

# Social and Economic Aspects of Development of Medical Tourism in the Conditions of a Pandemic

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## ABSTRACT

The article reflects the main problems and features of the development of medical tourism in Russia in the conditions of a pandemic. An attempt to assess the capacity of the medical tourism market in the world practice and to assess the share of Russia's participation in it is shown. The high level of Russia's potential in achieving a leading position among the leading states in the sphere of high-tech treatment and diagnostic and health-improving services was identified and assessed. The characteristic features of the development of the market for domestic and inbound tourism for medical purposes were identified. The authors determined the directions of the formation of inbound and domestic tourist flows in order to obtain high-quality and affordable medical care after the removal of restrictions, related to the prevention of coronavirus infection. Based on the review of information and analytical material, measures to improve the efficiency of the functioning of medical tourism industry facilities are proposed.

**Keywords:** market, medical services, medical tourism, cost, competitiveness, infrastructure, rating, coronavirus infection, development potential

## 1. INTRODUCTION

In the conditions of the commercialization of healthcare as one of the socially significant dynamically developing sectors of the economy, the number of states, investing in medical tourism, increases in world practice every year. In turn, the development of medical tourism involves the development and implementation of innovative forms, methods, and technologies of the treatment and diagnostic process with the parallel equipment of modern comfortable medical clinics and organizations, as well as training and improving the professional and qualification level of medical and service personnel.

Today, medical tourism is considered as a separate specific type of health tourism, which can be considered by the main three areas: internal (movement of the population within the country of residence), inbound tourism (involving the entry of citizens of other countries into the territory of Russia) and outbound (involving the departure of citizens outside the borders of the country of residence). The World Health Association assumes, that over the next decade, medical tourism will become a priority direction for the development of the global economy. According to

the Association, more than 11 million people annually take treatment abroad, and in the future, this indicator is expected to grow within 20-25% annually, while 3-4% of the world's population will go abroad for treatment and health improvement [19]. Thus, studies of assessment of the formation of the medical tourism market in Russia are relevant today and are focused on identifying factors, that

influence the development of domestic and inbound medical tourism and positively form the multiplier effect of the tourism industry activity, healthcare and medical science, as well as related sectors of the national economy. The materials and research base were statistical, accounting and reporting and information sources of the activity of healthcare organizations and enterprises of the tourism industry. The materials of scientific studies of domestic and foreign scientists in the field of medical tourism development were used. When processing and systematizing information and analytical material, the methods of grouping, synthesis, the historical and logical research method, as well as the methods of economic analysis were used.

## 2. RESEARCH METHODS

In October 2013, at the Congress of the World Health Organization, Professor E. Kelly, raised the problem of the lack of an agreed concept of "medical tourism" between countries in his report. However, all concepts are united by the fact, that in medical tourism, the patient travels from one country to another to receive the necessary medical services [4].

Consumers of medical tourism services expect to receive highly qualified medical care outside the area of their permanent residence. According to N.V. Goroshko, S.V. Patsal: "At present, a global market of medical services has already formed with its own infrastructure (medical management, accrediting authorities, medical tourism

agencies and tour operators, specialists in the field of medical travel)" [14].

A group of Filipino scientists defines medical tourism as an industry, that has been growing continuously in recent years. According to the authors, this field of interest lies in both medical services providers and consumers. Both of these sides are usually characterized by a dynamically developing level of social and economic development. Therefore, according to the authors, it is necessary to study the nature of the interrelations between providers and consumers in order to assess the influence of an increase in tourist flows on the growth of economic development of both parties by increasing efficiency [13]. Moreover, foreign experts think, that the economic value of medical tourism lies not only in the direct budget of public health service but also in indirect factors since foreign patients are often accompanied by family members or friends, who can use services such as hotels, restaurants, tourism attractions and tour operators [7]. The Indian scientist Amuta D. adheres to a similar point of view, believing, that medical tourism highly depends on travelers, hospitals, insurance companies, hotels, etc. [10]

Mc Kinsey study data as a result of a survey of medical tourism consumers from several countries indicate, that the main motives of medical tourism consumers are the need to receive high-tech care (42% of respondents), the search for higher quality medical services (33%), the need for urgent care (15 %) and the desire to save money on treatment. And the most requested services are weight loss (32%), orthopedics (22%), cosmetology (12%), and spinal diseases (2%) [9].

