# What is Tourism in Dental Tourism?

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Dental tourism is an important segment of the growing health tourism industry. Patients generate relevant tourism revenues for the destination country beyond the direct income of the dental clinics. This paper illustrates the development of dental tourism in the case of Hungary based mainly on price competitiveness of treatments. The first part of the paper traces this development on the base of in-depth interviews with representatives of the sector arriving at the conclusion that the treatment element still dominates the tourism experience. The question therefore arises whether a more destination based strategy would allow for a sustainable future. To respond to this question, the second part of the paper models the experience of the dental tourist in three phases - get there, stay there and live there – focusing on trip duration, expenditure and tourists' activities. Finally, implications for destination marketing strategies to overcome prospected future decline are discussed.

# 1. INTRODUCTION

The research is focusing on the tourism components of a specific medical treatment abroad. Medical tourism captured worldwide attention only in 2006, when medical journals started to publish papers on the topic, as awareness of the phenomenon in both developing and industrial countries was increasing (Horowitz, 2007). It became a growing trend, and its organization, volume and economic impact changed. According to Connell (2006), a medical tourist is someone who in order to minimize his costs of health care decides to travel abroad, and becomes a tourist. Statistically speaking this may be true but it is not very useful analytically as it mixes dental migrants (or commuters) with dental tourists in a strict sense (as we want to define them in this study) i.e. dental patients who combine the consumption of a treatment with a tourism experience.

The dental tourist's decision starts with a health problem which creates a more or less urgent need for an intervention by a dentist. If the price differences among services "at home" and "abroad" at some perceived quality level are important enough to incite the patient to travel abroad for the intervention, the dental patient becomes a potential dental tourist who is choosing a dentist, and – seemingly – in a simultaneous way a destination. However, if the destination has no touristic value as such for the patient other than being the location of the more convenient offer for a dental service, we cannot usefully consider this as being dental tourism. Medical services are dominant in the experience, while tourism spending is not significant.

Travelers who buy health care abroad usually get a package deal including the treatment, air transport, transfers and accommodation. Tourism is thus rather a byproduct of packaging, but creates substantial benefits to the travel industry. Although as will be argued below, the tourism part is not necessarily sustainable as it depends completely on the price differences of medical treatment. We will therefore discuss the potential for increasing the tourism value of dental tourism to the patient and to the destination.

Among the economic factors determining the demand for medical tourism, several components can be identified; the most important being differences in treatment price, in national health systems and in conditions of private health insurance. The reduced prices can compensate for the absence of insurance overall or for some treatments (e.g. cosmetic surgery). These push factors are well known from UK and USA who are important source countries of medical tourism in general. Concerning dental treatments, the British national health system, scarcely funded by tax revenue, results in long, up to half year stays on the waiting lists, while some treatments are hardly available in some regions. At the same time UK's private clinics are offering their treatments at unaffordable prices for many. As far as the US is concerned, an estimated 50 million of citizens are without health insurance and 120 million without dental coverage which creates and important potential for medical and dental

tourism. To what extent this translates into effective demand depends on the type of treatment. Bookman and Bookman (2007) claim, that the price elasticity of demand depends on the importance of the operation less complicated and more available treatments being more price sensitive. The implication for destinations is that they have to closely observe the development of relative, all inclusive prices to the patient between the source country and their own for different kinds of treatments before they ponder about additional tourism services. Apart from price differences, the necessary elements for the development of medical tourism (Bookman and Bookman, 2007) are: skilled local human capital, domestic research and development, developed infrastructure, stable political and regulated legal institutions, liberalized market economy, available tourist attractions.

Finally, as in general in tourism, good and cheap accessibility (i.e. mostly air transport services) will enhance the competitiveness of a dental tourism destination. Improved mobility gives better access to health services for the patients, and allows for a more efficient use of existing medical capacities. (Österle, 2007)

#### 2. THE CASE OF DENTAL TOURISM IN HUNGARY

Most of the medical tourism destinations offer dental treatments, but there are some countries, which are specialized in it. Only estimations are existing, how many people are undertaking dental tourism worldwide. RevaHelath, an Internet-based database of healthcare providers for the medical and tourism sector, is estimating the market through online advertising campaigns, impressions of web searches in the sector. Their numbers are still useful as indicators, looking at the World and Hungary's dental market. The leading dental tourism destination is Mexico, which comes from its closeness to the United States, from where 25% of the worldwide dental tourist are coming. The second place is shared between India and Hungary. Hungary is serving more European patients, while India attends Asian patients, and they share some of the US citizens.

