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ANALYSIS OF THE ATTENDANCE OF BARDEJOV SPA BASED ON THE EVALUATION OF ARCHIVED UNPUBLISHED DOCUMENTS

ANALÝZA NÁVŠTEVNOSTI BARDEJOVSKÝCH KÚPEĽOV NA ZÁKLADE HODNOTENIA ARCHÍVNYCH NEPUBLIKOVANÝCH DOKUMENTOV

Abstrakt

The main objective of this article was to evaluate the impact of historical events on the visit rate of Bardejov Spa in various periods of its development (in the years of 1814–2016). The collection of information on clients' spa visits, especially the oldest data, was difficult (19th century and 1st and 2nd World War). Much information was available only in the State Archive of the Ministry of the Interior of the Slovak Republic in Hungarian and Latin. The paper summarizes the history of the spa, natural medical sources, spa treatment and indications. At present, the number of guests has an increasing trend, as evidenced by the visit rate for 2016, as well as by current data for 2017. In 2017, there were 27,170 clients. In 2018, Bardejov Spa reached a pick of the visit rate with 31,011 clients. The main clients are the Slovaks, about 90%.

Keywords

Slovak Spa, Bardejov Spa, visit rate, spa tourism, spa treatment

JEL classification: I10; L83

Introduction

The geological development of the Western Carpathians has created preconditions for varied and rich sources of natural healing thermal and mineral waters in our territory. These treasures have been used by residents of this area for the treatment of various diseases since their first settlement (Petraccia et al., 2006; Zálešáková, 2013). According to the water registration at the Ministry of Health of the Slovak republic, 1657 mineral springs are documented in our territory, while 112 of them are recognized as suitable for the purpose of filling in containers and medical care. According to Bodiš et al. (2016), Slovakia can be proud of dozens of unique spa resorts whose treatment effects reached a good reputation not only in our country but also throughout Europe. Nowadays, tourism has undoubtedly become essential to both national and international economies, and each country is currently trying to face the challenges imposed by this industry (Orieška, 1994).

On the basis of the information provided by the Statistical Office of the Slovak Republic, the total number realized in mass accommodation facilities was 14,138,420 in 2016 (10,367,330 in 2010). In 2017 there were 21 spa towns in Slovakia with 31 spa treatments providers and 80 accommodation facilities in total. Total capacity was 12,339 beds and 6,344 rooms. Over the last 10 years, there has been no significant change in this indicator (bed capacity in 2005 was 11,804 beds). The number of visitors in the Slovak spa had rising tendency until 2008, and it rose by almost 10% per year. Probably by the reason of the economic recession, this growth was slowed in 2008 by over 3% and in the following year decreased by more than 18%. In 2009, the growth was again restarted to the level from three years ago, thanks to an increase in the number of domestic visitors (Matlovičová et al., 2013). The number of visitors to spa

facilities in 2016 was 316,046 with a number of overnight stays of 2,741,550; in the year 2017 it was 311,138 with a number 2,733,651 of overnight stays.

The spa tourism share in the total number of visitors to tourist accommodation facilities in Slovakia is 6.3%; the share in the total number of overnight stays in tourist accommodation facilities in Slovakia represents 19.4% (Statistical Office of the SR, 2018). The number of guests of spa tourism accommodation facilities in Slovakia for the years 2005 to 2017 and the average number of overnight stays is presented in the table 1.

Table 1 The number of guests of spa tourism accommodation facilities and their average number of overnight stays in Slovakia for the years 2005 to 2017

Year	Number of guests	Average number of overnight stays
2005	228 822	9.4
2006	253 260	9
2007	276 164	8.9
2008	284 806	9.2
2009	241 309	9.9
2010	259 506	9.6
2011	261 515	9.2
2012	256 380	9.3
2013	278 429	9.1
2014	299 032	8.8
2015	304 975	8.6
2016	316 046	8.7
2017	311 138	8.8

Source: Statistical Office of the SR 2018 www.statistics.sk and authors' own research

In the structure of foreign visitors, clientele from the Czech Republic is clearly dominant and creates nearly 50% of all foreign spa guests (in 2017 it created 48,7%). From other groups, following nations can be mentioned: Israelis (10,9%), Germans (9.4%), Polish (5.3%), Russians (5.0%), Austrians (4.1%). The highest number of overnights, which Slovak spa guests stayed in the Slovak spa, was 10.2 days in year 2009. The foreign guests stayed in the Slovak spa 9,5 days; this highest number was from the year 2005. In the year 2017 Slovak guests stayed 8.7 days, the foreign guests 8 days. Revenue from accommodation (per year 2017) was 61,953,120 Euro, while 45,133,232 of it came from domestic and 16,819,888 from foreign visitors.

