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## HEALTH TOURISM DEVELOPMENT IN CONTINENTAL CROATIA<sup>1</sup>

### Abstract

Although the present position of the Republic of Croatia within European tourist capacities is favourable, it is necessary to increase the quality of overall tourism offer and overcome seasonal fluctuations. From a regional point of view, tourism in the Republic of Croatia has achieved varied development levels. More than 94% of tourism turnover in the Republic of Croatia is achieved in the Adriatic region, which is mostly based on seasonal tourism products. Geothermal potential of the Republic of Croatia can be one of the first steps in expanding the existing tourism offer and attaining all-season tourism.

The analysis of previous research indicates that the biggest contribution in defining the geothermal tourism offer was provided by medical scholars (primarily physicians) rather than tourism specialists or economists. For this reason, this area has largely remained in the domain of medical tourism and development, and failed to be seen as new tourism potential. Different statistics and indicators show that there is growing investment in the health sector (mostly privately owned) as well as growing demand for this selective form of tourism, which should, in strategic terms, be linked to the trend of an increased

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dedication to the quality of life and European demographic trends. The analysis of this type of tourism offer in the neighbouring countries and benchmarking will yield conclusions about comparative advantages of these countries over Croatia. Although these countries in general have lower tourism potentials than Croatia, they are achieving remarkable results. A legal framework and mechanisms for enabling synergies between medical and tourism services is a precondition for the development of new tourism products in continental Croatia and their inclusion in the general development policy. Current legislation with a direct impact on exploitation of geothermal energy will be studied in order to formulate a model for eliminating the existing legal barriers, and to provide guidelines for future activities, with the general aim of attracting new investments.

**Keywords:** geothermal energy, continental Croatia, medical tourism

**JEL code:** L83, Q26, Q56, R58

## **1. Introduction**

Many European countries encourage the development of health tourism, but there is a lack of serious research on the subject. However, the conclusions of some statistical reports suggest there is a growing demand for those services, and investments into the health sector confirm that there is a need for the improvement of the current medical offer, e.g. thermal spas. According to the UNWTO (United Nations World Tourism Organization) data, the number of international tourist arrivals has reached one billion in 2012, and some projections suggest it will increase to 1.8 billion by 2030. Just to compare, the number of arrivals was 25 million in 1950 (UNWTO, 2012). According to ITC projects (2014), the increase in tourist arrivals in emerging economies between 2010 and 2030 is double that of the traditional advanced economies in Europe and North America (ITC, 2014). The MTA assessed that the 6 million people currently travelling for medical purposes can contribute to the gross world product with 45-90 billion US dollars, whereas previous research predicted that the total sum might even reach 100 billion USD (McKensey & Company in: Herrick, 2007). If we consider the data from 2004, when medical tourism generated around 40 billion USD of income worldwide, we can conclude it is definitely one of the most promising types of tourism within the past 20 years. Ormon (2011) claims "the expansion of modern medicine, in correlation with shifting conceptualisations and spatialisations of disease and illness, health-motivated travel gradually extended beyond places endowed with natural morphologies held as therapeutic to include medical facilities in which the "specific geographical location (was thought to be) of less significance in its therapeutic role than the physical, social and symbolic organisation of the space itself" (Smyth, 2005:488 in: Ormond, 2011:2).

This paper explores the theoretical and empirical aspects of health tourism and the possibility of integrating this concept into the developmental strategies for continental Croatia, as well as to encourage a more serious discussion regarding the somewhat neglected and underdeveloped tourist offer of continental Croatia. This paper synthesises the existing literature on health tourism and identifies some key prerequisites and restrictions that must be considered during the development of future tourism strategies. Finally, the conclusion of this paper provides a summary of key implications for future research.