Table 1. Overview on the prices in Euros taken from <a href="www.Revahealth.com">www.Revahealth.com</a> – date and exchange rate not available, published in 2007

	Hungary	Poland	Mexico	Thailand	UK	USA
Crowns	270	225	140	285	600	1000
Bridges	270	225	350	285	600	1450
Implants	1070	975	1000	1350	2700	2000
Veneers	400	325	300	225	750	1100
Fillings	45	34	35	22	75	75
Root Canals	100	80	110	90	450	375

In Table 1. the average prices of each dental treatment at each dental tourism destination are presented. The last two columns of the table show the prices of the dental treatments in UK and USA, which are the main sender countries regarding dental tourism. The difference is considerable in most cases.

Dental migration dates back to the late 1980's, when border-crossing Austrians have been visiting Hungarian dentists, because their prices were much cheaper than in Austria and their work was known to be of high quality. In the 1990's German and Swiss patients followed this health migration movement. Around 2003 some dental clinics started to supply incoming dental tourists with travel arrangements and accommodation, information about the destination, basing the marketing on price savings and tourism. This became possible with the presence of the budget airlines, the entry to the European Union in 2004, significantly cheaper dental prices than in Western countries and the well-known expertise of Hungarian dentists, which will be discussed later on.

Demand side analysis already exists on the topic, however no study has been conducted on the supply side; on the organization of dental tourism, the actors involved, their strategies, how they are structured and co-operate with different partners. How can the two different sector, tourism and dentistry combine their products?

Through questionnaires the market has been examined by Bünten (2006) and Österle, Balazs, Delgado (2009). Bünten (2006) was questioning foreign tourists about dental treatments in three regions of Hungary; a spa destination, a city at the Austrian border and Budapest. Form the answers of the respondents Bünten (2006) describes three type of dental tourist and their characteristics at the different destination. Österle, Balazs and Delgado (2009) sent their questionnaires via the Hungarian Medical Chamber to all registered dentists in the border regions with Austria and in the capital, Budapest, receiving a 25,34% and 20,65% response rate from the regions. In their results patients from neighboring countries are more attracted to the regions in Western Hungary, while patients coming by airplane are preferring the capital, Budapest, for dental treatment. Both studies found the price-performance ratio the main reason of the dental trips.

For our study the methodology of in-depth interviews has been chosen, in order to get an overview of this market from the suppliers involved. Eight experts have been interviewed, public authorities from the tourism and the dental side and private players (Table 2.). Additionally two cases of direct evidence have been collected via interview and an experiment to get a deeper insight on actual price differences and organizational issues.

Table 2. List of interviews

Interview	Institution	Position
1	Hungarian Tourism office in Ireland	Main responsible
2	Hungarian Dental Association	Chief Dental Officer
3	Dental clinic	Clinic owner/dentist
4	Dental agent in UK	Dental Travel Agent
5	Dental clinic works with agents abroad	Office manager
6	Dental clinic works agencies abroad	Customer relations manager
7	Dental travel agency, located in UK	Director
8	Partner hotel of a dental clinic	Sales manager

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Type Country		Gender	Age	Dental treatment		
Interview	Italy	Male	55	Implants		
Experiment	Switzerland	Female	32	Crowns		

The demographic profile of the dental tourist coming to Hungary has been built in accordance with the interviews done. The average age group, country of origin, income status and party composition are shown in Table 3. For further analysis, it is important to highlight that the patients are mainly from the lower part of the middle class, with a growth toward the higher middle income classes. People from low income classes in case of Great-Britain are rather waiting for the free national health treatments, or do not repair their teeth at all. Patients with high income tend to do less dental travel, as for them the time is more precious, and they can afford private dental treatment in their own country.

