CONSIDERATIONS ON THE DEVELOPMENT OF MEDICAL TOURISM AT WORLD LEVEL AND IN ROMANIA

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Abstract

The paper aimed to present a few considerations on the development of medical tourism at international level and in Romania, based on the existing literature abroad and in the country. The medical tourism is dynamics branch of tourism creating patients flows and incomes for the receiving countries, which are providers of healthcare services at international standards and certification. Most of the "suppliers" of medical services are in Asia, but also in the Latin America, Europe and the USA. The medical services of interest for medical tourists are: cosmetic surgery, dentistry, cardio surgery, orthopaedic surgery, bariatric surgery, fertility, organ, cell and tissue transplantation, eye surgery, wellness, analysis, tests, scans etc. The medical tourist flow is created by the wish of the patients to be consulted and treated in another place or country because in their own country are not satisfied by the offer of medical services, the quality of services, the price/procedure, for making savings. In Romania, about 70 % of the foreign tourists are represented the Romanians living abroad who return in the country for dental implants, cosmetic surgery, in vitro fertilization, heart diseases, orthopaedical problems, rheumatism treatments, physiotherapy in spas, because the average expenditure per procedure is about Euro 3,200, much cheaper than in other countries. The source of medical tourists for Romania are Germany, United Kingdom, Italy, France, Israel, USA. As medical tourism is a nich for Romania, a new strategy is required to improve the infrastructure, to assure the high tech endowment in hospitals and clinics, a high professional training and salary for the medical staff and a more efficient marketing to promote Romania's resources and quality and price of medical services.

Key words: development, medical tourism, international market, Romania's market

INTRODUCTION

The definition of a medical traveler, given by *Patients Beyond Borders* is: "anyone who travels across international borders for the purpose of receiving medical care". [19]

In other words, "medical tourism is defined as a travel abroad in order to seek medical treatment, with or without a holiday or the consumption of tourism services". [5, 10, 22] Medical tourism is continuously developing, becoming a distinguished branch of tourism industry as a result of the people's permanent need of health care, the uneven growth of private sector in health care services, the deeper involvement of high technologies in medical services, the tourism globalization the and the existence of unlimited opportunities to access health resources [5]. Medical tourists are characterized by the following features which divide them a various categories of patients:(i)people who

are ill and their disease is treatable, and because of that they look for a diagnosis to confirm their illness;(ii) people who look for a cosmetic treatment or a surgery;(iii)people willing to leave their home and travel in order to be treated;(iv) people motivated to travel because they found lower tariffs per medical service in another place or a higher quality of a healthcare service or a better access to healthcare services, or a shorter waiting period or who are not able to get a medical service at home or in their country of origin; (v)people looking for the best medical procedures, the highest technologies, the best doctors;(vi)people looking for the rehabilitation after a treatment or surgery or to get an additional medical service. [6]

Medical tourism has known a continuous development in the recent years at world level becoming a real tourism industry, creating patient flows to the countries offering healthcare services at international standards and at costs for all the types of medical tourists.

Traveling for medical services is a challenge and also an opportunity to get a new life experience aiming to maintain health and visit other places or countries.

In this context, the purpose of this paper was to present some considerations about the development of medical tourism both at world level but also in Romania, which has a high potential, for the moment not enough used in this area.

MATERIALS AND METHODS

This study is based on literature and aimed to point out the development of medical tourism at international level and in Romania, characterizing the main aspects such as: definition of medical tourism, the main factors determining patients to apply abroad for services, the healthcare top country destinations, financial aspect of medical tourism, the healthcare services of high interest for patients travelling abroad to test and treat. In this study are also presented the author's opinions on the development of medical tourism.

The statistical data provided by various sources have been processed using the specific methodology.

RESULTS AND DISCUSSIONS

Medical tourism development at international level

The main reasons of medical tourism development at international level.

There are many reasons determining people to look for tests, diagnosis or treatment, surgery etc in other places than the one of origin. In this respect, there are many opinions and some of them are selected below.

The growth of treatment cost, the limited financial resources and the need to save money have determined most of patients to look for cheaper medical services in other countries, mainly in the emerging economies [11].