In the paper, we summarize data from the Bardejov Spa history covering the area of natural healing sources, spa treatment and indications, facilities, services, architectural development of spa houses and hotels, a visit rate, whose development is included in individual historical stages. The aim of the paper is to clarify the impact of the historical events, in particular periods, on an increase and decrease of the Bardejov Spa visit rate and give a comprehensive view of the main periods of the Bardejov Spa tourism development.

The healing effects of mineral water, quiet and peaceful environment predominantly coniferous forests conditioned the emergence and development of the picturesque spa, in ancient times also called Burcuth. The famous Bardejov Spa is situated in the valley of the Bardejov Brook, about 6 km from the historically significant medieval town Bardejov (Dubcová et al., 2008). In

addition, the spa, spanning 31 hectares, is located in the foothills of the Low Beskid Mountains in northeastern Slovakia and is owned by 33 subjects. Currently Bardejov Spa belongs among one of the best equipped treatment facilities, where its rich tradition and history are combined with modern treatments. Bardejov Spa is among three most popular, most visited and largest Slovak spas with 1631 number of beds. The biggest treasure of the spa is natural medical sources that thanks to the composition are one of the most significant in Europe. The geographical location, mineral springs, natural environment and microclimate are beneficial for the treatment of various diseases. Concerning all Slovak spas, Bardejov Spa has the widest range of indication. The following indications specified by law are treated there: I. Oncological diseases; II. Disorders of blood circulation system; III. Disorders of the gastrointestinal system; IV. Disorders of metabolism and the glands of internal secretion; V. Non-tuberculosis type disorders of the respiratory organs; VI. Neurological diseases; VII. Musculoskeletal system disorders; VIII. Renal and urinary tract disorders; IX. Women's diseases; X. Professional diseases (Gutek a kol., 2012; Šenková, 2017).

Theoretical basis

The first historical findings of Slovak spa towns include the records, dated back to the 13th century to 1244, on Trenčianske Teplice and Sliač. According to Mulík (1981), the documents from 1247, from the time of Bela IV, about the Bardejov Spa also belong to those records. However, the properties and content of the water from that time are devoid of deeper knowledge. According to Rebro (1979), the spa treatment began to develop in our country at the beginning of the 16th century. Knowledge of mineral springs and their use is evidenced by old folk names of places, such as Štiavnička and Šťava (the *name* of the village comes from a Slovak word-formation base "štiav" that means acidic water), or Teplice and Teplička (the *name* of the village comes from a *Russian* expression "*Thoplica*" for *warm water* that *does not freeze even in winter*). During that period, the first record on the use of mineral especially thermal waters was created, namely a document by J. Wernher from 1549 "About the Wonderful Waters of Hungary". Another register on the use of thermal and mineral springs in Austro-Hungary from 1763 was also preserved. Mulík (1969) adds that the occurrence of mineral springs was proved by Matej Bel with his first map of the territory of Slovakia from 1715. The map captured geographical signs and the occurrence of mineral waters - acidulous mineral waters and also bath signs - *thermae*. The map was published in 1723 in the *Bearer of Old and New Hungary* (*Hungariae antiquae et novae prodromus*) (Matlovičová et al., 2013). Nowadays, spa tourism is generally understood as care provided to patients in the spa and aimed at treating the physical and psychological problems of humans. According to Oriška (1994, p.128), spa tourism is "a type of tourism, that requires the existence of spa facilities, using natural healing resources - healing waters, peloids, gases, emanations and climatic conditions." The use of natural healing resources has curative effects on the human body, stimulates the change in the body reactivity leading to adaptation to changed life situations, such as aging, diseases or stress. Spa tourism also represents health-preventive and therapeutic activities under the medical supervision of specialists (Zálešáková, 2008). Even if curative climate and healing waters are particularly important and required for spas, visitors do not come to spa resorts only for health, relaxation and beautiful nature but also for entertainment and cultural enjoyment. Hensel (1951) consider as a spa a place where the natural healing effects of water, gas, and mud are used for continuous therapy. These places are equipped with appropriate spa, dining and accommodation facilities, as well as medical services. Eliášová (2009) further adds that a healing spa represents more than one medical facility, and natural curative resources are used to provide treatment and prevention. In addition, a spa offers help in regenerating health, mental and physical strengths of a human, health care to stabilize the state of health, as well as a number of activities bringing

entertainment and cultural enrichment. The health insurers' limited spa care expenses place greater emphasis on the creation by spas of wellness products and on the building up of relationships through destination management organisations that enable the integration of resources for marketing activities (Derco, 2014).