In addition, today the diversification of medical tourism services faces the industry with the distinguishing of target segments of the consumption of medical services. Thus, many scientists and specialists from different countries segment the medical tourism market by types of services: 1) treatment and diagnostic services; 2) dental services; 3) services of esthetic therapeutic and surgical cosmetology; 3) reproductive services; 4) organ and tissue transplantation, etc. Transplant tourism occurs in two different situations: 1) in very well developed countries with a long waiting list, and 2) in underdeveloped countries, where there are no prohibitive rules for buying and selling kidneys, but people need help and have to make money selling their organs [ 2].

Currently, the list of dealers of medical tourism has been systematized, with more than 25 categories and subcategories of dealers (facilitators) are identified and described. The broadest classifier with their brief characteristics is presented in the international reference book on medical tourism for tourists [5]. According to the GB review, for 2016-2017, almost 38% of medical tourists apply to facilitator companies, 16.4% of medical tourists,

which are in search of a medical facility, apply to insurance companies, 13.1% apply to travel agencies, 13% apply to insurance agents or insurance brokers and consultants, 3.3% apply to the attending physician [3].

Thus, medical tourism has the characteristics of a rapidly developing industry, which is characterized by features of a multiplier effect, which have both positive and negative effects on both the provider and the consumer of treatment and diagnostic services.

### **3. RESEARCH RESULTS**

Today, statistical and prognostic data on the development of medical tourism in world practice vary greatly even among well-known and respected experts in the field of medical tourism. This may be due to substantive divergences in the definition of the definition of "medical tourism", as well as the lack of a statistical database in many countries of the world. But despite the above problems and features, medical tourism is gaining popularity in both developed and developing countries of the world.

Within the framework of the Decree of the President of the Russian Federation of 05/07/2018 No. 204 "On national purposes and strategic objectives of the development of the Russian Federation for the period up to 2024", the Federal Project "Export of medical services" was approved, which implies an increase in the volume of export of medical services in 2020 by more than 2 times compared to 2017 (from \$250 million in 2017 to \$580 million). By 2024, this indicator should be increased by more than 4 times and brought up to the level of \$1,000 million [1].

According to K.E. Vdovin, the export of medical services in economically developed countries has been developing over the years and therefore the author identifies 4 key factors, that influence the choice of patients in choosing a country to take medical services for certain nosological forms: profitability; availability; opportunity (duration of waiting); acceptability [12, p. 58].

The data of the analytical magazine Medical Tourism Index (MTI), reflecting the trends and problems of the development of the medical tourism business in the world, ranked Russia 34th in terms of the state of the environment, as well as the level of development of medical tourism. In terms of the quality of medical services and the level of equipment of medical organizations, Russia was ranked 31st in this rating among 40 countries, participating in this rating (Table 1).

**Table 1: Comparison of the medical tourism industry by country [8]**

Rating	Country	Total	State of environment		Level of development of medical tourism		Quality of medical services and equipment	
			point	rating	point	rating	point	rating
1	Canada	76.62	78.69	1	74.14	4	77.01	4
2	Great Britain	74.87	77.30	2	70.38	17	76.94	5
3	Israel	73.91	67.56	4	72.58	11	81.60	1
4	Singapore	73.56	73.26	3	70.09	15	76.63	6
5	India	72.10	63.26	12	75.94	1	77.0	3
6	Germany	71.90	67.50	5	70.38	18	77.88	2
7	France	71.22	66.88	6	71.92	13	74.86	8
8	South Korea	70.16	64.74	10	70.15	19	75.59	7
	.....	...	...	...	...	...	...	...
34	Russia	57.01	59.96	34	59.94	34	61.15	31

By the fact, that on the territory of the Russian Federation the medical tourism market is at the stage of its formation, the formation of statistical databases characterizing the qualitative and quantitative aspects of its development remains a big problem, therefore, the collection of official statistical information often remains inaccessible. In addition, many elements of the medical tourism infrastructure belong to various sectors of the national economy in Russia and form local databases of statistical information, that do not have a mutually conditioning relation.

