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Health Medical Tourism: The Present and the Future

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Abstract

Development of intergovernmental policy on health tourism is cross-industrial, with medical services acting as a promoting factor. Health tourism ideology is based on interconnection between the natural environment, transport availability, healthcare system and people. During health tourism travels people get in close contact with the environment in order to feel physical and psychological comfort without direct medical treatment. Health tourism is supposed to become the basis for alternative therapy and remain progressive. Meanwhile, dominating cultural aspects must provide competitive advantages related to non-clinical factors. Satisfactory health tourism can be achieved only with the help of a team of specialists having certain experience in both clinical and non-clinical healthcare.

Keywords: health tourism; tourism policy; tourism motivation and culture; tourism of aged people; extreme geotourism.

Jel Classification: I19; Z32; Z39.

Introduction

Tourism and Medical Tourism in the Modern World. Intergovernmental Relations

At the present stage of intergovernmental cooperation tourism is the most dynamically developing industry that promotes socioenvironmental and cultural relations. The health tourism concept originated from the definition by the International Union of Official Travel Organizations, the precursor to the United Nations World Tourist Organization, as "the provision of health facilities utilizing the natural resources of the country, in particular mineral water and climate".

Many health tourism industries are strong economic and social drivers that enable economic support of developed countries comprising about 11% of the global GDP. Currently they involve about 200 million people providing services to 700 million tourists all over the world. This number is estimated to double by 2020 (Amato *et al.* 2014, Lin *et al.* 2016). Tourism industry implies distribution of profits from provided services between residents of the country that endorses social justice policy (Tapak, Abbasi and Mirhashemi 2019).

Familiarization with the destination country and its culture, understanding social structure and demands help to strengthen international peace and security (Karamuz and Araghinejad 2014, Azami and Araghinejad 2012). This leads to an opinion that due to cross-industrial convergence in the modern world, medical tourism can become one of the most profitable economy sectors (Seo 2012). Based on this doctrine, many heads of government strive to develop and improve the medical tourism industry. According to Mordor Intelligence report, in 2018 global medical tourism market comprised 16,761 million USD and will increase up to 27,247.6 million USD by 2024 [Research T.M. Global Medical Tourism Market to Reach US\$32.5 bn in 2019]. VISA and Oxford Economics reports provide even more optimistic data according to which every year about 11 million medical tourists pay 100 million USD, with 25% annual growth rate [Index M.T. Medical Tourism Index 2016–2017.].

In terms of medical tourism attractiveness Europe is the most demanded destination in the world, with the highest number and diversity of available options. Tourism industry in European countries comprises over 10% of the EU GDP and involves at least 1.7 million employees and 1.8 million industrial companies (Illario *et al.* 2019). Directive 2011/24/EU on cross-border healthcare (Mainil 2017) stipulates conditions for further growth and strengthening of European medical system including state and private healthcare.

In the recent decade medical tourism has been actively developing in Asian countries such as Thailand, Singapore, India, Malaysia and the Philippines. They demonstrate relatively high quality of medical services, combined with inexpensive prices, short waiting periods and available tourism packages covering both tourism and recreation (MTA Medical Tourism Survey 2013). For instance, the number of people consuming Asian medical tourism services increased from 4.3 million in 2012 to 6.8 million in 2015, while the total medical tourism income soared from 7.3 billion USD in 2012 up to 14.7 billion USD in 2015 (Asian Medical Tourism Market Forecast to 2015. 2013).

Medical tourism is one of the main types of health tourism (Marczak and Zarębski 2013, Boguszewicz-Kreft *et al.* 2020). Korea Health Industry Development Institute, supported by the Ministry of Health and Welfare, defines health tourism and as a business that contributes to the national economy by revealing and developing tourism resources provided by healthcare system and preparing health tourism programs that attract foreign currency (Lee and Li 2019). Health tourism covers five categories: familiarization with healthcare activities, diagnostics and prevention, health promotion, sightseeing, health and leisure (Lee 2006).