Table 3. Characteristics of an average dental tourist and a dental trip

Person	Age	45-60 years old						
	Country of origin	Austria, Great-Britain, Ireland, Germany, Switzerland, Italy, USA, France, Norway, Denmark, Netherlands						
	Income status	Lower part of the middle classes, with a growth towards the higher middle income classes						
	Party composition	> 50% bring their friends or relatives						
Trip	Seasonality	No, pause in Christmas-New Year, August						
	Accommodation	3 star partner hotels						
	Duration	1 trip: 5-10 days 2 trips: 3-5 days, 5 days 3 trips: 3,3,5 days						
	Purpose	Cost-value ratio of the dental treatment Secondary: wellness, shopping, sightseeing, entertainment, VFR						
	Mode of transportation	90% airplane – budget airlines						
	Expenditure/ Treatments	50-70% cost saving on the dental treatment, quality-price ratio 3-4000 € spent on average – implants, bridges, crowns						

Dental trips are not penalized by seasonality, patients have teeth problems all year around. Dental tourism is less likely in the Christmas-New year's break and in the month of August, in the seasons of traditional family holidays, both for doctors and patients. Some dental clinics are also closing for those periods. Most of the arrivals are on Sunday nights, and the first visit of the dentist on Monday, differently from leisure travelers arriving for weekends. Hence a partnership with a dental clinic represents a perfect complement to the leisure business with respect to seasonality and weekly variations. The type of accommodation, where dental tourist usually stay are 3-star partner hotels, most of the agencies and clinics have agreements with them in Budapest. Some agencies offer wider scale of accommodation from bed&breakfasts till 5 star hotels. This is a mutually beneficial partnership, the clinics can provide discounted rooms to the patients nearby, while the hotels have very high occupancy rate all year around, saving costs for the marketing and sales department.

The duration of the trip depends on the nature of the dental treatment. In Table 3. the three most usual durations of dental trips are introduced. All of these require more than the average stay of a normal tourist in Hungary, which is 2,6 days (Hungarian Central Statistical Office). The mode of transportation is airplane for 90% of the dental tourists. Hungary and its close neighbor countries are well-served with budget-airlines, which can keep the price of the overall experience low.

The main part of the tourists' expenditure is coming from the dental treatment itself. As an example, an Italian patient's cost calculation about his dental trip is presented in Table 4. The

price in his case depended on how many implants it was necessary to install. There are two solutions, comprehending a different number of implantations from 8 to 16. In Italy the dentist always suggested "the 16-solution", the most expensive and also the "easiest" in technical terms, but also very "destructive" for the patient. The estimated cost was 100.000 €. In Hungary the dentist offered him the solution with 8 installations and significant savings.

Table 4. Cost calculation of the dental trip in comparison with offer from the sender country

	Italy	Hungary
Suggested treatment	16 implants	8 implants
Price of the treatment	100.000€	8.700 €
Travel expenses	-	710 €
Hotel expenses	-	600 €
Auxiliary services (food, taxi)	+	200 €
Total	100.000€	10.210 €

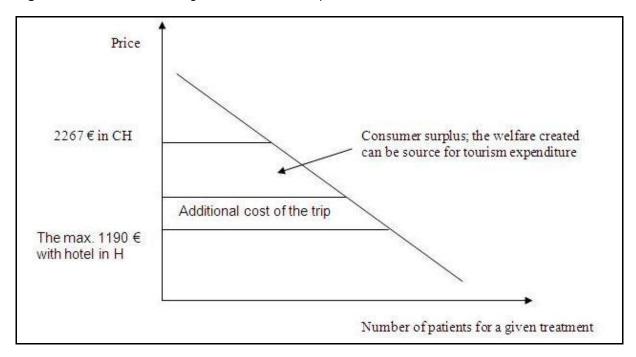
As compared to this extreme example, the average saving is around 50-70% of the price in the sender country, according to our interviews. Private insurance companies are also saving on the reimbursement, therefore they encourage their customers for treatments in cheaper countries. The most required treatments are the implants, bridges, and crowns, because those are the most expensive and allow bigger savings on the treatments. On average 3-4.000 € spent on a treatment.

