Abstract
The role of Medical Tourism in the process of a complex satisfaction of the prosumers and the impact played in the organizational and functional changes in the Polish healthcare system.

The analysis of the literature on the subject as well as an analysis of the documentation were the inspiration to write this work. The main emphasis was put on stating the conditions stimulating the development of this sector of the economy as well as the risk factors determining the quality of process changes in the healthcare system (functioning of public hospitals).

To approximate the characteristics of the involved risk within the framework of health tourism functioning in the conditions of a market economy. Selected research methods allowed to present the motives behind undertaken actions of both the regulators as well as participants of the health tourism.

Polish accession to the EU was an important impulse changing the way of thinking about health tourism in healthcare as well as, what is important, changes in the institutional and financial policy in Poland. In order to meet health-oriented demands of a prosumer, there should be a coordinated and effective informational system, aimed at improving the quality, reliability, availability of information concerning health tourism.

Keywords: health tourism, health services, quality.

Jel Classification: M19; L8; I11; I15

INTRODUCTION

In the era of globalization, access to international transport and the greater awareness of patients, health tourism is becoming more common. The origins date back to antiquity. During those times people not only travelled for religious reasons but also military and commercial; also to improve the psychophysical state (Lubowicki-Vikuk 2012). However, only in the XXI century through accelerating globalization and the impact of

mass media, health tourism is developing at a rapid pace. The scale as well as a number of other factors affecting the nature of travelling, make it an innovative product. Moreover, it can provide an answer to global challenges as an instrument for solving health problems of the prosumers.

The process of making choices for priority objective is the hallmark of every healthcare system, which depends on the economic situation of a country. In order to circumvent a situation, where our health will depend on the capacity of the system, we try to get certain medical services another way. Taking costs into account, we can consider participating in health tourism. With the improving economic situation and the standard of life, the demand for health tourism began to increase in Poland. The diverse nature of the factors determining Polish health tourism, both economic and non-economic, the complexity of this phenomenon, increasing importance for the economy, encouraged the authors to write this work.

The aim is to analyse Medical Tourism, barriers, factors and to formulate recommendations for the Ministry of Health (MZ) and the National Health Fund (NFZ) in Poland. The work was based on the query of literature covering a range of interesting scientific and consulting information. In addition, an analysis on the situation of healthcare system in Poland as well as the impact of regulatory changes connected with the implementation of the Directive on cross-border healthcare (Directive 2011) were provided. For the purpose of this work it is assumed that Medical Tourism is the movement of prosumers (to other countries) in order to acquire health services of high (repetitive) quality, an adequate level of safety and competitive prices.

1. THE HISTORY OF MEDICAL TOURISM

The phenomenon of looking for medical services outside borders has been known since ages. Medical Tourism is determined as travelling to other countries, aimed at treatment, rehabilitation and rest. Beginning of Medical Tourism is dated back to around 2000 BC. Hippocrates visited in ancient Greece the sanctuary of Asklepios at Epidauros (functioning since 6th BC to 2nd AD).

The 18th and 19th centuries are the beginning of increased Medical Tourism traffic, which consisted on visiting warmer places situated in southern France. A significant increase in the interest of Medical Tourism has been taking place since the 90’s in the 20th century. Despite the fact that travelling with the aim of seeking medical services have been known for many years, observed in the last twenty years phenomenon of Medical Tourism on such scale, is something new. For the first time the “reversed globalization” was noted, which is based on the travelling of people from highly developed countries to countries with lower level of economic development, due to costs, quality as well as lack of benefits (Connell 2013). Currently, this “reversed flow” is the determinant of Medical Tourism.

The new concept of Medical Tourism, which was only formed in the 21st century, concerns these people who travel for the purpose of receiving medical treatment. Other important factors include the development of low-cost air connections, expansion of the internet, which is the main source of information as well as formation of Medical Tourism by increasing the share of both the private and public medical entities. In addition, the increased involvement of governmental institutions in the promotion of
Medical Tourism is considered as an important source of income (Iordache, Ciochiná, and Roxana 2013).