Scientific literature shows that service quality, environment and customer satisfaction play key roles in promoting medical tourism (Zarei and Maleki 2019, Nilashi *et al.* 2019). Differences between national healthcare systems related to material expenses, treatment regulation and medical service providers could motivate patients to look for better medical assistance in foreign countries. It is worth mentioning that in 2013 South Korean government was the first to implement international system of medical tours coordinators. This incentive enabled foreign patients to have a comfortable visit to the country for obtaining tourist and medical services (Korea Tourism Organization 2013).

Modern tourists often begin their journey even before arrival by using web services and platforms that are quite effective and available regardless of travel period and destination (Martin, de Ipiña, Lamsfus and Alzua 2012). This is why many countries apply cloud technologies in their tourism activities in order to demonstrate efficient information platforms that quickly provide data basing on location and access to medical service providers (Zhang, Li and Liu 2012). For instance, Spanish Context Cloud infrastructure with web interface enables easy setting of contextual mobile tourism services using Google Maps and Drools Expert System (Martin, de Ipiña, Lamsfus and Alzua 2012), an Italian cloud, context-related tourism platform based on experience and personal preferences of previous tourists (Amato, Mazzeo, Moscato and Picariello 2014). Besides, it is important that upon getting information from guides, cloud services provide real-time data on traffic situation, working hours of stores, sightseeing as well as navigation of essential services.

Motivations of Healthy Medical Tourism. Health, Culture and their Role in the Modern World

Physical activity is a vital aspect of staying healthy. All over the world, lack of physical activity is nowadays the fourth most significant cause of death (Kohl *et al.* 2012; Allison, Bird and McClean 2017). Global scientific data show that one out of ten deaths is related to low physical activity (Lee *et al.* 2012). If inactive people increased their stress levels only by 10-20%, this would save 0.5-1 million lives every year (Lee *et al.* 2012). Besides,

physical inactivity reduces work performance causing total losses of 13.7 billion USD [Ding et al. 2016] and is associated with negative consequences for mental health (Physical Activity Guidelines Advisory Committee. 2018; de LFM et al. 2014). Total material losses because of insufficient physical activity estimate 50 billion dollars per year, 70 % of which are covered by the state sector (Berglund, Lytsy and Westerling 2016). Low physical activity is also the predictor of such diseases as dementia, ischemic heart disease, cerebral blood flow disorder, cancer, type 2 diabetes, osteoporosis and obesity (Committee PAGA Physical activity guidelines advisory committee report, 2008).

Thus, insufficient physical activity is not only a key global mortality factor but also a significant burden to national healthcare systems. Better understanding of economic stress caused by physically inactive people makes it necessary to set priorities for motivation measures increasing global physical activity, in particular by means of health tourism. In this case, national governments not only bear personal responsibility for maintaining and improving health of their people but also create favorable conditions for developing a long-term social strategy of health improvement (World Health Organization WHO global strategy on diet, physical activity and health. Food Nutr Bull. 2004; World Health Organization. Global Action Plan on Physical Activity 2018–2030: More Active People for a Healthier World. Geneva: World Health Organization. 2018). It is worth mentioning health support programs initiated by countries like Ireland (Department of Health and Department of Transport, Tourism and Sport 2016), Namibia (Ministry of Health and Social Services. National Multisectoral Strategic Plan for Prevention and Control of Non-Communicable Diseases in Namibia 2017), Denmark (Government of Denmark 2002), China, the UK (Public Health England. Everybody Active, Every Day: An Evidence-Based Approach to Physical Activity. 2014) and others. All this helps to integrate healthcare-related industries for standardizing and boosting health tourism.

Many medical tourists prefer countries with familiar culture; thus, we can assume cultural factor plays an important role in public mobility (Connell 2013; Alizadeh and Chavan 2015; Ormond 2008). Actually, culture has always been viewed as a significant factor determining medical tourism destinations (Ormond 2008) and can be rightfully called one of the most customer-focused healthcare aspects (Connell 2013). Common culture helps to establish connection between doctors and patients, build up trust (Thom and Tirado 2006), increase customer satisfaction and healthcare quality (Paez *et al.* 2009). Lack of cultural competence among medical service providers and healthcare workers (Alizadeh and Chavan 2015, Campinha-Bacote 2002, Ormond 2011) may provoke unfavorable consequences, misdiagnosis and wrong treatment tactics (Egnew 2009).