For further evidence, an experiment was conducted using a test person with cosmetic dentistry problems. An estimate was requested with an x-ray for her treatment in Lugano, Switzerland. Using the online contact form of dental clinics and agencies in Hungary, the same request was sent to 15 of them. Treatment type and price, accommodation offers and trip duration were the main curiosities. 12 answers were returned and the results are presented and compared in Table 5. There are four possible solutions for the patients problem; treatment I refers to a cheap composite filling, while treatment II, III and IV require a dental laboratory. The difference in the last three options is the material and the technology used, III and IV are more expensive, higher quality solutions. Responses showed higher prices from agencies, due to their commission fee. Packages include the treatment price and the hotel price multiplied with the number of nights suggested by the clinics. The table confirms, that for small scale treatments it is not worth travelling, while more labor-intensive procedures shows significant savings even combined with the travel costs. The graph (Figure 1) represents a hypothetical demand curve for a specific dental treatment and illustrates the potential welfare gain realized at destination which creates a potential for demand for additional tourism services and products.

Table 5. Results of the cost experiment – data collected in June 2009 (prices are in EUR)

Type of treatment	Offer price in Switzerland	Average price from the Hungarian sample	Average price Minimum hotel package	Average price Maximum hotel package
Treatment I	387	267	431	689
Treatment	2267	638	834	986
Treatment		684	899	1190
Treatment		612	845	1029

**Figure 1.** Demand curve using the data from the experiment

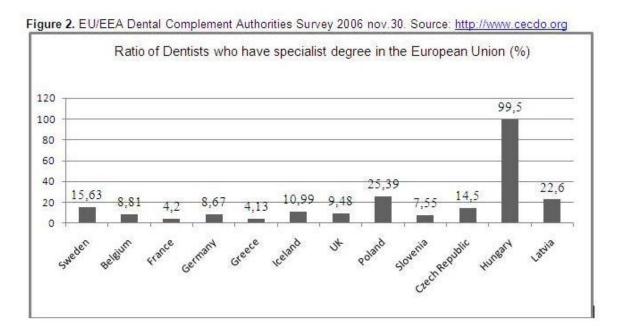


In order to analyze the tourism effects of a dental treatment in Hungary, Interview I has been conducted with the representative of one of the main sender countries. The tourism representative noted, that in 2007 55.000 Irish tourist visited Hungary, among them almost 10% went for dental treatment. 40% of all Irish dental patients going abroad have chosen a Hungarian clinic for their treatment. Approximately 5.000 patients spent at least 5 nights in Hungary.

In line with the Interview I, the tourism factor has not got a significant role in the decision for having a dental treatment abroad. The clinics can sell their product easier if it is in Budapest, even if it is a bit more expensive. 80% of the dental tourists are going to Hungary only for the dental treatment. The other 20% are interested in visiting Budapest in the first place, and decide after to undertake a treatment during the holiday. So far the Tourism Office of Hungary did not deal with the dental tourism topic. They are promoting heavily the Spa culture of Hungary, the curing thermal water, as health tourism. Dental tourism is mainly motivated by the price advantage not the country itself, that is why, the tourism industry is less interested in it. Even though the opportunity is high to convert patients to normal tourists.

Interview II was with the Chief Dental Officer of Hungary responsible for quality control and head of dental staff and dental profession in the country. According to him, Hungary's leading position is based on its cheaper prices and high quality dental education. The proof of this high quality education is coming from Israel, which is the only country where dental education is measured. Israel has one of the highest proportions of dentists to the general population in the world, with some 7,500 dentists currently practicing and about 300 new ones joining the profession each year. That is reason, why they have introduced a dental licensing examination, which is mandatory to complete successfully in order to obtain recognition as a dentist. Apparently students having obtained their degree in the Semmelweis University of Hungary, pass this exam with the highest results. In fact each year approximately 120 international students are enrolled at one of the English language medical programs at the university. The result of the EU/EEA Dental Complement Authorities Survey from 2006 can be seen in Figure 2. Hungary has the highest ratio of dentists with the specialist degree in the European Union. It is due to the fact, that before the political and

economic changes of 1989-1990 it was compulsory to study an additional 3 years in a specialized filed of dentistry for being allowed to practice.



The remaining interviews confirmed the findings cited. Turning to the tourism related aspects of the findings we discuss the way of organizing the trip, which will lead to the identification of a destination based strategy in the next part of the paper.

Patients can organise their dental trips in three different ways. Contacting directly the dental clinic, using a dental agent abroad, or booking via a dental travel agency.