2. THE CONCEPT OF MEDICAL TOURISM

Medical Tourism is a term used to describe the practice of travelling solely for the purpose of acquiring health satisfaction. This situation is primarily due to significant financial problems of financing the healthcare system in Poland. In addition, the increase in the availability of information (internet), reduced costs of travelling (development of low-cost air connections), necessary time to acquire needed medical services are important determinants to Polish prosumers and their decision making process. All these phenomena, typical to globalized economy of the 21st century, also allowed the development of Medical Tourism as a phenomenon of our times as well as a separate sector of the economy (WHO 2014).

The term “Medical Tourism” is commonly used by prosumers who travel outside the place providing permanent health care. The aim is to access the broadly defined medical services, which are offered abroad and for which they most often pay themselves. Medical Tourism is one of the forms of health tourism. In the literature on the subject an approach can be found treating Medical Tourism like:

- an obligatory part of a holiday trip programme (Rab-Przybyłowicz 2010),
- term identified with the global healthcare (Lunt and Carrera 2010),

Till now, the phenomenon of Medical Tourism has been researched mainly by economists, which results from:

- quality oriented, in relations to medical tourists from economically undeveloped countries, who wish to come to another country, where medical services are provided at a higher level,
- cost oriented, which means a form of tourism oriented on medical tourists, which come from countries with a high level of medical innovation and economic prosperity, for the purpose of lower service cost, coming to countries, where such costs are cheaper (Białk-Wolf 2010).

Whereas M. Prochorowicz (2008) holds the view that Medical Tourism is a combination of treatment with tourism. According to A. Białk-Wolf: Medical Tourism is a voluntary movement to a foreign country in order to undergo a planned treatment with the aim to safe health, to improve the quality of life or physical appearance, because of financial reasons, quality or due to unavailability of benefits in the place of residence (Białk-Wolf 2010).

The authors of this article, for the most accurate definition of Medical Tourism chose the one presented by J. Rab-Przybyłowicz (2010), which states that Medical Tourism refers to travelling outside of own country. The motive is to stay in a medical institution with the purpose of improving health under interdisciplinary care of a diagnostic and therapeutic team.

Next to Medical Tourism, Wellness Tourism (Figure 1) is also an important form of health tourism. The term was coined by joining words “wellbeing” (being in good shape/good health) and “fitness” (being in good physical fitness).
The range of provided services in Medical Tourism is wide, because the health needs and expectations of the modern prosumers are becoming increasingly individualized. The range of medical services in the field of Medical Tourism include: diagnostic tests, restorative and aesthetic medicine (Bukowska-Piestrzyńska 2008).

3. RESEARCH MATERIALS AND METHODS

Poland has an opportunity for the development of the economy by using the growing market of Medical Tourism. There are favourable conditions (infrastructure and specialized medical stuff) but legal issues may be a restriction (chances and benefits from the implementation of the International cross-border Directive). As highlighted earlier, the growth of Medical Tourism in Poland results from:

- systematically limiting social insurance coverage for commercial medical services,
- demographic changes resulting in the increase of the number of elderly people,
- use of information technology, including internet, to promote medical services.

According to OECD² the number of doctors in Poland per 1000 people is 2.2 with the average of 3.1 in OECD countries. The number of hospital beds per 1000 people is 6.6 with the average 4.9 in the OECD. Hospital infrastructure is therefore redundant in relation to the internal needs of the healthcare system. On the other hand, the number of doctors seems insufficient to meet the domestic demand.

These factors have a significant impact on the processes of developing Medical Tourism in Poland. While the hospital base is not a factor limiting the development, the shortage of doctors (of defined specialization) can be a significant obstacle limiting the development of the Medical Tourism industry in Poland (table 1).

The prospects of the development of Medical Tourism in Poland, as the export sector of the economy, are favorable but largely depend on the implementation process of coordinating activities and tidying-up the legal and business environment, in which Medical Tourism in Poland is developing.