The aging of the world population and the lack of possibility to cover all the inquiries of **242**

medical services in the country of origin have oriented people to travel abroad in the counties where they could find satisfaction [16]

Sometimes, the long time of waits to be consulted and treated in the country have determined the patients to find solutions abroad paying the procedures [11]

A survey report made by McKinsey and Company mentioned that 40% of medical tourists travel abroad looking for advanced technology, 32 % patients seek for better medical services, 15 % are interested in fast healthcare services and 9 % travelers seek lower medical costs. [15]

The increasing financial efforts made in the healthcare system by Governments, the high investments in healthcare and tourism infrastructure, the excellent medical services and international reputation, accreditation and quality assurance in some countries in general, but especially in the Asian countries and the Latin American countries have created poles of medical tourism in the world like: India, Singapore, Malaysia, Taiwan, Thailand, South Korea, but also Costa Rica and Mexico, as well as USA and Israel. [17, 151

Responding to the global need of hospitals accreditation, meaning that each international hospital must meet the same set of rigorous standards set forth in the USA in 1999, at present the Joint Commission International accredited more than 600 hospitals and clinical departments around the world and their growth rate is about 20% per year. [20]

The top 10 countries in the world regarding the number of JCI acredited hospitals in 2012 were: Turkey (42), Saudi Arabia (39), United Arab Emirates (38), Brazil (31), Ireland (15), Thailand (17), India (16), Italy (15), Singapore (14) and China (14). [21]

In Europe, the most important medical destinations are Hungary, Poland, Romania, Bulgaria, Czech Rep, and Romania, countries from the Central and Eastern part of the continent, where high facilities are provided at lower costs than in the Western Countries. Also Belgium, Spain, Belgium and Turkey are among the most important medical services providers. [7, 22]

The long experience, high performance and best practices in healthcare and medical procedures, high competence and experienced medical staff, international accreditation of some international hospitals and ambulatory medical services, recognition of high quality, prompt and efficient medical services have also contributed to a high international flow of patients. [19]

The internet access to various web sites providing useful information about healthcare services in various countries and also the possibility to mix the advantages of medical tourism and tourism attractions offered by the destination country have sustained the wish of many patients to travel abroad. [16]

A study regarding the use of internet by breast augmentation patients concluded that 68% of the respondents utilized internet information, 53 % patients have chosen the procedures by internet, 36 % choose the surgeon, 25% respondents choose the hospital. [13]

Medical services of high interest for patients: Cosmetic surgery (breast, face, Dentistry liposuction). (cosmetic and reconstruction), Cardiology/cardiac surgery (by-pass, valve replacement), Orthopaedic surgery (hip replacement, resurfacing, knee replacement, joint surgery), Bariatric surgery (gastric by-pass, gastric banding). Fertility/reproductive system (IVF, gender reassignment), Organ, cell and tissue transplantation (organ transplantation; stem surgery, Wellness cell). Eve services. analysis, tests, scans, etc. [14]

Medical tourism in figures

It is difficult to find information about the statistics of international and national medical tourism, global healthcare, and the international patient experience. Sometimes the figures presented by various sources do not fit. However, any information source is useful to have a comprehensive idea about the evolution of medical tourism industry.

-The number of international patients accounts for about 6 million people travelling in various countries for healthcare services, but adding those patients who travel a distance within a country, the total number of patients around the globe will be about 11 million per year. The forecast provides a continuous growth for the next years. [25]

The OECD estimated that in 2014, there were 50 million medical tourists worldwide, which prove the continuous extend of medical tourism industry. [15]

In the USA, the number of American medical tourists increased from 500 thousand in 2007 to 800 thousand in 2012 and 1,25 million in 2014. [15]

In 2012, the number of medical tourists by the main countries of destination was: 1,200 thousand in Thailand, 1,000 thousand in Mexico, 1,200 thousand in the USA, 610 thousand in Singapore, 160 thousand in India, 180 thousand in Brazil, 110 thousand in Turkey and 90 thousand in Taiwan. The figures increased every year in various destination countries.(Table 1).