High professional and human culture of doctors guarantee their individual approach to medical tourists depending on customer demands and covering not only medical, but also cultural, social and psychological aspects (Lee and Li 2019). Therefore, work in medical tourism requires teamwork of specialists showcasing both clinical and non-clinical advantages of their institutions no matter how much time is needed for solving patients' issues, including biomedical ones. It is worth noting South Korean initiative on estimating technological achievements in its medical tourism branding from the "human behavior" standpoint shaping innovation policymaking strategies (Geva 2018, Weech-Maldonado *et al.* 2012).

Expert assessment of health tourism is based on three constituents: (1) special requirements and demands – medical service, health improvement, tourism and recreation; (2) environment – climate, air, water and sunlight; (3) leisure and general requirements – sporting activities, therapy, interaction with animals and nutrition (Lee and Li 2019). Official academic position claims that health tourism must focus on special requirements and demands, while professional healthcare practitioners tend to view the environment as the main therapeutic system. They believe good air quality can help people to stabilize arterial pressure, achieve harmony, activate white blood cells, improve immune function and increase immunity (Lee and Li 2019). If any society or government wants to enroot health concept in people's lives, it is necessary to meet various demands for medical tourism and enable availability of health tourism destinations (Yong 2017). In order to satisfy tourists, health services must meet their expectations (Taghavi and Soleimani 2017). Satisfaction with the destination is an important factor that makes tourists consciously want to visit the place again or recommend it to their friends and relatives. Because of this, tourist satisfaction has become an important factor for many service industries (Nahid and Akbar 2016, Salleh *et al.* 2013). The receiving community behavior index, with components like promise fulfillment, hospitality, friendly attitude of locals, has the biggest impact on tourist satisfaction (Tapak, Abbasi and Mirhashemi 2019).

1. Choosing the Health Tourism Destination

Understanding the choice of destination and behavior of medical tourists upon arrival plays a decisive role in estimating the gap between provided services and consumer expectations. Choosing the health tourism destination can contribute to general strategic planning and increase competitiveness of health tourism management by further improvement of experience and tourist satisfaction (Lee and Li 2019).

Behavioral desire of young consumers to partake in medical tourism is subjective and depends on their lifestyle. Gender of young people proved to be insignificant in any medical tourism model (Boguszewicz-Kreft *et al.* 2020). Meanwhile, underestimation of the destination country can be the result of seemingly easy traveling in the modern globalized world as well as by unawareness of problems related to organizing such travels among young people who have never faced any problems in their home countries and don't like planning ahead. (Boguszewicz-Kreft *et al.* 2020).

For aged people, one of the main decision-making factors concerning health tourism is functional independence. This is why aged people (65 years old or older) with existing psychological or physical conditions demonstrate specific characteristics impacting distribution of health tourism market and often related to several diseases and functional disability. For these reasons aged tourists require a wider range of healthcare services compared to younger recipients (Takayama *et al.* 2014).

It is worth noting that aged tourists prefer travelling not in summertime but in fall and winter, when longer periods outside of home help to cope with loneliness and isolation and offered medical services have an added value. Aged people can actively partake in establishing personalized tourism offers among peers thus greatly improving attractiveness of such offers.

When choosing the destination, aged patients, just like young ones, opt for seaside or continental (hot springs, peloids) health tourism. Other equally important factors affecting destination selection are local and regional policies coordinating healthcare systems, social support, transport, security, mobility promotion, service availability (Illario *et al.* 2019).

Recreation-focused tourists often look for extreme or risky means of health improvement and getting new impressions from their travel, while medicine-focused tourists aim at treating their illnesses and recuperating (Bustamante 2014). Japan Institute of Tourism Research divides medical tourists in four groups depending on their leisure and medical activity: (1) tourism – tourists want to see the sights and get health-focused touristic experience; (2) improving health and physical condition – tourists want to improve their physical status, reduce stress and do the sightseeing; (3) metabolic syndrome – tourists want to combat metabolic syndrome, e.g. by sports and training; (4) healthcare – tourists want to travel and improve their health, focusing on healthy diet, improving main body functions and long-term strengthening of mental condition (Japanese Institute of Tourism Research 2010).