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Table 1. Determinants of the development of Medical Tourism in Poland

<table>
<thead>
<tr>
<th>Infrastructure factors</th>
<th>Entities</th>
<th>2000</th>
<th>2004</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of hospitals</td>
<td>Public</td>
<td>714</td>
<td>643</td>
<td>526</td>
</tr>
<tr>
<td></td>
<td>Non-public</td>
<td>38</td>
<td>147</td>
<td>228</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>752</td>
<td>790</td>
<td>754</td>
</tr>
<tr>
<td>No. of hospital beds</td>
<td>Public</td>
<td>189 707</td>
<td>175 631</td>
<td>165 012</td>
</tr>
<tr>
<td></td>
<td>Non-public</td>
<td>1 583</td>
<td>7 649</td>
<td>18 028</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>191 290</td>
<td>183 280</td>
<td>183 040</td>
</tr>
<tr>
<td>Hospital beds per 1000 people</td>
<td>Total</td>
<td>49.5</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Hospital beds usage indicator (in %)</td>
<td>Total</td>
<td>76.1</td>
<td>71.8</td>
<td>69.7</td>
</tr>
<tr>
<td>Average stay (in days)</td>
<td>Total</td>
<td>8.5</td>
<td>6.9</td>
<td>5.8</td>
</tr>
<tr>
<td>No. of hospitalized people</td>
<td>Public</td>
<td>6 207 379</td>
<td>6 705 060</td>
<td>7 249 283</td>
</tr>
<tr>
<td></td>
<td>Non-public</td>
<td>70 686</td>
<td>295 923</td>
<td>781 669</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6 278 065</td>
<td>7 000 983</td>
<td>8 030 952</td>
</tr>
</tbody>
</table>

Source: Based on Author’s own study from 2007-2011

In addition, the development of Medical Tourism also leads to the creation of niche markets, where specialized medical entities, having a reputation for treating particular diseases, present their offer on the international market.

3.1. The security of service provision processes in medical tourism

In order to increase the access to medical services and safety outside one’s country borders, European Union has implemented a Directive on patient’s rights in cross-border healthcare. Its main objective is to finance medical services implemented in the territory of any Member State by the health funds of the resident country of the patient.

The Directive \(^3\) Patients without borders, ensures, to the insured patients in the Member States of the EU, to freely use medical care through:

- a clear definition of the right to reimbursement for benefits provided in other Member States of the UE,
- guarantee of safety, quality and efficiency of cross-border (Exworthy and Peckham 2006) medical care,
- regulation in the creation and circulation of medical documentation (increase in patient’s safety by defining responsibilities of both the State, in which the services are provided, and the State of the insured patient in case of complaints and compensation,
- creation of national contact points (patients access to important information),
- the participation of regional reference centres in the European reference network,
- implementation of appropriate administrative procedures regarding the use of cross-border health care and reimbursement processes, calculation of costs and procedures for dealing with complaints.

From the patient’s perspective, Medical Tourism within the EU becomes more predictable and safer. It also introduces the responsibility of the State to ensure equal access to medical services.

In addition, it leads to exchange of health services between the Member States. Determines the development of healthcare standards and procedures in the Member States and reduces costs of provided medical services. Poland is also the beneficiary of the

Directive. It affects significantly on the internal market in terms of accessibility and quality of provided health services. The main aim of the implementation of the Directive is to:

- establish rules for facilitating the patient’s access to safe cross border health service,
- ensure patient’s mobility in accordance with the principles established by the Court of justice of the European Union by setting legal framework defining the use of health service in other Member States than the country where one is insured, with the possibility of reimbursement of the costs of these benefits,
- promotion of the cooperation in the field of healthcare between Member States, while fully respecting Member States’ competence in organizing and delivering healthcare.

Currently, regulations of the Polish law do not provide for the possibility for reimbursement of costs of healthcare services delivered against payment outside Polish borders, including other Member States of the EU. The exception is when health benefits, necessary from the medical point of view, were delivered during a temporary stay abroad, and the person entitled to receive them payed the costs, for example due to failure to present the European Health insurance Card. The National Health Fund also finances the costs of a planned treatment, not those incurred by the patient but covers these costs through a payer of another EU Member State, with the prior, individual consent of the President of the National Health Fund.

3.2. The role of the quality of information in medical tourism

Medical Tourism is an example of an industry, which is dominated by a ROBO effect (research on-line, buy off-line). It is therefore essential for the development of the quality and safety of Medical Tourism, to take steps to gather and standardize information on medical services, their quality, effectiveness and certification (Olkiewicz 2012).