## **2. Health and tourism**

For years, tourism experts were kept out of the discussion regarding the development of health resorts as part of the tourist offer of continental Croatia. Also, health resorts were funded exclusively through health insurance. Nearly all European countries are making an effort to increase the inflow of funds into health resorts from other sources, like tourism. Medical / health tourism is one of the oldest types of tourism (Smith and Kelly, 2006, see Appendix, Figure 1). The International Union of Tourism Organizations (IUTO, 1973:7) produced one of the first and the most popular definitions of medical tourism: “the provision of health facilities utilizing the natural resources of the country, in particular mineral water and climate”. Geić (1971:35) offers a broader perspective, considering the functional unity of economic and non-economic activities which increase tourism revenue and value natural healing factors through therapy, therapeutic recreation and tourism. Goeldner (1989) provides one of the first definitions linking health and tourism and relating to other elements of health resort tourism (medical treatments, relaxation, enjoyment, health as a motive) (see Appendix, Figure 2). Although the rapid development of health and medical tourism began in the 1990s (Hall, 1992; Goodrich and Goodrich, 1987), the academic community has started discussing it more seriously since the 2000s (Kušen, 2002; Connell, 2006; Carrera and Bridges, 2006; Herrick, 2007; Horowitz et al. 2007; Gray and Poland, 2008; Turner, 2008; Smith and Puczko, 2009; Lunt and Carrera, 2010; Rhodes and Schiano, 2010; Lunt et al. 2011; Hall, 2011; 2003; Bergmann, 2011; Ormond, 2011; Musa et al. 2012; Schalber and Peters, 2012; Wong et al., 2014; Ormond et al., 2014; ITC, 2014; and many others). Health tourism is any pleasure-oriented tourism which involves an element of stress relief could be considered to be a form of health tourism (Benner et al., 2004 in: Puczko, 2010). Modern medicine has a new approach towards the patient, who is no longer treated as a combination of various diagnoses and patho-anatomical analyses, but rather as a complex individual, a member of society faced with a number of various challenges which can lead to health issues (Geić et al., 2010). Although it may seem very simple at first, a more serious consideration of medical tourism unveils numerous challenges. It is very difficult to monitor this particular market, since the visitors/ patients may have other reasons for visiting a wellness centre (see Appendix, Table 1). ITC (2014:3) states "depending on whether one takes a narrow or broad definition of medical tourism,

portions of tourists with other revealed purposes for travel may or may not be counted as medical tourists". In most cases, there is no official data regarding health tourism indicators on a national level.

### *2.1. Who and why? – market demand*

Connell (2006) lists a number of specific causes of this significant increase: high costs and long waiting lists at home, new technology and skills in destination countries alongside reduced transport costs and Internet marketing have all played a role. More than 27% of American "medical tourist" was previously involved in similar tourist programs, most of them are women between 45 and 64 years of age, with a graduate or postgraduate education, and an average income between 50 000 and 100 000 USD. It is interesting to point out that only 50 % of them had health insurance, according to MTA data from 2013. Considering the impending demographic deficit in developed Western countries, this specific branch of tourism is definitely worthy of consideration. For example, 20.6 % of Germans are over 65 and the country's age dependency ratio is 31.2. In Italy, 20.3 % are over 65, and the ratio is 30.9, in Greece it's 19.3 % with a 29.0 age dependency ratio, etc. The total number of medical check-ups in various Croatian medical institutions was 17 % higher in 2010 than in 2000 (National healthcare strategy 2012-2020). The Institute for Tourism (2014) states that this tourism sector will achieve a 7 % increase with a total consumption of approximately 115 billion Euros and contribute to the European economy with approximately 328 billion Euros. Austria has around 30 "spa" towns, and is considered a prestigious destination, Slovenia has 15 health resort centres and around 90 wellness centres with special emphasis on orthopaedic and sports therapy, Hungary has 12 "spa" towns and is famous for their top-quality dentistry services, Poland is an emerging market in plastic surgery, dentistry and orthopaedic services, Turkey is rapidly developing in the field of JCI accredited organizations etc. (Institute for Tourism, 2014). In 2013, there was a total of one million overnight stays in health resorts, 63 % of which were by domestic patients (under the Croatian Health Insurance Fund), 15% individual patients with health insurance and 22 % individual patients without health insurance. The most popular destinations for medical tourists in Croatia were Varaždinske Toplice spa town, Krapinske Toplice spa town, Stubičke Toplice and Naftalan, where most visitors / patients had health insurance, whereas the spa centres in the Adriatic region mostly host patients who personally cover their own medical expenses.

