cardiovascular surgery, radiotherapy, organ transplantation, fertility treatments including IVF procedures, aesthetic and reconstructive surgeries, among others.

This type of tourism is in demand particularly among the patients who combine medical treatment with leisure during their vacation [7]. For instance, the Center for Fertility and IVF at Loma Linda University (LLU) in California, USA, offers high-quality reproductive health services.[4] The clients stay for an IVF cycle from 10 to 21 days depending on individual needs. Thus, female patients and their partners can combine treatment with leisure, taking excursions, etc.

After 2015, many researchers began to distinguish two main categories of wellness tourism: health restoration-oriented and medical ones. The first includes SPA procedures, yoga, Ayurveda, homeopathy, and naturopathy, while the second includes diagnostics, surgery, etc. The medical tourism industry has developed as a result of international collaboration and digital advancement, embodying a form of commerce linking the healthcare and tourism sectors. [8]. The phenomenon demonstrates "the global-scale economy in action", or the sale of health-related services: patients seek to obtain less expensive, high-quality medical care and/or access to healthcare technologies in another country [9, 10].

During the traditional phase outlined by the author, medical tourism referred to temporary assignments of clinicians from wealthier nations working in resource-poor settings. Today, medical students and healthcare professionals demonstrate increasing engagement in volunteer programs, expert consultancy, and emergency relief initiatives in developing countries. [11]. Currently, however, such outbound medical missions take place primarily within the realm of premium medical tourism, where clinics serving VIP clients invite world-class medical experts for telemedicine consultations and operation oversight utilizing robots and artificial intelligence.

[4] URL: https://lomalindafertility.com/treatments/medical-tourism-in-vitro-fertilization/

Within the segmentation framework of medical tourism, treatment can be classified as elective, urgent, or emergency type, in accordance with a risk scale ranging from low to high level [7]. In the author's view, this classification could similarly employ a color-coding system akin to the three-level triage method used in medicine. Green indicates preventive measures associated with wellness tourism, yellow signifies intermediate conditions necessitating consultation with general practitioners, while red signals critical emergencies demanding immediate specialized medical interventions.

CROSS-CULTURAL ASPECTS

Over thirty countries worldwide have hospitals and clinics providing services to medical tourists [3]. The key countries in Asia are Thailand, India, Singapore, Malaysia, and the Philippines. The author examines South Korea [12] within the present research work, as an example of the fast-developing industry, which is attractive to foreign patients due to the cost-to-quality ratio of provided services, excellent care standards, and integrated healthcare and hospitality technologies [13].

In 2023, the number of Russians visitors to receive medical services in South Korea was 14,700, eightfold more than in 2009. This country serves as a benchmark for studying the organization of medical tourism. Hence, it is worth highlighting the following key points [13–15]:

History of legislative initiatives in the context of medical tourism. South Korea has

been promoting medical tourism since 2009 (as evidenced by the articles registered in scholarly databases): to attract foreign patients legislative initiatives were implemented. In 2016, the Korean Government adopted the "First Comprehensive Plan to Support the Expansion of Overseas Activities of the Healthcare System" as a stage in fulfilling the provisions of the (2016) "Act on Supporting the Expansion of Overseas Operations of the Healthcare System and Attracting International Patients".

Economic aspects. As per South Korean government assessments, the industry

revenues increase annually by 48.2 per cent. However, the growing number of tourists raises concerns due to a potential negative impact for the national healthcare system.

Problems and risks. The growth of private medical sector at the expense of the

state sector contributes to the generation of a two-tier healthcare system: high-quality services for foreigners and less accessible infrastructure for local residents. Another risk is the internal relocation of qualified doctors from public clinics to private ones.

Regional competition. South Korea competes with other Asian nations like Thailand, India, and Singapore, all striving to enhance their strategies for promoting medical tourism. Key initiatives include simplifying visa regulations, establishing medical hotels, and introducing medical care coordination services. Furthermore, in November 2013, according to a Presidential Decree adopted within the framework of the "Tourism Promotion Act", South Korea authorized medical hotels to host foreign tourists. They provided hospitality services (accommodation, meals, etc.) while simultaneously operating as medical institutions. Under this policy, such institutions will be registered by specialized entities or agencies dealing with medical tourism, and the new position of International Medical Tourism Coordinator (IMC) will be introduced to facilitate promotion of these services within the public healthcare sector.