In the most simple case, the patient contacts the dental clinic directly via internet or phone, in order to get a quote for his treatment. In this model the patient does not pay the commission to the agent for organizing the trip. Most of the dental clinics have agreements with partner hotels, if the patient is asking for help in booking accommodation. The hotel can help them in spending their free time. Clinics following this model are the least successful in the international competition, as they have only the presence on the Internet abroad. However those, which are located in well known spa destinations are receiving many incidental tourist from Austria and Germany. Especially elderly repeaters, who are spending 2-3 weeks of holiday there, and during their stay seek out the dental treatment. In this case the dental visit is the secondary motivation of the patient.

The second possibility is to contact a Dental Travel Agent. In this case the dentistry is working with several dental travel agents located in the sender countries and mainly expatients of the clinic. They are representing the tangible aspect before the experience, the person with whom a patient can talk to and build up trust. The agents are intermediates between the clinic and the patients, everything is communicated through them, they ask for the quote and book an appointment for the patients. The accommodation is booked by the clinics at the destination. In terms of number of dental patients per months, this model proved to be the most successful one. Though success can be influenced by many other factors, such as how long they have been treating foreign patients, how big the clinic's capacity, how many articles have been written on them in foreign media, not to mention customer satisfaction, which is the key element of word of mouth marketing.

The third and most advanced way to book a dental holiday is via a Dental Travel Agency. In sender countries based agencies are responsible for the marketing, providing information,

finding the right dentist for the patients, arranging appointments, communicating between the two parties, booking hotel, transfer, entertainment, keeping customer service. Some agencies are also advertising packages, which are containing a specific treatment the hotel for the number of nights required by the treatment.

It is common, that agencies have contracts with more than one clinic. Smaller dental clinics can enter into the dental tourism market only by cooperating with travel agencies, which can take over the organizational tasks acting as an outgoing tour operator.

As the above findings shows, in dental tourism the treatment part dominates the whole experience of the tourists. Price differences are still significant between sender and receiver countries, which ensures the continuation of the business as long as prices are not getting equalized. The tourism part has not yet been exploited enough, which gives scope for enhancing the experience with more tourism activities. While current strategies focus only on treatment and hotel elements, the business should develop, as the following part of the study argues, towards destination based strategies, inspired by integrated tourism experience models.

## 3. STRATEGY FOR DENTAL TOURISM

In order to describe a strategy for dental tourism that would take dental tourism closer to tourism, we apply the "Get there – stay there - live there" model (Croce, Maggi, 2005) which distinguish these three phases of the tourism experience. The GET THERE phase covers holiday start-up activities as information gathering ("Virtual Get There") and mobility ("Real Get There"). STAY THERE regards the satisfaction of basic holiday needs, i.e. accommodation and food, and LIVE THERE is about the satisfaction of secondary holiday needs and including all the activities of tourists at destination. The overall experience of a tourist is integrated among the three phases, but the degree of integration can vary in the different organizational models.

Dental treatments are the primary motivation of the dental trips. For obvious reasons the treatment is placed in Stay there phase (see Table 6). Visiting dental clinics constitutes a basic need of the patients, dental tourism would not be possible without them. The clinic is the anchor point of the dental tourism experience, much like the business meeting of the conference is for business tourism.

Table 6. Dental tourism activities in the GET THERE - STAY THERE - LIVE THERE model

	GET THERE	STAY THERE	LIVE THERE
Activities	Information gathering	Dental treatment	Entertainment
	Contact with operators	Accommodation	Wellness
	Transportation	Food	Sightseeing
Activities Stakeholders	Marketing and information platform	Dental Clinic	DMO
	Dental travel agent	Partner Hotel	Excursion organizer
	Dental travel agency	Controlling authority at the destination	Entertainment provider
	Controlling authority in the source country	Restaurant	
	Insurance company		63
	Airline company		