Different structures which can be found in the European tourist demand, greatly influencing the development of an all-inclusive package which helps preserve health and prevent illness, can be analyzed based on visitor demands/ needs:

- medical tourism relates to healing, operations and medications: 1) free patient flow where patients are free to select another country for the purposes of healing

and medical treatment and 2) public or private medical institutions send their patients to other countries for various reasons (cost of treatments etc.).

- centres for disease prevention (acting against bad health habits through prevention)
- wellness tourism as a combination of travel and wellness, beauty treatments etc., the goal is to feel good, relaxed, healthy and fit;
- dental tourism – travelling abroad for more affordable dental services and oral surgery;
- "fitness and functional food" (3F) includes disease prevention, healing and the improvement of general well-being;
- plastic surgery combines the traditional role of medicine for the functional improvement of the human body with the improvement of a person's self-esteem through aesthetic surgery;
- lifestyle medication intended for the treatment of non-medical conditions (weight loss etc.);
- fertility treatments, in vitro fertilization etc.

### **3. Continental Croatia as a medical tourism destination**

Although Croatia is increasingly becoming a relevant tourist destination, when it comes to medical tourism, it is still an emerging market. Reasons for the existing situation include the rigidity of the legal framework, administrative passivity, and the unwillingness to establish cooperation between the public and the private medical sector. Kesar and Rimac (2011:112) point out: “as long as financial resources of public health care systems are limited and in decline, the management of public health care capacities is recognized as a complex task and takes a lot of effort, time, and money to harmonize demand and supply in the short-run. Such supply side constraints generate a surplus of demand for health care services that needs to be offset by private health care systems”. Ormond (2011) introduces the concept of “productive hospitality” through the metaphorical space of the “hotel-fortress” – the nexus between “commercial” and “political” hospitalities. Lunt et al. (2011) introduce numerous examples of neighbouring countries which are a fierce competition to Croatian medical tourism, but are much more advanced when it comes to development policies and specific reforms. In Poland, a popular destination for dental tourists and cosmetic tourists, medical tourism is facilitated through private companies; many of the clinics are state-owned, serving Polish citizens alongside medical tourism. Hungary (dental care and cosmetic oral surgeries, see: ITC, 2014) Turkey (ophthalmology), Cyprus and Malta are in a similar situation. Hospitality and tourism companies, as well as local governments and destination marketers, are positioning themselves to capture a share in the global medical tourism market (Wendt, 2012; Wong et al., 2014). However, if the

commoditisation of individual health is acceptable in some jurisdictions then new questions arise as to where the limits of commodification should lie, and the ethical (and medical) demands of the individual versus the ethical demands of groups (Widdows, 2011 in: Hall, 2011). Also, critics generally warn that medical tourism may harm destinations by stimulating private health care development unresponsive to locals' needs and resources (Bookman and Bookman, 2007 in: Ormond et al., 2014). Despite a number of countries offering relatively low cost treatments we know very little about many of the numbers and key indicators on medical tourism (Lunt and Carrera, 2010). Modern technology enables potential medical tourists to investigate and arrange healthcare anywhere in the world from their home computer directly or with the advice and assistance of a medical tourism agency (Horowitz et al., 2007).