One of the main competitors of South Korea is India. It made a part of its strategy the simplification of visa barriers and economic regulation. Specifically, India introduced M-visa (medical category visa), approved tax benefits for providers of medical tourism services, reduced customs duties, increased depreciation rates for certain types of medical equipment, and provided land for hospital construction at preferential prices.

The necessity of regulation. South Korea regulates the growth of the industry of medical

tourism and monitors resource distribution in order to prevent negative influence on the national healthcare system. The country demonstrated considerable industry growth: an annual revenue increased by 48.2 per cent, indicating the high efficiency of the implemented measures (however, it is important to consider the potential risks mentioned above). Similar policy, if waged in Russia, including the activities like chains of medical hotels and easier visa procedure, state support for the industry for conducting marketing campaigns, providing tax benefits, etc., could contribute to enhancing the competitiveness of the domestic medical tourism industry on the international arena.

SOCIO-ECONOMIC ASPECTS

According to Patients Beyond Borders data,[5] the global medical tourism market is estimated approximately from 65 to 87.5 billion USD [16]. The growth in the industry's popularity was generated by a number of factors: high healthcare costs in developed countries, easy travel accessibility, improved levels of medical care, and proven treatment safety in a number of states [17]. Medical tourism boosts a country's economy by providing more jobs, financial inflow, and attracting foreign investors. States secure advantages from the growing exchange of knowledge and experience, as a result of intercultural interaction of patients [18]. Entrepreneurs manage to fill market gaps in this sphere by improving the quality of services thanks to attraction of foreign clients and enhancing the image of the hosting country [19]. However, in some developed countries, cases have been reported, that tourists returned with infectious complications related to breaches of sanitary norms after surgical intervention [20].

The share of beds in public hospital is nearly 79 per cent in Asia, 84 per cent in Africa, and 71 per cent in Latin America. The main operators are non-profit social welfare-based entities. Such state of affairs leads to a high workload for the staff and low salaries, which prompts medical personnel to relocate abroad: Asians go to North America, Africans to the UK, and Eastern Europeans to Western Europe. However, high prices for such services in developed countries contribute to the appearance of medical tourism, thus, it helps reducing the leakage of medical staff abroad. Still, the absence of state regulation in this sphere generates social stratification, limiting the accessibility of high-tech medical care for the local residents.

DIGITAL TECHNOLOGICAL AND INNOVATION ASPECTS

The term "Industry 4.0" denotes the transition to a highly automated production based on the application of the Internet of Things (IoT), Big Data, cloud computing, Artificial Intelligence (AI), Augmented Reality (AR), additive technologies (3D printing, etc.). Integrating them into the field of medical tourism would enable remote delivery of basic services, thus minimizing patients' need for physical travel. The term 'Internet of Medical Things' (IoMT) related to this sphere was announced by the Abu Dhabi Health Department during the 12th Annual World Medical Tourism & Global Healthcare Congress in 2019.[6] The use of portable minidevices and sensors, which are components of IoMT (fitness trackers, smartwatches, smart textiles), allows collecting patient health information and running real-time communication with medical specialists [21, 22].

As defined by the author of this article, hybrid medical tourism is a service, which allows persons, who stay in their permanent place of residence, remotely seek medical assistance from an institution where they had treatment previously. This can reduce the burden on healthcare facilities and provide residents with access (including at special discount prices or with medical insurance) to innovative technologies often available for premium medical tourists. The de-

[5] URL: https://www.patientsbeyondborders.com/

[6] URL: https://www.doh.gov.ae/en/events/12th-World-Medical-Tourism-and-Global-Healthcare-Congress

velopment of hybrid medical and technological tourism enables solving the problem of two-tier healthcare, which was described earlier.

According to the author, the advancements in robotics and AI applications transform medical tourism into a part of the innovation economy: patients now travel overseas more for accessing cutting-edge technologies than for consulting well-known specialists. States unable to offer competitive developments risk losing leading positions in medical tourism in the coming decade.

The mobility restrictions imposed during the pandemic highlighted the importance of Industry 4.0 for advancing the medical industry. Digitalization and the integration of innovative solutions have given modern medical care a supranational dimension. [23]. Technological transformations can positively impact the increase in the average service costs per tourist since visitors will seek costly procedures conducted with innovative technologies available only in specific countries. For example, in 2017, the first-in-Russia Clinical Proton Beam Therapy Centre was opened in St. Petersburg on the basis of the Berezin Sergey Medical Institute (MIBS), which can annually treat over 800 patients from various regions of Russia and abroad.[7]

AI-based marketing technologies facilitate to identify more accurately potential patients, and predictive data analytics helps doctors understand their preferences [24]. However, this creates ethical concerns stemming from biases inherent in AI algorithms, potentially causing incorrect recommendations, faulty diagnoses, and improper formulations of treatment protocols due to flawed data processing during machine learning. [25].