The challenge for the development of dental tourism lies in the currently dominating focus of the tour organization on the stay there phase, hence the dental treatment complemented by the accommodation. Figure 3 shows the three actual dominating organizational models of dental tourism. While in the first of the three cases illustrated the organizational anchor point (i.e. the TO) is the clinic, in the other two cases the organization of the experience is in the hand of a specialized tour operator. When the first model applies, the tourism experience at destination represents just an accessory, organized eventually by the hotel or the clinic upon request from the patient. As there is no integration with the destination, the scope of a DMO to target the market via the TO is very limited and the business will never become more touristic. The intermediation between the clinic and the patient by a TO, as in the second case in Figure 3, makes the organization of the experience more efficient and consequently will enlarge the market. However neither this model includes the tourism experience at the destination in the dental tourism market. Only the third model where the anchor is again the TO but with direct access to the destination, i.e. packaging, arranging, offering the whole experience will give scope for a development of a real dental tourism market. Dental Travel Agencies have the potential to link effectively DMO-s with the dental industry.

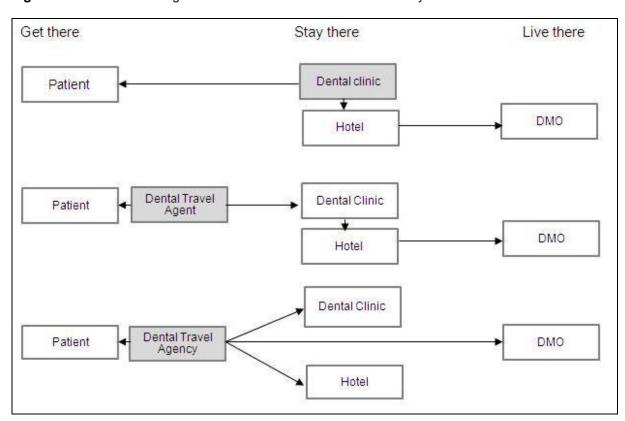


Figure 3. Dental tourism organizational models in the Get there - Stay there - Live there frame

International competition is growing in Europe, especially in Poland, Turkey, Croatia, Slovenia, Slovakia, Czech Republic, and for British and Irish patients with lower willingness to travel, the prices are already a bit lower in Northern Ireland.

So how can Hungary keep its leading position with respect to the eastern competitors which are sometimes cheaper, but less experienced in this sector. Hungary can beat them at the moment by guaranteeing its high-quality dental tourism, emphasis on high professional standards with more agencies, bigger clinics, more doctors, state of the art technology and language skills. A successful strategy has to contain at least two elements: quality control, cure of the core product and extension of the tourism experience to the live there phase.

Hungarian dentists need to cooperate in filtering out lower quality clinics and keeping their good fame facing the foreign competition. Labeling on quality control of dental tourism could be a strategy in this situation, in which to enter would be a free decision of each clinic. Under that label all clinics and agencies should satisfy dental requirements for foreign patients. Besides the usual control of a flawless clinic, ensuring fluent communication towards

patients and help during their stay in Hungary. This could represent their competitive advantage to win and retain more customers. A recent initiative in this direction is the one of five clinics, claimed to be the biggest in Hungary, who have decided to form an association of Leading Hungarian Dental Clinics in 2009. Their efforts concentrate on common marketing and lobbying for stronger image building in the European Union. Together those clinics generated 20.000 overnight stays in 2007 and 22.000 in 2008.

The country itself could profit much more from the existing dental business with higher involvement of the tourism offices (DMO's). Patients could be motivated to extend their stay, or plan a new trip in the future to visit the country, get in touch with the culture or just simply spend their time more enjoyably, and when they return talk not just about the treatment but also about the destination. Possible cooperation with the Tourism Office also in small level, such as brochures in the waiting room of the dental clinic, would work as a tourist information point. On higher level, dental tourism should get an important role in thematic marketing of the country abroad, as it has been decided to dedicate 2011 to the year of Health tourism. Special dental holiday packages should be created for that occasion, using the dental professionalism in Hungary to attract more tourism.

The Hungarian competitive advantage will shrink within 2 to 3 years, and possibly, only the few big players will continue, those which will take part in dental travel association, have consultancy service in foreign countries, and advertising the most (Interview I).

Making the example of the positioning of dental clinics in Great-Britain and in Hungary, the National Health System (NHS) today offers free dental services to the British patients, but at low quality, concerning availability and waiting lists. The British dental clinics offer good quality services, at high prices. Hungarian dental clinics provide high-quality services for low prices to Western patients. When the overhead costs will increase in Hungary, the price of the treatment together with the airplane and accommodation might cost as much as the treatment in Great-Britain. Hungary will be repositioned into high-quality high price dental tourism segment. At that point the competitive potential of an integration of the dental service with the improved tourism product comes into play. While today the primary motivation is the medical treatment, in the future it would be the tourism experience with the dental treatment as a byproduct.