### 3.1. *Geothermal potential – a turning point for medical tourism in continental Croatia*

There are numerous examples of the exploitation of a country's unique natural resources for tourism purposes. Geotourism is a new niche market of tourism centered on sustaining and enhancing the geographical character of place (Stokes et al., 2003). Some of the most famous examples of this new market include Iceland (Timčak, 2001), Greece, Japan, England, the Americas and New Zealand natural hot springs are used by large numbers of people for their beneficial mineral content, their relaxing and usually pleasant temperatures, and their visual attraction (Erfurt and Cooper, 2010). Erfurt and Cooper (2010) recognize four ranges of springs that may be used: geothermal springs or hot springs (with therapeutic benefits), mineral springs (thermalism), saline springs and extreme hot springs. If implemented correctly, geotourism can benefit all aspects of the destination and become a term that is synonymous with truly sustainable tourism because it enhances all aspects of the destination (Boley, 2009). Smith and Puczkó (2009) stated that, in historical terms, health and wellness practices have been very much embedded in regional and local traditions and cultures, with available natural resources also determining the forms of wellness that were developed. Croatia's natural resources, geothermal potential and highly educated medical personnel make it a promising destination for medical tourism. It is also important to note that thermalism in continental Croatia dates back to ancient times (Roman baths, etc.). The first research on the subject of geothermal springs conducted in Croatia were carried out in continental Croatia, and the beginning of the development of modern spas and health resorts dates back to 1709.<sup>2</sup> Health tourism in continental Croatia takes off in the early 20th century,

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<sup>2</sup> A book on Varaždinske Toplice was published in 1709 by J. P. Mayer, which is the first publication on balneology in Croatia. From then on, there were attempts to establish a balneology institute in the area of today's Republic of Croatia, which was finally realized in 1939, under the name Permanent Balneology Council of the Banovina Croatia. This was the foundation for the later Balneological-Climatological Institute in Zagreb, established on 28 August 1949. Since that time, there have been numerous changes, tasks and activities related to the Croatian medical sector. Available at <http://www.pearlsofcroatia.com/hr/varazdinske-toplice-savrseno-mjesto-za-odmor-i-rekreaciju/> [24 March 2013]

when Varaždinske Toplice, Bizovačke Toplice, Stubičke Toplice and Krapinske Toplice opened. The spas and health resorts mentioned above are far from optimal examples of medical tourism, and have mostly transformed into special hospitals, with a tendency towards becoming water parks (amusement parks) (Kušen, 2011:96). According to the research conducted by the Hrvoje Požar Energy Institute (2013), there are over 120 hot springs in Croatia. Croatia's geothermal gradient is above the European average. The Pannonian Basin has the highest thermal capacity, with a geothermal gradient of 0.049°C/m, while the European average is 0.03°C/m (Croatian Geological Survey, 2013). Due to unique natural resources, continental Croatia has a lot of potential for future development: spa and wellness tourism (leisure and recreation), health and medical tourism (thermalism, balneology, hydrotherapy), geotourism and ecotourism (geothermal features as visual attractions), adventure tourism (extreme geothermal environments) and nature-based tourism. Getliher and Horvat (2008) identify the following usages of geothermal energy in Croatia: spas and health resorts (Bizovac, “Naftalan”, Ivanić Grad, Daruvar, Lipik, Zagorske Toplice, Varaždinske Toplice, Krapinske Toplice, Stubičke Toplice etc.), heating and recreation (Sports Centre “Mladost”, Zagreb, Clinical hospital Novi Zagreb). Geothermal energy cannot be considered a universal answer to all energy issues, but it can help improve the general energy balance (Getliher and Horvat, 2008), and ensure price competitiveness by adopting an appropriate resource management strategy.

#### 4. Final considerations

Continental Croatia could potentially attract investments into the medical tourism sector, especially since health tourism can be combined with numerous other branches of tourism. There is an increase in the number of wellness centres, and hotel owners are becoming more aware of the importance of wellness as part of their offer. However, other aspects of medical tourism are still underdeveloped and should be based on natural health resort factors, linked with other forms of health tourism. The future development of health tourism will be faced with a number of challenges, as shown in Table 1 below.