| | THAILAND | MEXICO | USA | SINGAPORE | INDIA | COSTA RICA | PANAMA | BRAZIL | TURKEY | TAIWAN | MALAYSIA |
|------|----------|--------|-------|-----------|-------|---------------|--------|--------|--------|--------|----------|
| 2012 | 1,200 | 1,000 | 1,200 | 610 | 166 | - | - | 180 | 110 | 90 | - |
| 2013 | 2,500 | 1,200 | 1,225 | 850 | 280 | - | - | 200 | 185 | - | 770 |
| 2014 | 2,500 | 1,500 | 1,250 | 855 | 400 | 40 | 40 | 220 | 300 | - | 800 |

 Table 1. Number of medical tourists by destination country, 2012-2014 (thousand)

Sources: [15, 20]

-The receipts coming from international healthcare services are estimated at about USD 50 billion and even USD 65 billion in 2014, and the average annual growth rate is about 20 %.[15]

-The average expenditure for medical healthcare services is about USD 3,500-5,000

per visit, including the cost of medical services, transport, accommodation etc.

-The average growth rate of the international medical tourism market is estimated at 15-25%, but higher in Asia, more than 26 %. The market is continuously increasing.

-The tariffs for some medical services practiced in a few top countries are presented in Table 1. It could be easily notice that in the USA and UK the tariffs are higher in general

compared to the ones applied in Singapore, Thailand, India, Malaysia, Mexico, Poland and Hungary (Table 2).

Table 2. Tariffs of Medical services in some countries in 2011 (USD/procedure)

| PROCEDURE | USA | UK | SINGAPORE | THAILAND | INDIA | MALAYSIA | MEXICO | POLAND | HUNGARY |
|----------------------------|---------|--------|-----------|----------|--------|----------|--------|--------|---------|
| HEART BYPASS (CABG) | 113,000 | 13,921 | 20,000 | 13,000 | 10,000 | 9,000 | 3,250 | 7,140 | - |
| HEART VALVE REPLACEMENT | 150,000 | - | 13,000 | 11,000 | 9,500 | 9,000 | 18,000 | 0,520 | - |
| ANGIOPLASTY | 47,000 | 8,000 | 13,000 | 10,000 | 11,000 | 11,000 | 15,000 | 7,300 | - |
| KNEE REPLACEMENT | 48,000 | 10,162 | 13,000 | 10,000 | 8,500 | 8,000 | 14,650 | 6,375 | - |
| RHINOPLASTY | 4,500 | 3,500 | 4,375 | 2,500 | 2,000 | 2,083 | 3,200 | 1,700 | 3,500 |
| MASIECTOMY | 17,000 | - | 12,400 | 9,000 | 7,500 | - | 7,500 | - | - |
| BREAST IMPLANIS | 5,200 | 6,075 | 8,000 | 2,600 | 2,200 | 3,308 | 2,500 | 5,243 | 3,871 |
| CROWN | 385 | 330 | 400 | 243 | 180 | 250 | 300 | 246 | 322 |
| TOOTH WHITENING | 289 | 500 | - | 100 | 100 | 400 | 350 | 174 | 350 |
| DENTAL IMPLANIS | 1,188 | 1,600 | 1,500 | 1,429 | 1,100 | 2,636 | 950 | 953 | 650 |

Note: Travel and accommodation cost excluded. Source: [14]

A research study revealed that it is cheaper to apply for medical services in India compared to UK. In India, a patient could save £ 4,718 for a coronary artery bypass, £ 4,898 for a total hip replacement, £ 732 for a total knee replacement, £ 276 for a femoral hernia repair and £ 378 for an inguinal hernia repair.(Table 3).

-The savings level in various countries where the US patients used to travel for treatments and medical procedures are: India: 65-90%, Malaysia: 65-80%, Thailand: 50-75%, Turkey: 50-65%,

Costa Rica: 45-65%, Mexico: 40-65%, Taiwan: 40-55%, South Korea: 30-45%, Singapore: 25-40% and Brazil: 20-30%.[15]

Regarding the savings in various countries for dental and cosmetic surgery compared to the cost of these medical services in the USA, another information source mentioned: 40-70% less in Panama, 40-50% less in Hungary, 25-35% less in Mexico, 30-40% less in Costa Rica, 40-50 % less in Brazil, 20 % less in India, 30% less in Thailand, 35% less in Singapore, 25 % less in Malaysia. [15]

-The country ranking based on medical tourism index. In order to establish a correct hierarchy of the countries where patients travel for medical services, the International Healthcare Research Center (IHRC) has set up a Medical Tourism Index (MTI) which quantifies the attractiveness of a country for medical tourism based on its local environment, healthcare and tourism potential and infrastructure, and availability and quality of medical facilities and services.