Despite the existing shortcomings in monitoring the indicators of the development of medical tourism, the volume of incoming flows of patients in order to receive medical care annually systematically increases within 20-40%. So, in 2017, the flow of foreign clients reached 110 thousand people, which indicates an increase in this indicator by almost 60% compared to 2016 (66.4 thousand people). In addition, about 70% of all visiting foreigners receive medical care on an outpatient basis, and only 30% apply for high-tech types of medical care in a medical setting. Another stable trend in the development of inbound medical tourism - 70% of clients are citizens of the CIS. About 13% are residents of the Baltics and Nordic countries, 10% are tourists from Central Europe, South-West Asia, and China. The economic contribution of inbound medical tourism is more than 15 billion rubles [18]. At the same time, it is necessary to understand, that these indicators are formed in the context of the activities of state healthcare institutions without taking into account the activities of the private healthcare system, which are usually not included in the general statistics of state healthcare in Russia [17].

According to RIA News, over the past five years, there has been an annual increase by an average of 7-10% in the internal movements of Russians in order to receive high-quality medical care with the most economical offers of its delivery, and reached 9 million Russians in 2019 [16].

Experts of the Association of Medical Tourism in Russia note a redistribution of patient flows within the country in

favor of provincial cities, their number is increasing every year, while the flows of inbound tourism have been distributed in favor of the capitals (Moscow - 60% of foreign tourists, St. Petersburg - 30% of foreign tourists). At the same time, the outbound medical tourist flow from Russia continues to decline - if in 2015 the number of outbound medical tourists reached 100 thousand, then in 2016 their number was 60-70 thousand, and in 2017, according to predictions, the upper threshold will be no more than 50 thousand. Among the reasons are the exchange rate of the ruble, the influence of foreign policy factors, as well as “dishonest agents” in medical tourism. Restrictions on travel abroad for security officials and their family members also affect [11]. In our opinion, the demand for the services of inbound and domestic medical tourism over the coming years will only increase due to the cheapness of medical services in Russia due to the ratio of Russian and foreign currency. Moreover, the country has potential - the specific gravity of medical tourism in Russia is no more than 0.4% in the total structure of the world medical tourism market. Table 2 shows a comparison of the average cost of popular high-tech medical services in countries with a high share of the world market for the tourism medical business and Russia. As K.S. Surnina and A.A. Yanovskaya note, the level of equipment with high-tech medical equipment in domestic clinics has significantly increased in recent years and is not fundamentally different from the leading clinics in Europe and America, which allows domestic medical institutions and organizations to provide high-quality treatment and diagnostic services [22, p. 138].

**Table 2: Cost characteristics of popular directions of medical services**

Country	Cost, \$ USA	Ratio index of cost of medical
Extracorporeal fertilization (ECF)		
India	3,000-8,000	3.93
Poland	4,500	3.2

Turkey	4,000-8,300	4.39
Great Britain	4,000-10,000	5.0
USA	12,500-15,000	9.82
Russia	1,300-1,500	1.0
<b>Dentistry (dental implants)</b>		
India	500-1,000	2.14
Poland	550-1,000	2.2
Turkey	740	2.11
Great Britain	2,200-3,000	7.43
USA	3,000-6,500	13.57
Russia	300-400	1.0
<b>Executive checkup Check Up</b>		
India	350	1.0
Poland	600	1.71
Turkey	650	1.86
Great Britain	695	1.99
USA	460	1.31
Russia	350	1.0

Compiled by the authors based on: [20, 21]

The data in Table 2 prove once again the high attractiveness of medical services in Russia due to their relative cheapness with a sufficiently high level of medical care in Russia. The cost of extracorporeal fertilization is 4 to 9 times lower compared to other comparable countries, the cost of dental services, including prosthetics, is 2 to 13 times. Diagnostic services vary at about the same level in almost all countries. There are deviations from 30% to 90% compared to prices in other countries with a developed structure of medical tourism. Sometimes paradoxes are observed in the field of inbound medical tourism. So, often the cost of living in various accommodation facilities in Russia can significantly exceed the cost of the treatment and diagnostic process. In addition, as practice shows, tourists from European economically developed countries note a low level of services.