**Table 1. Assessment criteria for health tourism development**

Intrinsic quality	Potential for use	Potential threats
Rare natural phenomenon	Tourist attraction (water parks), spa potential, medical treatments	Slow restructuring and modernization of existing facilities; low absorption of EU funds; lack of a long-term development strategy of tourism in continental Croatia
Energy potential	The most efficient heating method – price competitiveness	Rigid legal framework, ownership issues

Qualified personnel, verification	Keeping skilled professionals in the country, knowledge transfer, scientific networking, development of professional associations, introduction of ISO quality standards, education programs enter the market	Slow inclusion into the system of international standardization, outdated educational system
Tradition, geo-communication, politics, historical background	Developing an all-inclusive approach connected to cultural, historical and gastronomic content	Local communities resist change, the private medical sector is stronger than the public one
Demographic deficit in the EU	Developing diverse packages of medical services for elderly patients	Lack of a clear plan to stand out among the competition, relying on the "sea & sunshine" image
Public vs. private health sector	Public-private partnerships, intensifying the activities of the health tourism cluster (legislative); triple helix	It is necessary to establish a clear distinction between medical tourism based on "need" (illness) and that based on "care" (wellness, relaxation), in order to avoid 'sensitive questions' and 'vulnerable patients'

Source: Authors based on criteria proposed by Bruschi and Cendrero (2005) and Serrano and Gonzalez-Treuba (2005) in: Kubalikova (2013).

Bookman and Bookman (2007, in: Horowitz at al., 2007) emphasize that the government of destination countries must implement and enforce appropriate macroeconomic redistributive policies to ensure that the local residents of these nations actually realize the potential benefits of the medical tourism industry. Empirical research proves that health care service providing, distribution of health care products, and the increase of demand for health care treatments, serve as a catalyst for the globalization of health tourism movements, which generates significant economic effects such as investments, income, employment, tax revenues, and export earnings for host countries (Kesar and Rimac, 2011). Local politicians and community activists often fight to protect community hospitals from closure in the belief that communities cannot do without them. However, lawmakers must take advantage of cost-saving techniques in health care (Herrick, 2007:27). The benefits and risks attached to medical tourism both for individual and collective public health are a significant area for future research (Hall, 2011). The rational usage of available energy, a friendly entrepreneurial environment aimed towards the attraction of new investments and public-private partnerships, together with the development of specific packages in order to ensure a high quality of



services, this special niche of tourism has a bright future in continental Croatia, and can significantly contribute to the region's economic growth.

## References

- Carrera, P. M. & Bridges, J. FP. (2006). Globalization and healthcare: understanding health and medical tourism, pp. 447-454, available at: doi: 10.1586/14737167.6.4.447
- Connell, J. (2006), Medical tourism: Sea, sun, sand and... surgery, *Tourism Management*, 27(6), pp. 1093-1100, available at: doi: 10.1016/j.tourman.2005.11.005
- Croatian Geological Survey (2013), available at: <http://www.hgi-cgs.hr/> (accessed at: 24-03-2013)
- Bergmann, S. (2011). Fertility tourism: Circumventive routes that enable access to reproductivetechnologies and substances, *Signs*, 26(2), pp. 280-289
- Boley, B. B. (2009). Geotourism in the Crown of the Continent: Developing and Testing the Geotourism Survey Instrument (on-line), Theses, Dissertations, Professional Papers, Paper 490, available at: <http://scholarworks.umd.edu/etd/490> (Accessed at: 15-12-2014)
- Čavlek, N., Bartoluci, M., Prebežac, D. & Kesar, O. (2011). Turizam - ekonomske osnove i organizacijski sustav, Školska knjiga, Zagreb
- Erfurt-Cooper, P. (2010). The Importance of Natural Geothermal Resources in Tourism (on-line), Proceedings World Geothermal Congress, Bali, Indonesia, 25-29 April 2010, available at: <http://www.apfisisio.pt/> (Accessed at: 15-12-2014)
- Geić, S. (1971). Klimatske prilike i zdravstveno rekreativni turizam na Trogirskom primorju, Institut za povijest prirodnih, matematičkih i medicinskih znanosti, JAZU, Zagreb
- Geić, S., Geić, J. & Čmrlec, A. (2010). Zdravstveni turizam egzistencijalna potreba u suvremenom društvu, *Informatologija*, 43(4), pp. 317-324
- Getliher, A. & Horvat, S. (2008). Uporaba geotermalnih resursa na području grada Zagreba u cilju gospodarskog razvitka, INA, Razvitak Zagreba
- Göldnerr, C. (1989). 39th Congress AIEST: English Workshop Summary, *Revue de Tourism*, 44(4), pp. 6-7
- Goodrich, J.N., & Goodrich, G.E. (1987). Health-care tourism: An exploratory study, *Tourism Management*, 8(3), 217-222
- Gray, H. H. & Poland, S.C. (2008). Medical Tourism: Crossing Borders to Access Health Care, *Kennedy Institute of Ethics Journal*, 18(2), pp. 193-201
- Hall, C.M. (1992). Review. Adventure, health and sports tourism, in: Weiler, B. B. & Hall, C.M (Eds.), *Special Interest Tourism* (pp. 141-158), Belhaven Press, London, ISBN 0470218436
- Hall, C. M. (2003). Health and spa tourism, in: Hudson, S. (ed.) (2003). *International Sports & Adventure Tourism*, Haworth Press, New York, pp. 273-292, ISBN 0-7890-1275-8
- Hall, C. M. (2011). Health and medical tourism: a kill or cure for global public health?“, *Tourism Review*, Vo. 66, Iss: ½, pp. 4- 15, available at: doi: 10.1108/16605371111127198