In addition, an important factor determining the development of Medical Tourism is also the internet platform that enable broad access to information (Cormany and Baloglu 2011). Its role and importance in the development of Medical Tourism is extremely essential (it is both in the supply and demand group), without it the expansion would be practically impossible. Medical Tourism bridges the gap in the field of tourism, expands it to new forms, shapes its development because of the internet network (Cormany and Baloglu 2011).

Due to its nature, the intermediary agencies, mainly associated with medicine, play an extremely important role. There is an increase in the quality of medical service in Poland because of the exchange of information and cooperation on a national, regional and local levels. Activities coordinating Medical Tourism at the national level in Poland should also include the supervision of public administrative bodies on the principles of providing legal protection and to insure patients coming in for a treatment. They should also regulate damages caused to the health and grant compensations for medical errors. Moreover, in the case of Medical Tourism, we also have to deal with a particular type of risk (medical risk (Léon-Jordán, Kuruvilla, and Jacob 2010)), which is related to the risk of diseases in the country of reception, unknown in the country of origin. In addition, ethical issues associated with certain medical services (i.e. stem cell therapy (Connell 2011)).

In Poland there is a practice of signing the informed consent for a surgery. This is a standard procedure in Polish healthcare system, ensuring that the patient has been informed about both benefits and risks of a specific medical service and that he has
received answers to all his doubts (OECD 2013). In addition, the promotion and development of an international network of accreditation provides:

- guarantees business projects of private and state entities, determines reputation (increase in quality and safety of medical services, reduces costs for potential liability for medical errors),
- increases the potential access to financing by foreign insurers (i.e. in the USA accreditation by JCAHO (American Osteopathic Association and DNV’s National Integrated Accreditation for Healthcare Organizations) is a prerequisite for access to the Medicare system,
- attracts potential foreign patients (databases about doctors, medical centres), every entity can include held accreditation in their offer.

Striving for are petitive quality and reduction of risks is a determinant of the quality of information processes to provide services in Medical Tourism. The determinant factor for the mobility of the participants of Medical Tourism is also to organize patients’ rights to cross border healthcare within the UE. Ensuring Follow up allows to provide care after treatment abroad and the circulation of patients’ records.

4. RESULTS

Actions of the prosumers on the Medical Tourism market is a complex process depending on a number of important factors. Decision-making model in the treatment process results from different knowledge and competences (Olkiewicz 2015) between a doctor (expert) and a patient or a patient and a payer (Bober 2013). Whereas, the phenomenon of Medical Tourism (non-reimbursed) is that the doctor or a payer are not decision-makers, the patient is. In this regard he is a an aware prosumer, making individual decisions. The determinant, which is, inter alia, lack of:

- accessibility to certain medical services,
- waiting time is relatively extended,
- the amount of payment or subsidies of the insured prosumers are high.

Decision-making process is conditioned by many important factors that directly affect the decision to leave in order to use medical services.

The literature on the subject (Glinos, Beaten, and Boffin 2006; OECD 2013) allowed to distinguish factors determining the demand for medical services: knowledge, quality, legal regulations, lack of accessibility to certain medical services in own country, medical service provision performed by experts, waiting time and affordability as main reasons for Medical Tourism. What has to be taken under consideration is that various categories of the determinants should not be considered separately, as a far more common situation are circumstances when using medical service in another country is a result of several overlapping reasons (Rab-Przybylowicz 2012).

Presented factors influence the decision-making process of the participants of Medical Tourism. Diversity can be a result of changes in the level of income, social origin or religious and cultural differences. Mentioned determinants condition the development of Medical Tourism that combines tourism and medical services. Poland (Ministry of Health, National Health Fund) by sending patients abroad for treatment can gain a number of benefits from Medical Tourism such as reducing queues for scarce medical services and not burdening the budget. In addition, Poland benefits from the
investments in infrastructure as well as organizational and functional restructuring processes of the entities and improvement of provided medical services.