Quality of health tourism destination place is determined by ability of medical personnel to maximize usage of the environment for providing health services such as mineral springs, peloid, carbon, seawater and climate therapy (Chen 2018; Schlemmer, Blank and Schnitzer 2019). For instance, medical health tourism in Germany consists of four components: peloid, seawater, climate and alternative therapy (Nobuyuki 2012). Combination of peloid and springwater is supposed to restore health of medical tourists. Alternative treatment includes physical exercises and therapeutically gymnastics relieving physical and psychological stress. Besides, personalized diet therapy greatly improves physical and mental health of recuperating tourists (Zhang, Tang and Zhu 2017).

Health improvement can be divided in two subgroups: disease prevention (motor dysfunction prevention among aged people, sleep normalization, prevention or decrease of allergic reactions, reduction or normalization of arterial pressure, improvement of cardiopulmonary functions and muscle strength) and improvement of mental (relaxation) and physical health and rejuvenation (cosmetic procedures). This health activity helps people to feel younger, improves their motivation and sporting performance. All the methods mentioned above address several tasks including establishing sport habits, adjusting food habits and developing continuous interaction between tourists, animals and plants (Japanese Institute of Tourism Research 2010; Fetscherin and Stephano 2016).

2. Health Tourism for Aged People

Ageing is one of the main socioeconomic challenges the European Union (EU) has to face (Rechel *et al.* 2013). Ageing population is not homogenous and can be divided into active, fragile and vulnerable groups having different expense models within their common consumer economy called "silver economy" (European Commission. Growing the Silver Economy Background paper. 2018). This name for aged people economy is determined by emergence of a new consumer market and necessity to stabilize state expenses related to ageing.

Goods and services for active and healthy ageing can have a significant impact on healthcare and social welfare efficiency making condition of this age group more stable (European Commission. Growing the Silver Economy Background paper. 2018). This why tourism focusing on aged people is an example of an innovative touristic offer satisfying healthcare demands of all "traveling" population, applying integrated and cross-industrial approaches and involving various organizations that work in healthcare, availability and transportation (Illario *et al.* 2019).

Age-Platform Europe is a nongovernmental organization representing interests of aged people in the European Union and working on an optimal market offer for this age group that is aimed at different socioeconomic groups. "Silver economy", "silver tourism", active and healthy ageing are the keywords of this (European Commission. Growing the Silver Economy Background paper. 2018). The same demands are met by the 2007 Convention of the Rights of Persons with Disabilities (CRPD) stipulating the right to access to tourism services and initiating travels for aged and disabled people as an important part of global tourism policy (European Commission. Europe, the first tourist destination in the world: a new political framework for tourism in Europe. 2010). From this standpoint, it is worth mentioning the role Smart Healthy Age-Friendly Environments (SHAFE) play in healthcare, social support, construction and ICT. This network is a part of the European Innovation Partnership (EIP) initiative related to AHA (Active and Healthy Ageing) and was approved by the European Commission in 2018 (Illario et al. 2019). It was launched to provide coordination between technological development coordinated and construction industry in order to make aged people healthcare and support more efficient and increase service quality using less investments (Illario et al. 2019).

The ultimate goal of SHAFE is to prepare guidelines improving quality of life for aged people and make their places of residence more attractive by largely introducing innovative and sustainable solutions related to electronics and mobile healthcare involving robotics, domotics and intellectual communications (Dantas, van Stalduineen, Jegundo and Ganzarain 2018). This enables to achieve years of healthy living that compared to general life expectancy can be converted into services for aged people and long-term mobility support focusing on health and welfare.