Herrick, D. M. (2007). Medical Tourism: Global Competition in Health Care (on-line), Policy Report No. 304, National Center for Policy Analysis, Dallas, Texas, available at: <http://www.ncpa.org/pub/st/st304> (accessed at: 02-03-2015)

Horowitz, M. D., Rosensweig, J. A. & Jones, C.A. (2007). Medical Tourism: Globalization of the Healthcare Marketplace (on-line), Medscape General Medicine, 9(4), US National Library of Medicine, National Institutes of Health, available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2234298/> (accessed at: 02-03-2015)

Hrvatski Energetički Institut (2013), available at: <http://www.eihp.hr/hrvatski/images/geoen/hr-temp.gif> (accessed at: 24-03-2013)

International Trade Centre (ITC) (2014), Medical and Wellness Tourism – Lessons from Asia (on-line), Geneva, available at: [http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Medical%20and%20wellness%20Tourism%20-%20lessons%20from%20Asia\\_L.pdf](http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Medical%20and%20wellness%20Tourism%20-%20lessons%20from%20Asia_L.pdf) (accessed at: 15-01-2014)

International Union of Tourism Organizations (IUTO) (1973), Health Tourism, United Nations, Geneva, ISBN: 978-0-9817007-0-1

Kesar, O. & Rimac, K. (2011). Medical Tourism Development in Croatia, Zagreb International Review of Economics & Business, vol. 14, No. 2, pp. 107-134

Kubalikova, L. (2013). Geomorphosite assessment for geotourism purposes, Czech Journal of Tourism, 2(2), pp. 80-104, available at: doi: 10.2478/cjot-2013-0005

Kušen, E. (2002). Health tourism, Tourism, 50(2), pp. 175-188

Kušen, E. (2011). Pozicioniranje medicinskog turizma u širi okvir zdravstvenog turizma, Institut za turizam Zagreb, 59(1)

Lunt, N, Smith, R, Exworthy, M., Green, S, Horsfall, D & Mannion, R. (2011). Medical Tourism: Treatments, Markets and Health System Implications: A scoping review (on-line), OECD, Paris, available at: <http://www.oecd.org/dataoecd/51/11/48723982.pdf> (accessed at: 15-01-2014)

Lunt, N. & Carrera, P. (2010). Medical tourism: assessing the evidence on treatment abroad, Maturitas, 66(1), pp. 27-32, available at: doi: 10.1016/j.maturitas.2010.01.017

Menvielle, L., Menvielle, W. & Tournois, N. (2010). Panorama du tourisme médicale, Une logique de flux migratoires, Revue Espace

MTA (2013). Medical Tourism Survey Report, Executive Summary (on-line), The George Washington University, available at: <http://www.medicaltourismassociation.com/en/2013-mta-survey-report.html> (accessed at: 10-11-2014)