Changes and revaluations taking place in the living model of Polish prosumers (increased health satisfaction, quality and level of safety) have an increasingly important impact on the present shape and functioning of Medical Tourism. Prosumers travelling abroad face many obstacles and difficulties such as:

- geographical and language barriers,
- system barriers (unknown healthcare system),
- problems with the follow up, care after treatment and medical errors,
- the problem with reputation, infrastructure, standards of medical centres and doctors,
- problems with the participation of medical centres in the international system of certification, standardization and accessibility to information,
- legal barriers connected to insurance, damage repair and compensation for medical errors.

All these factors may be significant to the development of Medical Tourism as a sector of the economy. Poland, just as any other country, which plans to develop Medical Tourism into a product for export, should take the factors mentioned above under consideration and to take action in order to reduce or eliminate them.

To the factors shaping the development of Medical Tourism as sector of the economy we can add:

- difference in the costs of medical procedures between countries of destination,
- the waiting time for the provision of health services covered by the insurance,
- the scale of subsidies by insured patients to use medical services,
- aging of the population, which is a major challenge to healthcare budgets due to the increasing demand for healthcare and rising costs of medical services,
- legal improvements in the UE (Directive 2011),
- improvement of technology as well as standards of healthcare,
- the ability to use low-cost or free-of-charge medical services, i.e. in the case where health insurer (National Health Fund (Kurek 2007)) directs someone to medical service.

Knowledge of the demand shaping process for medical services (Medical Tourism) is essential to all entities, which deal with healthcare and tourism (economy). Today, it is especially essential to those who deal with the marketing policy, particularly with the promotion and advertising of Medical Tourism. Furthermore, it is also important for business operators preparing medical offers.

The growing importance of Medical Tourism is a determinant of creating competitive advantage, cost conditions, the development of medical technology and efficiency of Polish healthcare system. Availability and quality of medical services are the main indicators of the decision-making process. The determinant of the quality of Medical Tourism is also the feeling of legal security in countries of the UE.

5. DISCUSSION

Socio-economic transformation affects the shape of Polish healthcare market (medical services). Fighting the aging process and increasing health satisfaction are the priorities
The literature on the subject allows to distinguish specific factors for the expansion of Medical Tourism, of which the model (Heung, Kucukusta, and Song 2011) (from the supply side), includes:

- infrastructure factors – public and private hospitals, promotion, quality and communication; from the demand side it analyses,

- factors influencing the place of service provision:
  - political, economic, regulatory,
  - hospital (costs, accreditation, reputation, medical staff training),
  - a doctor (expert opinions, reputation, recommendation),
  - advertising and distributing channels (including the activities of Medical Tourism agency).

In addition, factors for the development of Medical Tourism can be divided into:

- structural, which include appropriate facilities offering high quality service and meeting expectations of prosumers and communication accessibility,

- functional elements such as: price, entities involved in the promotion of this sector, as well as organizations coordinating the creation of a coherent Medical Tourism product. To other functional elements we can also include information availability by integrated internet platforms or legal regulations allowing reimbursement of medical services received abroad (Białk-Wolf 2010).

Poland, by following other countries (rising costs for the maintenance of the healthcare system) should also plan subsidies for specific medical services (Berg 2008). Due to significant difference in the cost of medical services, this is a factor for the development of Medical Tourism. By analysing this field, factors, which should be distinguished are:

- push – expansion of the internet as a source of information, availability of qualified medical staff, globalization, the emergence of specialized communication platforms and low-cost transportation,

- pull – lower costs due to less bureaucracy and administrative fees, labour costs, regulator shares (i.e. bioethical legislation), lower insurance and medicine costs. In addition, reducing the waiting time for medical services, more personalized care, certain medical procedures availability, greater confidentiality, privacy, a well established reputation as well as an international accreditation, the quality of provided services, references and training for doctors, advanced technology and equipment, security of personal data (Gan and Frederick 2011).

The determinant of the development of Medical Tourism is also a range of phenomena related to demography (the purchasing power of individual segments (Yeoman, Schanzel, and Smith 2013)). The value of global financial flows in the field of Medical Tourism is estimated at $6 billion (Poland 860 million). Medical Tourism constitute 1.65% of the local healthcare market in Poland. The determinant of the mobility in the process of finding specific medical services abroad is the lack of their availability in the Polish healthcare system (Olkiewicz and Bober 2015). Patients leave with the aim of dealing with a particular health problem, for which the waiting time or/and the costs are lower in the country providing the medical service than in Poland. Therefore, the implementation of recommendations mentioned above make it possible to
retain native prosumers or even obtain foreign patients as a part of Medical Tourism policy; determinants, which are included in table 1.