Given actual physical and psychological vulnerability of aged people, it is essential to maximize their security by carefully analyzing offers and services in all areas explicitly or implicitly affecting their health or welfare. Improvement of tourism offers must focus on social purposes of tourism considering material status and possible problems that may arise during visits to remote locations. Disease prevention and health improvement as part of active ageing can be focused on specific demands: sport, physical activities, diet and lifelong skill consolidation (Speranza *et al.* 2015; WHO. The Dublin Declaration on age-friendly cities and communities in Europe 2013. 2013). More and more often aged tourists use mobile devices in everyday life, especially during their travels. This calls for a necessity to adapt them to foreign terms of mobile systems usage and provide essential phone numbers.

Aged tourists ("silver tourists") prefer travelling with companions and visiting friends and family members who live in their destination country. This is why they are less interested in all-inclusive packages and care more about history, sporting activities and healthy diet.

3. Extreme Geotourism

There is a growing tendency towards extreme adventure tourism involving geological sites of high natural beauty: cliffs, rocks, volcanos, waterfalls (You Lim *et al.* 2012, Gasser 2019). Compared to commercial adventure tourism, extreme open-air sport activities pose high physical risk. It is the risk level, not the activity type, that distinguishes extreme sport from adventure tourism. This is why probability of unfavorable accidents during extreme sports must be kept very low (Buckley 2018).

Nowadays mountain sport is popular among many people. For example, in 2001 the number of tourists climbing Alpine mountains higher than 2000 m above the sea level reached 40 million people per year, while all over the world the number of high-altitude mountain tourists exceeded 100 million people (Burtscher *et al.* 2001). In the Alps, mountain hiking is the most attractive sport during summer seasons when millions of tourists come to Austria (Burtscher *et al.* 2007), including healthy people and people with pre-existing chronic conditions (Faulhaber *et al.* 2007). Meanwhile, risk of injury or even death makes it necessary to carefully develop safety solutions. Local seismic and volcanic activities, coupled with landscape specifics, must be specially taken into consideration while planning touristic events in these regions (You Lim and Flaherty 2020). Despite all safety measures, average annual death rate is about 4 cases per 100,000 tourists (Faulhaber, Ruedl and Burtscher 2012), approximately 4 times higher compared to mountain skiing (Burtscher and Ponchia 2010). Waterfall journeys cause almost 50% of all mountain hiking accidents (Gasser 2019; Faulhaber *et al.* 2007). Mountain

tourism emergencies may lead to unfavorable cardiovascular consequences including sudden death, even if all preventive safety measures are taken (Burtscher et al. 2007, Faulhaber et al. 2007).

When considering the possibility of mountain tourism, it is important to carefully assess eyesight and age of potential tourists. The thing is that 70% of all victims of a fall during hiking had eyesight disorders and were over 50 years old (Freeman *et al.* 2007). Several authors found no significant differences between males and females in terms of their body mass index (BMI), physical preparation, absolute weight of backpacks and footwear type (Faulhaber *et al.* 2020). On the contrary, other researches of German and European populations demonstrated that males had higher BMI compared to females (for Germans: 26.1 against 25.2; for Europeans: 27.1 against 25.3) (Rohrmann *et al.* 2016, Wientzek *et al.* 2014).

Thus, while selecting a mountain tourism route it is necessary to maintain the right balance between the route and tourists' physical condition. This enables to minimize accidents.

Mountain tourism can be recommended for young and aged people with good physical and psychological preparation (Gatterer *et al.* 2015, Powell, Paluch and Blair 2011). Hiking in relatively small mountains provides enough physical activity that combined with moderate hypoxia creates additional conditions for health improvement (Schobersberger 2010).

Conclusion

Developing health tourism polices is multisectoral, with medical services acting as a promoting factor. During health tourism travels people should keep a positive reaction to the surrounding environment and feel comfortable without direct medical treatment. Health tourism site must keep people healthy and happy while fully meeting industry standards and demonstrating potential for sustainable economic development. In the future health tourism should become the basis for alternative therapy and remain progressive. Meanwhile, dominating cultural aspects must provide competitive advantages related to non-clinical factors, *i.e.* culture-focused services. Cultural demands can be satisfied only by a team of specialists having certain experience in both clinical and non-clinical healthcare.

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