The 18th and 19th centuries were a golden age of spas in Europe. In almost every country, tourist resorts grew up around the springs and provided the template for later developments in specialized tourism urban landscapes (Warwick & Laing, 2017). Health tourism may seem like a new form of tourism. However, the opposite is true. Health tourism is one of the oldest forms of tourism. Still, certain forms of health tourism have been changing and evolving, e.g. visiting retreats. Certain forms of health tourism have been (re)discovered in many areas of the world recently. This is the real reason why such health tourism forms seem to be new. They are new to a given market but might be rather traditional in other countries (Bushell, 2017). In most European countries, a spa treatment is usually a supplementary element of other medical procedures (Hungary, Spain, France) and not a primary procedure, as in Poland, Slovakia and Germany (Rogers, 2009). The authors Vystoupil, Šauer & Bobková (2017) compare and assess the position of the spa and wellness sector in the structure of tourism in the Czech Republic. The article deals with the brief history of the Czech spa tourism and the development of spa tourism in the spa resorts. The paper of Vavrečková, Stuchlíková & Dluhošová (2017) focuses on the development of balneal care provision and its current state in the Czech spa industry in connection with the changes in legislation. Special attention is paid to two turning points in the balneal care provision: the turn of 2012 and 2013 and the turn of 2014 and 2015, which were significantly affected by the changing legislation. The main topic of the paper the authors Kasagrandá & Gurňák (2017) is the evaluation of tourism in Slovakia through a geographic analysis. Kulla (2011) focused his paper on the evaluation of trends and perspectives of Spa tourism in Slovakia and on the changes in guests' behaviour. He compared also structure and infrastructure of spa tourism between the era of socialism and present. This paper briefly evaluates the development and the importance of spa, spa tourism and wellness. The scientific articles on mineral waters and spas in various European countries have been published in a scientific journal that has been mono-thematically focused on Clinics in Dermatology. Mineral water and spas in Bulgaria (Vassileva 1996), Greece (Katsambis & Antoniou, 1996), the United States (Benedetto & Millikan, 1996), Germany (Titzmann & Balda, 1996), Italy (Andreassi & Flori, 1996), France (Karam, 1996). Promotion of balneology in Hungary was published in the Hungarian language in the scientific journal *Orvosi Hetilap* (Szállási, 1985). The authors Csapó & Marton (2017) presents and highlights the role and importance of spa and wellness tourism in Hungary. Their study examines the supply and the demand side together with competitor analysis and recent trends in spa and wellness in Hungary. The study of authors Roanghes-Mureanu & Tudoric (2014) focused on the evaluation of both natural and man-made resources favourable to the emergence and development of spa resorts in Romania. The author of the paper Widawski (2017) presents the situation of the spa resorts in Poland from the geographical point of view, emphasizing especially the tourist context of their existence.

Methodology

The collection of information on clients' spa visits, especially the oldest data, was difficult (19th century and 1st and 2nd World War). Much information was available only in the State Archive of the Ministry of the Interior of the Slovak Republic in Hungarian and Latin. Some data over several years were not available at all, and some data were not recorded in writing. There are no institutions in this compact form, including the management of the Bardejov Spa, that have been reported by the clients that we were able to obtain. Then we reviewed the historical development of the Bardejov Spa, which we divided into individual time periods. In them we

have tried to include history, attendance, treatment, indications, reconstruction, construction, social life. Subsequently, based on the chronological progress of the development of Bardejovské Kúpele, we have graphically evaluated the bathing experience by means of the mathematical - statistical method, taking into account the years in the individual stages. Using the Gretl statistical program, we created two regression analyzes. The first regression analysis concerned the years 1814-1898 and includes periods of the first great flowering, the period of stagnation to the period of the second bloom of Bardejov Spa. For the second half of the Bardejov spa bath development period from nationalization and spa development in the years 1960-2015, we created a second regression analysis.