Another trend in introducing new technologies involves transforming conventional catalog-based websites into intelligent platforms powered by AI-driven interactive services. For instance, under governmental initiative, South Korea established the national portal «Medical Korea,» designed to promote domestic medical services to an international audience. The platform features multilingual support, offering content localized into five major languages — English, Japanese, Chinese, Russian, and Arabic.

MasterCard entered into a strategic alliance with the Medical Tourism Association (MTA) in 2024 to streamline international payments for medical treatments. By introducing a virtual Mastercard option, the innovation addresses challenges linked to traditional cash transactions and bank wire transfers, simultaneously improving payment clarity and security.

MTA also created the "Better by MTA" platform, which combines medical and tourism services for booking and payment for the convenience of users.[8] Russian sector of medical tourism could introduce similar digital solutions, on the bases of the capabilities of the "Mir" payment system.

CONCLUSION

The criteria for assessment of medical tourism have transformed due to the evolution of societal views on its pros and cons, both for the global economy and for the economies of individual host countries.

The author suggests studying various aspects of medical tourism within the three phases of development: traditional, commercial, and digital (hybrid, technological) and determines its socio-economic aspects, namely:

- economic benefits for host countries: job creation, attraction of finance and foreign investments;
- risks and negative effects: lack of medical personnel in donor countries because of external relocation and intensification of social disparity due to limited accessibility of high-tech medical services for local residents in developing countries.

The article highlights how digital transformation and the adoption of new tech advancements bring numerous benefits to the industry. IoMT

[7] URL: https://protherapy.ru/about

[8] URL: https://www.mastercard.com/news/press/2024/july/mastercard-and-the-medical-tourism-association-join-forces-to-revolutionize-cross-border-health-care-payments/

ensures real-time interaction between doctors and patients, irrespectively of their location; AI and data analysis enhances marketing strategy: understanding patient preferences and increasing their satisfaction.

Technological shifts drive the evolution of hybrid medical tourism models, effectively lowering hospital occupancy levels and stabilizing prices for local populations. Advanced digital platforms also simplify bookings and payments, enhancing accessibility and safety. As emphasized by the author, competitive success in this dynamic landscape hinges upon possession of robust technology infrastructures.

For future research, several promising areas have been identified:

- Assessing the long-term socio-economic implications of medical tourism on national healthcare systems.
- Developing refined regulatory frameworks and informed state policies for managing medical tourism activities.
- Enhancing digital platforms and implementing advanced decision-support tools for stakeholders.
- Exploring potential scenarios for medical tourism resilience amidst large-scale events such as pandemics and other crises.

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REFERENCES

1. Oborin M.S. Special types of tourism: Medical tourism. *Servis v Rossii i za rubezhom = Services in Russia and Abroad*. 2022;16(1):179-187. (In Russ.). DOI: 10.24412/1995-042X-2022-1-179-187
2. Nikol'skaya E.Yu., Ignat'ev A.A. Trends in the development and promotion of medical tourism in Russia. Moscow: KnoRus; 2023. 94 p. (In Russ.).
3. Ghasemi M., Nejad M.G., Aghaei I. Knowledge management orientation and operational performance relationship in medical tourism (overview of the model performance in the COVID-19 pandemic and post-pandemic era). *Health Services Management Research*. 2020;34(4):208-222. DOI: 10.1177/0951484820971438
4. Karadayi-Usta S., Asan S.S. A conceptual model of medical tourism service supply chain. *Journal of Industrial Engineering and Management*. 2020;13(2):246-265. DOI: 10.3926/jiem.3008
5. Crooks V.A., Ormond M., Jin K.N. Reflections on 'medical tourism' from the 2016 Global Healthcare Policy and Management Forum. *BMC Proceedings*. 2017;11(8):6. DOI: 10.1186/s12919-017-0075-8
6. Horowitz M.D., Rosensweig J.A. Medical tourism-health care in the global economy. *The Physician Executive*. 2007;33(6):24-31.
7. Mason A.M., Spencer E. Health communication: Insights for quality hospitality bridging healthcare delivery in medical tourism. In: DeMicco F.J., ed. Medical tourism and wellness: Hospitality bridging healthcare. Abingdon: Routledge; 2017:127-145.
8. Ghose K. Hospitality in and out of hospitals: Creating and maintaining brand equity for medical tourism destination brands (MTDs). *Romanian Journal of Marketing*. 2010;4:114-131.
9. Smith R.D., Chanda R., Tangcharoensathien V. Trade in health-related services. *The Lancet*. 2009;373(9663):593-601. DOI: 10.1016/S0140-6736(08)61778-X