Müller, H. & Lanz, E. (1999). Wellness tourism in Switzerland, Quality development between Tourism Economy and Health Care Policy, 11th ELRA Congress, Leisure and Wellness: Health Tourism in Europe, October, 7-9, Bad Saarow, Germany

Musa, G., Doshi, D.R., Wong, K.M., & Thirumorthy, T. (2012). How satisfied are inbound medical tourists in Malaysia? A study on private hospitals in Kuala Lumpur,

Journal of Travel & Tourism Marketing, 29(7), available at: doi: 10.1080/10548408.2012.720150

Nacionalna strategija razvoja zdravstva 2012.-2020., Narodne novine br.116/2012

Ormond, M. (2011). Medical tourism, medical exile: Responding to the cross-border pursuit of healthcare in Malaysia, in: Minca, C. & Oakes, T. (eds) (2011). Real tourism: Practice, Care, and Politics in Contemporary Travel Culture (pp. 143-161), Routledge, London.

Ormond, M., Mun, W. K. & Khoon, C.C. (2014). Medical tourism in Malaysia: how can we better identify and manage its advantages and disadvantages?, Asean Integration and its health implications, Global Health Action 7:25201, available at: doi: 10.3402/gha.v7.25201

Patients Beyond Borders (2014), available at: <http://www.patientsbeyondborders.com/medical-tourism-statistics-facts> (accessed at: 10-11-2014)

Perišić, M. (2000). Pretpostavke razvitka zdravstvenog turizma u Republici Hrvatskoj, in: Zdravstveni turizam za 21stoljeće, Rožanić, I. (ed.), Opatija, Zambelli, Rijeka, pp. 35-44

Puczkó, L. (ed.) (2010). Health, Wellness and Tourism: healthy tourists, healthy business? Proceedings of the Travel and Tourism Research Association Europe 2010, Annual Conference 1-3 September, Budapest, Hungary, ISBN: 978-91-633-4666-8

Rhodes, R. & Sciano, T. (2010). Transplant tourism in China: a tale of two transplants, American Journal of Bioethics, 10(2), pp. 3-11

Schalber, C. & Peters, M. (2012). Determinants of health tourism competitiveness: An Alpine case study, Tourism, 60(3), pp. 307-323

Smith, M. & Kelly, C. (2006). Wellness Tourism, Tourism Recreation Research, 31 (1), 2006., pp. 1-4

Smith, M. & Puczkó (2009). Health and Wellness Tourism, Elsevier, Oxford

Stokes, A.M., Cook, S.D. & Drew, D. (2003). Geotourism: The New Trend in Travel, Travel Industry America and National Geographic Traveler, Washington DC

The Institute for Tourism (2014). Akcijski plan razvoja zdravstvenog turizma, Analiza stanja i SWOT, Zagreb

Timčak, M. (2011). Iceland as a geotourism learning destination, Acta Geoturistica, 2(2), pp.40-48

Turner, L. (2008). Cross-border dental care: 'dental tourism' and patient mobility, British Dental Journal, 204, pp. 553-554, available at: doi: 10.1038/sj.bdj.2008.403

United Nations World Tourism Organization (2012). Tourism Highlights, available at:

[http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/docpdf/unwtohighlights12enlr\\_1.pdf](http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/docpdf/unwtohighlights12enlr_1.pdf) (accessed at: 10-11-2014)