Regression analysis represents a summary of statistical methods and procedures used for study and evaluation of relationships between two (or more) variables. Such a relation of one quantity to the other or the dependence of one quantity on the other is possible to express from the simultaneously observed and measured data. Their aim is primarily to estimate parameters, mean values of the dependent variable or prediction of future values. The variable Y, called the dependent variable or explained, is the variable whose dependence on other variables we investigate. Variable X, called an independent variable or explaining, is the variable anticipated to cause changes and to estimate the values of the dependent variable Y. When observing the relationship between the two variables, there is a simple pair regression whose predicted dependence is expressed by the function $y = f(x)$.

To understand the regression model, firstly, it is necessary to explain the individual values:

- P-value (significance level) - if the p-value is < 0.05 , the H_0 hypothesis is rejected and we accept the hypothesis H_1 which shows that there is a statistically significant linear relationship between the variables. If the p-value is ≥ 0.05 , the H_0 hypothesis cannot be rejected, and it is not between variables, there is no statistically significant relationship existent.
- To determine the accuracy of the model, the coefficient of determination is $0 \leq R^2 \leq 1$. The greater the number is, the more variability of the dependent variable the model elucidates, or shows how much variability the regression model (by considered regression dependence) has been able to explain.

The visit rate for individual years is also evaluated by a line graph, which is a graphical representation of our two variables X and Y. The individual point values are in a graph depicted by red crosses, while a blue line in the graph, called the equalizing regression line, graphically represents an estimate of our model. The line is linear and growing, meaning that with increasing values of the variable Y values of variable X also increase.

Results

Based on the study of historical materials about the Bardejov Spa, including spa treatment, construction of accommodation facilities and especially its visit rate, we have prepared an overview of the historical development that we have divided into individual stages. We have tried to include history, the visit rate, treatment, indications, reconstructions, constructions, and social life which conditioned the increase or decrease in the number of guests. In the phase of study of historical sources, we have summed up all the available information into the individual stages that we have divided into the first period of flowering, the period of stagnation, the second period of flowering, the period of the First and Second World Wars, the development of the Bardejov Spa from nationalization and development in the years 2000 to 2016, separately 2017. For the purpose of calculating the regression analysis using the Gretl statistical program, we have chosen the following historical stages from the above-mentioned.

The first evaluating period, concerning the years 1814 to 1898, includes the period of the first great flowering, the period of stagnation until the period of the second flowering of the Bardejov Spa. For the second half of the periods, and that is the period of spa development from nationalization and development in the years 2000 to 2017, we created a regression analysis, in which we recorded the flow of the visit rate, but in the years 1960-2015.

Hypothesis: It is assumed that the reconstruction of the Bardejov Spa facilities, the construction of the center, the improvement of the services and the spa treatment in the years 1960 to 2015 increased the number of guests of the Bardejov Spa.

The growth of the visit rate in each period was affected by the following development. In the visit rate graph of the Bardejov Spa (see Figure 2), it is possible to identify an increase or decrease in the number of guests who stayed overnight in the spa in periods of the first great flowering from 1814, during the period of stagnation from 1848 to the period of the second flowering of the Bardejov Spa, finishing in 1898.

The number of visitors at the beginning of the first flowering was also growing thanks to Professor Kitaibel, who developed an analysis of curative springs and suggested indications for particular diseases. That brought the rapid spread of awareness of Bardejov curative waters, as can be seen in the number of guests in 1814, when 800 guests visited the Bardejov Spa, and even more in 1815. Not only medical care was offered at that time in the spa but also a variety of cultural and sports activities to make a patients' stay enriching and entertaining. New summer residences were built, hotels and spa became more and more luxurious. As we can see in the chart, the visit rate was rising constantly. Great popularity during the period was influenced also by the visit of Austrian Princess Maria Lujza and later Russian Tsar Alexander I. As there is no record to clarify why the number of guests dropped to 763 in 1824, we can only deduce that this could be caused by the fact that the Bardejov Spa became more luxurious, and consequently less affordable for inhabitants of the surrounding towns, as the treatments and stays in the spa were quite expensive. Still richer cultural and social life and building of the Institute for Cold Water Therapy increased the number of guests in the Bardejov Spa to 1,000 in 1840. From the visit rate graph of the Bardejov Spa (see Figure 2), we can see a decrease in the visit rate because the following years were not very prosperous for the Bardejov Spa. In the data we obtained, the number of visitors in the revolutionary period was not recorded. We only know that the Revolution and the arrival of Russian soldiers affected the Bardejov Spa to a considerable extent. The entire Pánska Street was destroyed, and there was no efficient investment into the spa development. Moreover, as a consequence of improvements in the railway network abroad, many richer visitors preferred treatment beyond our borders. The fire in 1856 destroyed many houses and the number of spa guests was reduced to only 186. However, this situation lasted only shortly, and in the course of three following years, the number of visitors increased, in 1857 to 285 guests, in 1858 to 465 guests and in 1860 to 630 visitors. Spa tourism grew significantly thanks to low service charges, which could be afforded even by less wealthy people, and thanks to new diseases that began to be treated in the spa (Cassens et al., 2012). The number of guests increased to 1900, as evidenced by the year 1871. Since there are no reports for 1876 why the number of guests was so rapidly reduced to 650, we can only conclude that it was caused by stagnation in a renovation of the spa and ownership changes. The following year 1880, the second period of flowering of the Bardejov Spa began. Through Bardejov financial incentives, the construction of a spa colonnade, a wooden pavilion, and many other improvements, that raised a spa reputation, began. Thanks to a wide range of services, the spa could flourish from 4000 guests. As Mulík mentions (1969, p. 141), inconsistent criteria and reports distort the visit rate of that time, so it is not known why the number of visitors in 1890 dropped to 3500. One of the reasons was an increase in stay and procedure charges, which was not affordable to everyone. The turning point for a rise of the