1. The top 25 performers with the highest MTI scores are presented in Tabel 4. As one can notice, 7 destination countries are from Asia: Singapore, Philippines, China, Japan, South Korea, India, and Thailand. [9]

-In Europe there are some countries facing with medical tourists because of their high healthcare services, high tech endowment in hospitals and clinics, high competence medical staff. Italy, Germany, France, Spain, Poland and Russia are among the top 25 countries in the world based on the medical tourism index.(Table 4). Also, other countries like Czech Rep., Hungary, Ireland, Turkey, Romania and Bulgaria are considered among the attractive countries for their medical services.

A recent study made in 2013 in Lithuania put into evidence the number of practicing physicians, hospital beds and healthcare price level in a few European countries, reflecting the potential healthcare capacity.(Tabel 5)

PRINT ISSN 2284-7995, E-ISSN 2285-3952

The tariffs per medical service differ according to the procedure and country as

presented in Table 6 for dentistry, plastic surgery and vision surgery.

| COST FOR ONLY | COSTUK(£)A | COST | COST OF | TOTAL COST | COSTSAVEDPER | WAITINGLISIS | TOTAL SAVED (£) |
|------------------------------|------------|-----------|---------|-------------|--------------|--------------|-----------------|
| PATIENT | | PROCEDURE | FLIGHIS | INDIA | OPERATION(£) | | |
| TRAVELLING | | INDIA(£)B | (£) | (£) | | | |
| PROCEDURE | | | | | | | |
| CORONARY | 8,631 | 3,413 | 500 | 3,913 | 4,718 | 97 | 457,646 |
| ARTERY BYPASS GRAFT(CABG) | | | | | | | |
| CORONARY | 2,269 | 2,363 | 500 | 2,863 | -594 | 25,241 | NOT WORTH |
| ANGIOPLASTY | | | | | | | Π |
| TOTAL HIP | 8,811 | 3,413 | 500 | 3,913 | 4,898 | 28,800 | 141,062,400 |
| REPLACEMENT | | | | | | | |
| TOTAL KNEE | 6,377 | 5,145 | 500 | 5,645 | 732 | 53,911 | 39,462,852 |
| REPLACEMENT | | | | | | | |
| FEMORAL | 1,595 | 819 | 500 | 1,319 | 276 | 1,686 | 465,336 |
| HERNIA REPAIR | | | | | | | |
| INGUINAL | 1,595 | 717 | 500 | 1,217 | 378 | 65,064 | 24,594,192 |
| HERNIA REPAIR | | | | | | | |
| TOTAL | | | | 206,042,426 | | | |

Table 3.Comparative advantages to apply for medical services in India compared to UK

Source: Hospital Episode Statistics, Main procedures and operations 2007-2008 [14]

| Table 4. The country ranking at world level | based on this Medical Tourism Index (| (MTI)in 2014 |
|---|---------------------------------------|--------------|
|---|---------------------------------------|--------------|

| CRTNO | COUNTRY | MTI(%) | CRTNO | COUNTRY | MTI(%) |
|-------|-------------|--------|-------|----------------|--------|
| 1 | CANADA | 76.9 | 14 | JAMAICA | 67.7 |
| 2 | UNITED | 74.9 | 15 | INDIA | 67.5 |
| | KINGDOM | | | | |
| 3 | ISRAEL | 74.2 | 16 | COLOMBIA | 67.4 |
| 4 | SINGAPORE | 74.0 | 17 | DUBAI | 66.1 |
| 5 | COSTA RICA | 72.8 | 18 | DOMINICAN REP. | 66 |
| 6 | ITALY | 72.0 | 19 | POLAND | 65.5 |
| 7 | GERMANY | 70.7 | 20 | THAILAND | 65.5 |
| 8 | PHILIPPINES | 70.7 | 21 | ARGENTINA | 64.4 |
| 9 | JAPAN | 70.4 | 22 | CHINA | 63.1 |
| 10 | FRANCE | 70.2 | 23 | SOUTHAFRICA | 62,1 |
| 11 | SOUTHKOREA | 70.0 | 24 | MEXICO | 61.0 |
| 12 | SPAIN | 69.3 | 25 | RUSSIA | 50.3 |
| 13 | BRAZIL | 679 | | | |