10. Medhekar A. Government initiatives for developing medical tourism: India, Singapore, and Australia. In: Proc. 2nd Annu. int. conf. on tourism and hospitality research (THoR 2013). Singapore: Global Science and Technology Forum; 2013:7-16. DOI: 10.5176/2251-3426_THoR13.04
11. Chuang T.C., Liu J.S., Lu L.Y.Y., Lee Y. The main paths of medical tourism: From transplantation to beautification. *Tourism Management*. 2014;45:49-58. DOI: 10.1016/j.tourman.2014.03.016
12. Tarasenko E.V. The impact of the cross-cultural aspect on customer-centricity and competitiveness when working with "guest-patients" in the scope of medical tourism: Insights from international hotel groups. *RISK: resursy, informatsiya, snabzhenie, konkurentsiya = RISK: Resources, Information, Supply, Competition*. 2025;(1):129-135. (In Russ.). DOI: 10.56584/1560-8816-2025-1-129-135
13. Xu Q., Purushothaman V., Cuomo R.E., et al. A bilingual systematic review of South Korean medical tourism: A need to rethink policy and priorities for public health? *BMC Public Health*. 2021;21(1):658. DOI: 10.1186/s12889-021-10642-x
14. Semina L.I., Slobodyan D.E. The place of the Republic of Rorea in the international medical tourism market. *Koreevedenie = Koreanology*. 2024;(3):41-56. (In Russ.). DOI: 10.48647/ICCA.2024.47.42.005
15. Tastanbekova Sh.O. Global experience in the development and promotion of medical tourism: South Korea as an example. *Vestnik KazNMU*. 2016;(4):477-481. (In Russ.)
16. Hassan V., Noaman S. Relation between tourism and health: Case study AIDS in Lebanon. Atiner Conference Paper Series. 2017. TOU2017-2262. URL: https://www.researchgate.net/publication/340846049_Relation_between_Tourism_and_Health_Case_Study_AIDS_in_Lebanon
17. Horowitz M.D., Rosensweig J.A., Jones C.A. Medical tourism: Globalization of the healthcare marketplace. *MedGenMed*. 2007;9(4):33.
18. Pocock N.S., Phua K.H. Medical tourism and policy implications for health systems: A conceptual framework from a comparative study of Thailand, Singapore and Malaysia. *Globalization and Health*. 2011;7:12. DOI: 10.1186/1744-8603-7-12
19. Hopkins L., Labonté R., Runnels V., Packer C. Medical tourism today: What is the state of existing knowledge? *Journal of Public Health Policy*. 2010;31(2):185-198. DOI: 10.1057/jphp.2010.10
20. Menon K.V., Abdelmottaleb M., Al Ghafri K., Kumar R. An audit of surgical site infections among Omani travelers to India for spinal surgery. *Health Policy Open*. 2021;2:100049. DOI: 10.1016/j.hpopen.2021.100049
21. Junata M., Tong R. Wearable technology in medicine and health care: Introduction. In: Tong R., ed. Wearable technology in medicine and health care. London: Academic Press; 2018:1-5.
22. Wong B.K.M., Hazley S.A.S. The future of health tourism in the Industrial Revolution 4.0 era. *Journal of Tourism Futures*. 2021;7(2):267-272. DOI: 10.1108/JTF-01-2020-0006
23. Hassan V., Bellos G. COVID-19: Reshaping medical tourism through artificial intelligence (AI) and robotics. *Athens Journal of Tourism*. 2022;9(2):77-98. DOI: 10.30958/ajt.9-2-2
24. Reshadi M.S., Mohammadi Chehragh A. A review of medical tourism entrepreneurship and marketing at regional and global levels and a quick glance into the applications of artificial intelligence in medical tourism. *AI & Society*. 2025;40(5):4011-4027. DOI: 10.1007/s00146-024-02178-6
25. Shafik W. Artificial intelligence and the medical tourism. In: Examining tourist behaviors and community involvement in destination rejuvenation. Hershey, PA: IGI Global; 2024:207-233. DOI: 10.4018/979-8-3693-6819-0.ch016

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