#### 4. DISCUSSION OF FINDINGS

Today, the pandemic made its cardinal corrections to the development of the travel industry around the world and, in particular, to the development of medical tourism in the Russian Federation. In conditions of uncertainty, it is difficult to plan the volume and financial indicators in the development of tourism activity of the population for medical purposes. After the lifting of restrictions and the opening of borders between states, in the near future the population will be reluctant to move long distances for many reasons of an objective and subjective nature, consisting in social and economic, political and psychoemotional factors.

The World Tourism Organization (UNWTO) expects a decrease in the number of foreign medical tourists in the world to decrease by up to 30% and the development of the tourism business will slow down its growth rates within 5-7 years [15]. At the same time, as evidenced by the structure of the entry flow of patients into the territory

of the Russian state, the decrease in its volume will not be as significant as in other European states due to the fact, that the formation of the flow of tourists for medical purposes was carried out mainly at the expense of the neighboring countries (up to 75%) , including the CIS countries, including Tajikistan, Kazakhstan, Belarus, Ukraine, Kirghizia, Turkmenia, etc., which citizens often have the opportunity for employment for a long period of time on the territory of the Russian Federation. In addition, now the decline in the paying capacity of the population in many countries of the world is also of great importance, which undoubtedly makes medical tourism in Russia more attractive due to the low level of cost of treatment and diagnostic services. In addition, in the next year or two, Russia can focus more on the formation and development of domestic tourism for medical purposes.

The practical significance of the study lies in the fact, that, based on the analysis of the structure of tourist flows for medical purposes, the authors identified the directions and possible prospects for the development of medical tourism in the conditions of a pandemic in Russia. The drawn conclusions and proposals will allow the entities of the medical tourism business to determine the vector of development of medical tourism after the lifting of restrictions on the anti-epidemiological regime in connection with the spread of COVID-19 and to improve the qualitative and quantitative indicators of the implementation of medical tourism services.

#### 5. CONCLUSIONS

Based on the above, it is possible to establish the fact of reformatting the activity of many organizations in the travel industry in modern social and economic conditions after limiting self-isolation measures, including medical organizations. At the same time, the authors are optimistic about the future development of domestic and inbound medical tourism in Russia due to the high existing potential for the development of scientific and technological parameters of the national healthcare system. In addition, after the pandemic, citizens of many countries in Europe and Asia will pay attention to the state of the healthcare system in Russia, which showed the whole world a high degree of mobility and efficiency in the infection diseases control with a low mortality rate. In addition, in our opinion, many of the current subjective assessment criteria of health care systems in world practice will be revised, which will entail the introduction of significant corrections in assessing the scientific and technological level of healthcare systems in many countries, where Russia can take its rightful place.

Despite the potential for the development of medical tourism in Russia, it is necessary to solve many organizational issues, related to the formation of a modern and efficient infrastructure both at the level of the executive authorities of the Russian Federation and at the microlevel (the level of medical, tourism and transport organizations). Therefore, the authors consider it expedient to rely on the experience of leading countries in the field

of medical tourism in the development of medical inbound tourism. When organizing and managing domestic clinics, focus on international standards for the provision of medical care, as well as when providing a range of additional services to tourists.

Seeking to the many competent opinions of leading specialists and experts in the development of the tourism industry in Russia, it is possible to predict the formation of flows due to internal movements of the population and tourists from neighboring countries in the near future, who have the opportunity for employment in the territory of the Russian Federation, as well as their relatives and friends. In addition, many scientific medical communities, doctors, scientists in the field of medicine and pharmaceuticals proclaim the thesis, that the future of healthcare in Russia is preventive medicine. Therefore, reformatting is expected not only in tourism but in many sectors of the national economy, including healthcare. The preventive orientation of healthcare, the formation of a healthy lifestyle of the population, an increase in the level of responsibility of the population for their own health and the health of their relatives and friends will form the flows of health tourism among Russians.

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