Source: [9]

Medical tourism development in Romania Among the main factors contributing to the development of medical tourism in Romania could be mentioned:

-the existing healthcare and medical potential of Romania representing 30 % of Europe potential;

-the existence of the infrastructure regarding well known state hospitals with high competence and long experience medical staff in various medical fields and the spas, even thou some of them are not so well maintained; -the appearance of high class healthcare services in private hospitals, clinics, well endowed with high technology for offering corresponding high quality medical services;

-the tariffs of medical services in Romania are by 40-50 % lower compared to the tariffs practiced in Germany, Italy and France; for instance a coronary artery bypass surgery accounts for about Euro 4,000-5,000 compared to about Euro 9,500 in UK; another example, a dental implant in Romania costs about Euro 500 compared to Euro 1,000 in the Western countries;

-the European Directive No.24/2011 which allows the cross-border healthcare and according to which, at the beginning the

PRINT ISSN 2284-7995, E-ISSN 2285-3952

medical services were for free, but din October 25, 2013, this provision was modified, so that at present each patient with medical insurance is obliged to reimburse a part of the treatment cost if the national legislation provides this, meaning about 40 % and the remaining of 60 % is discharged by the country of origin. [4, 23]

Table 5.The healthcare capacity in a few European countries

| COUNTRY | | NO. OF HOSPITAL BEDS | HEALTHCARE PRICE | | | |
|------------------------|------------|----------------------|------------------|--|--|--|
| | PHYZICIANS | | LEVEL | | | |
| LITHUANIA | 372.0 | 675.1 | 1.00 | | | |
| ESTONIA | 323.5 | 533,4 | 1.28 | | | |
| POLAND | 217.9 | 658.5 | 1.10 | | | |
| CZECH REP. | 358.0 | 701.0 | 1.12 | | | |
| HUNGARY | 286.9 | 718.2 | 1.05 | | | |
| UNITED KINGDOM | 271.2 | 295.5 | 2.24 | | | |
| THE NETHERLANDS | 292.3 | 465.7 | 1.92 | | | |
| GERMANY | 373.1 | 842.8 | 2.06 | | | |
| SWEDEN | 380.2 | 272.6 | 2.41 | | | |
| TOTAL 10 COUNTRIES | 2,875.1 | 5,162.8 | - | | | |

Source: [1]

The tariffs per medical service differ according to the procedure and country as

presented in Table 6 for dentistry, plastic surgery and vision surgery.

Table 6.Tariffs per medical service in a few European countries in 2013 (USD/procedure)

| MEDICAL SERVICE | SCANDINAVIAN | THE NETHERLANDS | UNITED KIN | JGDOM/ | |
|-----------------|--------------|------------------------|------------|--------|--|
| | COUNTRIES | | IRELAND | | |
| DENTISTRY | 816 | 488 | 723 | | |
| PLASTIC SURGERY | 3,842 | 3,087 | 3,891 | | |
| VISION SURGERY | 3,000 | 2,100 | 2,460 | | |

Source: [1]

According to a study made on 1,000 patients from United Kingdom, *Treatment Abroad* -*Intuition Communication Ltd 2012*, it was noticed that on the top position is the doctor professional experience (89 %), the quality and fame of a hospital (85%) and tariff level per medical service is on the 3rd position (81%). [7]

The main medical services of high interest for patients in Romania are: Surgery 42 % esthetical surgery, but also other surgery types like general and gastric bypass, Dentistry 32 % (restorative, cosmetic), Obesity 9 %, Reproduction (fertility tests and treatments 4 %, births, in vitro fertilization), Orthopaedy 4 %, other medical fields 9 %: Cardiology (transplants, angioplasty, bypass), Skin diseases, Nutrition, Rheumatism treatment, physiotherapy spa (Mangalia, Eforie, Otopeni, Baile Herculane, Baile Felix). Dentistry, luxury surgery, plastic surgery and reparatory surgery, abdominal surgery are of high attraction in Romania because of the lower price per intervention compared to the Western European countries. Dentistry is the top medical field, because in Romania there are high quality services and an excellent price/quality ratio and high competence of the medical staff. Unfortunately, spa physiotherapy is still limited due to the uncorresponding infrastructure, but this is also a niche for Romania's medical and wellness tourism. [7]