number of guests was the construction of the Deák Spa Hotel, which raised the total capacity of the spa. The construction of the Bardejov - Prešov railway line in 1895 brought an important progress and new guests, whose number reached 3700. The visit of another prominent European ruler, Elisabeth Empress, known as Sissi, and the construction of the Dukla and Astoria hotels also contributed to a good reputation of the spa which can be seen in the number of guests - 4000 in 1898.

The increase in the visit rate in individual years was really affected by reconstructions, constructions, development of treatment and indications, and visits of well-known historical figures. The growth of the visit rate in each period was affected by the following development. In the visit rate graph of the Bardejov Spa, it is possible to identify an increase or decrease in the number of guests who stayed overnight in the spa in periods of the first great flowering from 1814, during the period of stagnation from 1848 to the period of the second flowering of the Bardejov Spa, finishing in 1898. Based on the shape of the regression line (Figure 3), we can conclude that study of the historical sources and the regression analysis calculation has confirmed the dependence, that the found historical facts (construction and reconstruction of buildings, visits of prominent personalities, etc.) influenced the visit rate of the Bardejov Spa in periods of the development of the spa from nationalization and the spa development in the years 2000 to 2015.

The equalizing regression line in the graph shows the estimate of our model. The line is growing, so we can say that with the rising values of the variable (year) the values of the variable (guests, visit rate) increase, too. For the beginning, it is important to note that the number of guests to the spa was affected by two laws. Namely the Act on Nationalization of spas and springs of 1948, when the reconstruction and restoration of damaged buildings for year-round operations started and the Act No. 43 on Spas and springs. The approval of the spa statute for the Bardejov Spa in 1955, significant for continuing construction and development of the spa, was of great importance, as well. The spa grew up in popularity which was a contribution of the reducing of the number of indications resulted in a better therapeutic effect for patients, so in 1960, 7,000 visitors were treated in the spa. Many guests arrived mainly from the western part of Czechoslovakia and in 1964 the number of visitors rose to 8000. Even though the number of guests fell in the following year, it started to rise again thanks to the doctor František Radáč who contributed to the building of a service centre, colonnades, cinemas and balneotherapy with a heath centre and an indoor pool. The construction of the Hotel Minerál and the opening of a spa open-air museum called skanzen conduced to an increase in the number of guests to 7,637 in 1970. Completion of the construction of the Ozón Hotel raised not only the number of visitors (10,200 in 1975) but also accommodation capacity of the Bardejov Spa. Vibrating social life, lively spa tourism, and high- quality health care showed results in the rise of the number of guests, and, in 1980 with the accommodation capacity of 1,100 beds, it reached 13,800 guests (Kireta, 2012).

Since we have not been able to find any data for the years 1990 to 2000, we can only deduce that the visit rate increased, as in the following years, in 2001 there were 21,904 guests, and in 2003 – 27,689 guests arrived at the spa. In the following year 2004, the amendment to the payment of some healthcare fees marked the spa tourism; consequently, the number of guests was reduced to 21,937. In 2007, the number of guests rose to 23,943, but the global economic crisis and the euro adoption brought further decrease in the visit rate, and only 16,267 patients visited the spa in 2009 (Kireta, 2012; General Director of Bardejov Spa, 2018).