According to Pucko and Ràtz (2006) Hungary's competitiveness is in wellness and city tourism, while its unique selling proposition is the healing water. Therefore health tourism has been and can be the product, which makes Hungary a favorite destination for the European visitors. It is based on several elements, such as the unique thermal bath history in the country, Budapest is the only spa capital in the World, and the lake of Heviz is the largest thermal lake in the World. Tourism and bathing organizations are trying to ensure that health tourism becomes the core product of the country. A combination with dental tourism could develop Hungary to a medical destination, where tourist come to get healthier, relaxed and better looking in every sense.

#### 4. Conclusion

This paper investigates a special type of medical tourism, analyzed from tourism perspectives. Both the tourism and the medical sector get more involved in the phenomenon, deeper integration is continuously emerging between them. The case study of Hungary's dental tourism has been chosen due to its high specialization and success in this market. The country's competitiveness based on its low prices, high quality, modern technology, central location, and being primer starting with dental tourism, brought the idea to discover its relevance in terms of tourism, not only in the revenues of the dental clinics.

The findings of the research contains 3 organizational models of Hungary's dental tourism supply in the framework of the Get there - Stay there - Live there approach. The 3 models differ with respect to the intermediaries involved, the degree of integration of the product and the anchor point of the experience.

Dental tourism in Hungary is still in the growth phase of its lifecycle. It has still few years of significant presence on the market, before the overhead costs will increase, and the price of the whole trip will be equal with a treatment in the Western countries.

This study claims, that higher cooperation with tourism, and changing target market gives the possibility to overcome the decline. To consider repositioning into high price-high quality dental tourism, would imply the dental treatment to become the by-product of visiting Hungary for those patients, who are also seeking high quality treatment. This new product will be developed from the old one using its suppliers, such as the clinics and the agencies, which will have a higher degree of cooperation with other tourism suppliers.

Whether dental tourism in Hungary repositions and stays still successful or completely vanishes, would be the scope of a new research, when the phenomenon reaches its maturity phase. Thinking more globally, further studies could investigate how medical tourism will react to price increases at different destinations. The changes on the World's medical supply map in 10-20 years would be an interesting continuation of the research. Not just in the supply, also in the demand major changes could occur. Government health reforms and country developments can originate new targets within new source countries. However people will always seek high quality deals, especially when their health and beauty are on the stake.

# **Appendix**



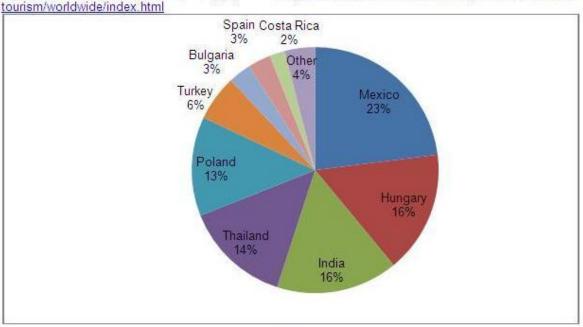


Figure 2. Results of the experiment

Figure 2. R	2		gency o		9	A	gency i	ncomin	g		С	linic	
	CH	1	2	3	4	1	2	3	4	1	2	3	4
Treatment I	387		280	280						150			
Treatment II	2267		950		ė.			807		440	480	450	700
Treatment III	0 -	741		792	÷	678	595			640	8	660	÷
Treatment IV	0				540	0. 3	595	807	507	8	Ø :		3
Package I	1		418	405		1			01 =	470			
Package II			1088					962		760	680	640	875
Package III		896		917		928	845			960		850	
Package IV					790		845	962	782				
Package I			418	1180						470			
Package II			1088					1347		760	680	640	1400
Package III		1351		1692		1093	1195			960		850	
Package IV					790		1195	1347	782				

Abbreviations

Tr. treatment, Min. Pack.: minimum package price, Max. Pack.: maximum package price

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