The number of medical tourists visiting Romania was 60,000 in 2013, and their number is expected to increase. [4]

However, at national level there no a statistics regarding medical tourism. [24]

The structure of foreign patients who apply for healthcare services in Romania is represented in the most cases by the Romanians living abroad. The foreign patients are mainly from Germany, United Kingdom, Italy, France, Israel, USA. For instance, for dental problems, the main patients come from UK, Italy, France, USA, Austria, Hungary, because the tariffs are 70 % lower than in those countries; the most accessed services are: dental implants, ceramics cover, teeth whitening etc. The structure of patients: 60 % Romanians, 25 % Romanians from abroad and 15 % foreigners. An important role in the promotion of dentistry tourism in Romania have the non profit organizations and the implementation of various projects destined to develop the educational system in order to assure high competence medical staff in the field of dentistry. [7]

The number of Romanian patients travelling abroad to make analysis, tests, surgery, scans etc was 20,000 in 2012 and 25,000 in 2013 and it is expected to increase in the coming years. These patients are represented by people interested to get the second opinion on their diagnostic and treatment or for a surgery because they consider that the medical system abroad is better endowed and has higher competence medical staff.

The most preferred destination countries by the Romanian medical tourists are Hungary, Turkey, Austria, Germany and Israel and the average expenditure made abroad per medical service is about Euro 5,000. About 25 % of the Romanian medical tourists are attracted by the healthcare service provided by Turkey, because of the complete offer provided by the Turkish hospitals including: collection of the patient from the airport, transport, translator, high quality accommodation healthcare, for the accompanying person, tickets to museums and tourism attractions etc. [4]

The expenditures made by a Foreign patient in Romania for a medical procedure is in average Euro 3,500, including the air ticket, accommodation, and healthcare service. This is a small price compared to the medical services provided by other European countries. For the price attractiveness and a high quality of medical services, Romania is expected to exceed Euro 400 million income in the year 2015. [8]

From other information source, it is expected as the number of healthcare tourists mainly Germans, Italians, Israelians and British patients to be double by the end of the year 2015 and the income coming from the their payments to account for about Euro 500 Million. [3]

At the International Forum on "Medical Tourism - A pillar for Romania's sustainable development", it was affirmed that there is no evidence on medical tourism in Romania, but Romanian the Association of Medical Tourism in Romania recorded 6,500 patients in 2014. It was also mentioned that Romania has a high potential for healthcare tourism and for this reason a higher number of patients is expected to come resulting an income growth for the private hospitals and clinics. Only in 2014, those 6,500 patients spent about Euro 20 million in Romania. [12]

The amount of money for the treatments abroad by the Romanian patients made by CNAS- The National House of Medical Insurance, NHMI, increased from Lei 0.1 million in 2007 to Lei 300 million in 2014. Only in the period 2007-2014, the NHMI paid Lei 564.4 million.(Table 7)

Therefore, if in the period 2007-2014 Romania was due to pay Euro 212 million, including the medical services assured by the European card of social health insurance, the provisory certificate replacing that card, and the European forms needed to pen the residence and treatment rights. [4]

Romania's debts for the Romanians' treatments by country are presented in Table 8.

Romania's potential of medical and wellness services in spas. Romania has a high potential to offer medical services and wellness services in spas.