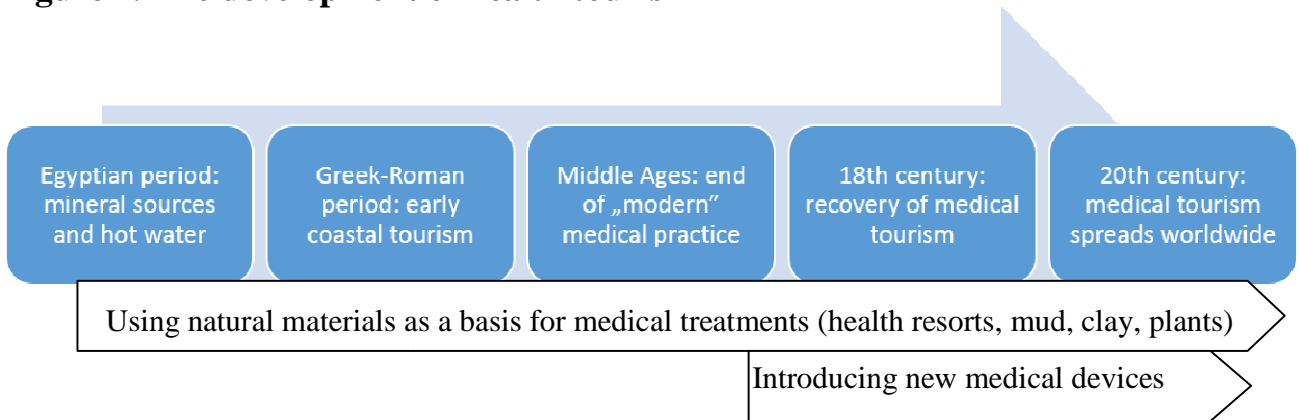
Vasiljević, Dj.A., Marković, S.B., Hose, T.A., Smalley, I., Basarin, B., Lazić, L. & Jović, G. (2011). The Introduction to Geoconservation of loess-palaeosol sequences in the Vojvodina region: Significant geoheritage of Serbia, Quaternary International

No. 240, ElsevierLtd and INQUA, pp. 108-116, available at: doi: 10.1016/j.quaint.2010.07.008

Wong, K.,M., Velasamy, P. & Arshad, T.N.T. (2014). Medical Tourism Destination SWOT Analysis: A Case Study of Malaysia, Thailand, Singapore and India, SHS Web of Conferences, Volume 12, 4th International Conference on Tourism Research, available at: doi: 10.1051/shsconf/20141201037

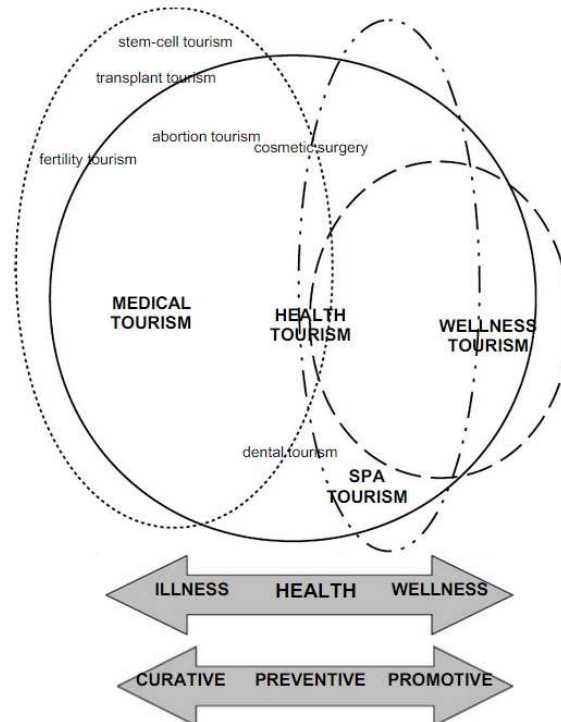
## Appendix

**Figure 1. The development of health tourism**



Source: Menevielle et al., 2010

**Figure 2. Interrelatedness of health and medical tourism domains**



Source: Hall, 2012

**Table 1. Data implications of various definitions of medical tourism**

Definition	Coverage	Data implications
Narrow	Only medical travel for specific medical procedures, even excluding elective cosmetic surgery	Fewer number of medical travellers; Number of medical tourists may still depend on whether based on admitted patients by hospital or number of procedures performed on medical tourists
Broad	Medical travellers as above, plus those travelling for spa and wellness, as well as cosmetic procedures	Higher number of medical tourists may be reported; Number may still vary depending on whether admitted patients or number of procedures is used to count the number of 'medical tourists'; Count may include expatriates living in the country as well as tourists who fall ill while travelling in the country and are admitted in domestic hospitals

Source: ITC, 2014 from various sources