The demand for goods and medical services, meeting the needs of the prosumers, can be considered to be the reasons for the demand for Medical Tourism. Grossman among the determinants for the demand of medical services mentions: prices of other goods and services, age, level of education and the income level. Whereas I. Rudawska, based on empirical research, added:

- economical determinants of the demand (income, price of goods and services, also alternative ones such as products of nonconventional medicine and so called non-cash reasons),
- demographic determinants of the demand (age, level of education),
- health determinants of the demands (health status),
- psycho-sociological determinants of the demand (patient’s system value, his desire to be healthy) (Rudawska 2006).

In addition, a modern prosumer expects additional special value, based on fulfillment of individual health needs associated with the need for respect, recognition and prestige (Scott, Laws, and Boksberger 2009). Value comes from: quality of service, competence, experience, and culture of the staff (Ząbek and Sikora 2011).

Globalization on the market of Medical Tourism takes place by migration of the healthcare system elements and international exchange of medical services (Klich 2008). The capital consolidation and internet marketing in recent years have contributed to the globalization of health tourism by:

- Presence of suppliers from all over the world,
- Available information and reservation systems,
- Relatively low prices of airlines.

Currently, among the non-price factors having influence on the competitiveness are: easiness and speed of access to medical services and quality as well as technological innovation of medical service processes.

About 7 million people use Medical Tourism annually, the value of this sector is estimated at 40 billion dollars. An interesting phenomenon is the way in which Polish system of healthcare functions. On the one hand Polish patients are not able to receive the required level of access to medical services (increase in the number of patients waiting for planned medical procedures), on the other hand, Medical Tourism in Poland is becoming more popular (for patients from other countries), where the main motivation to them is primarily price and accessibility to medical services (Table 2).

| Table 2. The value of Medical Tourism in Poland (in millions PLN) |
|--------------------|----------------|----------------|----------------|----------------|----------------|
|                    | 2007 | 2008 | 2009 | 2010 | 2011 | 2012           |
| Medical tourism    | 306.0 | 447.1 | 652.9 | 786.0 | 863.5 | 958.0         |
| Health tourism     | 845.9 | 910.8 | 948.9 | 943.1 | 980.7 | 1 051.3       |

Source: Based on: Report, 2012. Health and wellness tourism in Poland

According to the data, in 2014 Poland was visited by 410,000 foreign patients. Poland is a popular destination, when health is concerned, due to the high quality of provided health services and relatively low prices. Based on the report (Grail Research, 2009), Poland may become one of the most perspective directions of treatment for foreign patients in Europe. The main factors contributing to the development of medical tourism
is not the search for savings, but the availability of new technologies, higher quality and faster access to medical services.

CONCLUSIONS

The expansion of Medical Tourism led Poland, having a network of private medical institutions providing medical services on a global level at relatively low prices, wanting to have its share in the market. The demand of people engaged in Medical Tourism is shaped by health and economic factors, as well as social and psychological determinants, which cause an abnormal reaction to the price forming process (reputation, quality or the need to obtain specific medical services).

Poland, by supporting the development of Medical Tourism, should build an informational system concerning safety and quality as well as effectiveness of medical procedures, shape the legal environment and:

- conduct a comprehensive, qualitative and quantitative market research (the basis for a strategic development of medical tourism),
- develop contacts with the stakeholders of the medical tourism market (based on analyses and facts),
- develop an information platform on available medical services and a coherent international system of accreditation and certification of service providers taking part in medical tourism,
- promote the development of national health insurance as well as safety and quality of health services (increase of Polish reputation as the provider of health services).

Summing up the observations mentioned above, it should be noted that the implementation of coordinated policies of health (Medical Tourism), determines the development of a separate, strong sector of Polish economy, which is the Medical Tourism based on economic calculation.

Carried out observations verify positively the hypothesis formulated in the title at the beginning of this article on the existence of a strong impact of Medical Tourism in Poland on the demand of provided medical services abroad.

REFERENCES