PRINT ISSN 2284-7995, E-ISSN 2285-3952

Table 7.The payment made by NHMI for the Romanian patients treated abroad in the period 2007-2014 (Lei Million)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|------|------|------|------|------|------|-------|------|
| PAYMENT FOR TREATMENTS ABROAD | 0.1 | 14.8 | 19 | 89 | 12.7 | 57.6 | 151.3 | 300 |

Source: [4]

Table 8. Romania's debts to various countries for the Romanians' treatments

| GERMAN | Y | ITALY | | AUSTRIA | | FRANCE | | SPAIN | | HUNGAR | Y | BELGIUM | I |
|-----------------|-----|-----------------|----|-----------------|----|-----------------|----|-----------------|---|-----------------|---|-----------------|----------|
| EURO MILLION | % | EURO MILLION | % | EURO MILLION | % | EURO MILLION | % | EURO MILLION | % | EURO MILLION | % | EURO MILLION | <u>%</u> |
| 73 | 365 | 40 | 20 | 30 | 15 | 20 | 10 | 16 | 8 | 12 | 6 | 8 | 4 |

Source: [4] Own calculation.

In 2013, the accommodation capacity was represented by 499 spas, representing 8.30% of the total number of accommodation units (6,009 units), with 39,953 places (beds) in spas, representing 13.06 % of the total number

of 305,707 beds at country level. Also, in 2013, the number of beds-days, totalized 10,370,447 in spas, representing 13.46 % of the 77,028,488 beds-days at country level (Table 9).

Table 9. Romania's accommodation capacity in spas in 2013

| TOTAL | SP | AS | TOTAL | SP | AS | TOTAL | SPA | S |
|------------|-----|-----|----------|--------|-------|------------|------------|-------|
| UNIIS WITH | | | BEDS | | | BEDS- | | |
| TOURIST | | | (PLACES) | | | DAYS | | |
| ACCOMMOD. | | | | | | | | |
| NO. | NO. | % | NO | NO | % | NO | NO | % |
| 6,009 | 499 | 830 | 305,953 | 39,953 | 13.06 | 77,028,488 | 10,370,447 | 13.46 |

Source: [18] Own calculation.

The number of tourists accommodated in Romania's spas increased by 19.40 % in the

period 2010-2014, from 568 thousand in 2010 to 678 thousand in 2014.

Table 10. The number of tourist accommodated in spas, 2010-2014

| SPECIFICATION | 2010 | 2014 | 2014/2010% |
|--|---------|---------|------------|
| NO. OF TOURISTS ACCOMMODATED IN SPAS | 568,257 | 678,536 | 19.40 |
| SHARE OF THE NUMBER OF TOURISTS ACCOMMODATED IN SPAS IN TOTAL NUMBER OF ACCOMMODATED TOURISTS IN ROMANIA (%) | 10.3 | 85 | - |

Source: [18] Own calculation.

But, the share of the number of tourists accommodated in spas in the total number of tourists accommodated in Romania declined from 10.3 % in 2010 to 8.5% in 2014.(Table 10)

The number of tourist overnight stays in the Romanian spas increased from 3,910,309 in 2010 to 4,138,034 in 2013, that is by 5.82 %.(Table 11).

Strategical directions for the medical tourism development in Romania

Taking into account the deficiencies existing in the medical services in Romania such as:

-the lack of statistical records with complete and correct data bases at national level,

-the lack of a corresponding infrastructure regarding in the field of spas, state hospitals and clinics, -the lack of related services like visiting tour to tourism attractions: historical and cultural places, landscapes, Romanian traditions,

-the lack of viable alternatives in case of complications after treatment,

-the weak promotion of Romania's potential regarding the medical and wellness services,

PRINT ISSN 2284-7995, E-ISSN 2285-3952

the well endowed hospitals and clinics, the well known doctors and other medical staff, -the lack of a corresponding salary for the medical staff, the migration of doctors, assistants etc in the Western countries and the lack of medical personnel, it is obviously required to develop a strategy for the development of medical tourism in Romania in the future.

| YEAR | TOTALOVERNIGHTSTAYSATCOUNTRY | OVERNIGHT STAYS IN SPAS | SHARE OF OVERNIGHT STAYS IN SPAS IN TOTAL | | |
|------|------------------------------|----------------------------|--|--|--|
| | LEVEL | | OVERNIGHT STAYS (%) | | |
| 2010 | 16,051,135 | 3,910,309 | 24.4. | | |
| 2011 | 17,979,439 | 4,342,157 | 24,2 | | |
| 2012 | 19,116,122 | 4,268,473 | 24.3 | | |
| 2013 | 19,362,671 | 4,138,034 | 21.4 | | |

Table 11.The number of overnight stays of the tourists in Romania's spas, 2010-2013

Source: [18] Own calculation.

Table 12.The number of overnight stays in spas by foreign and Romanian tourists, 2010-2013

| OVERNIGHT STAYS IN ROMANIA'S SPAS | | | | YEAR |
|-----------------------------------|------|---------------------------|-------|------|
| FOREIGN TOURISTS | | ROMANIAN TOURISTS | | |
| NO. OVERNIGHT STAYS | % | NO. OVERNIGHT STAYS | % | |
| 89,637 | 2,29 | 3,820,672 | 97.71 | 2010 |
| 103,503 | 2.38 | 4,238,654 | 97.62 | 2011 |
| 111,534 | 2.61 | 4,156,939 | 97.39 | 2012 |
| 129,070 | 3.12 | 4,008,964 | 96.88 | 2013 |

Source: [18] Own calculation.

Since 2007 when Romania became an EU member, it lost 25,000 doctors and 15,000 medical assistants who went to Germany, France, Spain and Italy, because the average salary of an experienced doctor in Romania is USD 20,000 per year compared to USD 82,000 in Germany and USD 120,000 in UK.

At present, Romania has the lowest doctors density: 22.7 doctors per 10,000 inhabitants, less than 35 doctors the EU average and also less than in Croatia (26) and Hungary (30.3), Austria (48.5). [3]

The strategy for the development of the medical tourism in Romania in the future should contain specific objectives and measures to assure their achievement.

The main strategical directions to whom the authorities with responsibilities in the field of medical tourism must to pay attention are:

(i)the improvement and modernization of infrastructure in the medical system, by investments in new and high technologies, (ii) a better marketing meaning: the identification of foreign markets which could supply medical tourists, the promotion of Romania's health care resources and services, the establishment of Romanian brands in medical tourism, setting up complete touristic packages including both healthcare services, tours to touristic attractions, air tickets, tickets to museums etc;

(iii) the increase the quality of medical services and assure the best ration between service quality and price;

(iv)to increase the medical staff knowledge and skills, to assure high competence doctors and assistants;

(v)to increase the salary of medical staff based on their professional contribution to the medical problem solving and to reduce and avoid medical staff migration to other countries where they could find better paid jobs.

The main medical services of high attraction which should be developed in the future for the foreign patients are: Dentistry, Esthetyc Surgery, Fertilization, Anti-aging treatments, Bariatric surgery and post recovery, Cardiovascular surgery, Eye surgery, wellness and spa medicine. [2]

The role of medical associations in the development of medical tourism. A high importance in the development of medical tourism have had and have the various medical associations, including hospitals, clinics with the highest technologies and the best medical staff, and also dealing with projects and a sustainable marketing. A

Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 15, Issue 3, 2015 PRINT ISSN 2284-7995, E-ISSN 2285-3952

significant example is the Romanian Association of Medical Tourism, including 136 private hospitals and clinics and 206 tourism agencies, hotels, air companies, insurance companies. This Association received over Euro 26 million last year from the patients treated in its hospitals and clinics. The average expenditure of a foreign patient in Romania accounted for Euro 3,200. The most required medical services have been Dentistry (70% of foreign patients), Esthetyc surgery (15%), Vision surgery (5%). Orthopedy, Skin diseases and Bariatric surgery (10%). The country of origin for these patients were Italy, France, Spain, Germany, Switzerland, United Kingdom, but also the Arabian countries, Russia and USA. [8]

CONCLUSIONS

Medical tourism is continuously developing and has created poles of medical services, patient flows and income flows at international level and in some countries from Asia, Latin America and Europe.

For Romania, medical tourism is a challenge, an opportunity and a niche which could bring more tourists in the country to have contact and appreciate the achievements in the field of medicine, but also the beautiful landscapes, cultural and historical treasures, traditions and people hospitality.

The medical tourist flows could also increase the incomes improving the payment balance and supplying financial resources to the private units to continue their development.

The medical tourism should be better promoted keeping pace with the new trends and actual requirements and standards of the European and national market.

Romania's medical tourism must offer high quality services, fitting the international standards and certifications, assuring a corresponding management of the medical units and the patient security and safety as well as an efficient marketing.

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