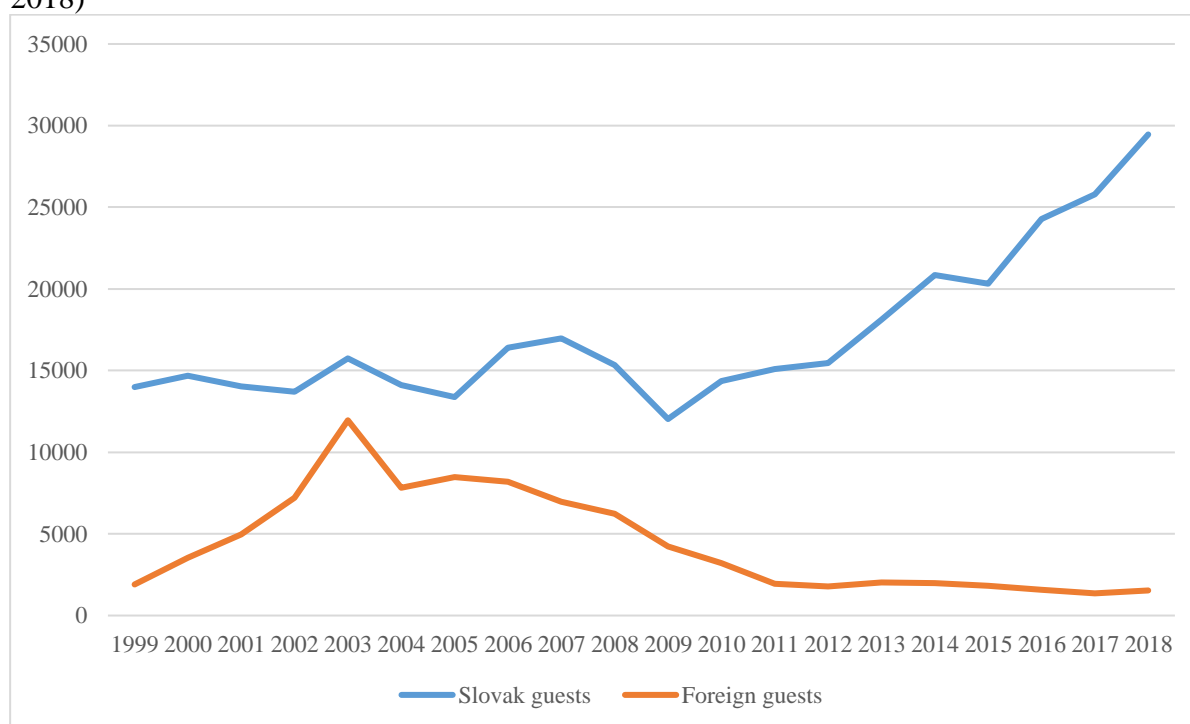
Table 2 The regression analysis of the Bardejov Spa's visit rate for the period from 1960 to 2015

	Coefficient	Standard deviation	P-value
Constant	-554,536	72,802.5	0.0001
Year	286.507	36.8691	0.0001
Determination coefficient	0.742904		

Source: Own processing using Gretl statistical program

Based on the results from the regression model, we can conclude that there was a high growth in the guest rate. As a result, there is a statistically significant linear relationship between these variables (year and visit rate), so we can say that the visit rate in individual years was also influenced by the development (reconstructions, constructions, indications, treatment). The value of the determination coefficient, in this case, is estimated at 0.742904, which is 74%, and represents a high dependency. The remaining 26% of the variability are caused by factors not included in the regression model and other accidental impacts. We have used HAC to correct standard errors, and our hypothesis has been confirmed. At present, the number of guests has an increasing trend, as evidenced by the visit rate for 2016, as well as, current data for 2017. In 2017, there were 27,170 clients. In 2018, Bardejov Spa reached a pick of the visit rate with 31,011 clients.

Figure 1 The visit rate of Slovak and foreign guests in the Bardejov Spa (the years 1999 to 2018)



In 2011, another amendment to the Health Care Act was adopted which caused some decline in the number of patients, as well. This number leveled off thanks to the opening of a new Wellness Centre and Centre for Men's Health, and the introduction of a fibro-elastography examination of the liver. The number of guests increased to 17,268 at the end of 2012. In 2015, the Mineral Hotel was rebuilt into a luxurious congress Hotel Alexander *****, which brought accretion of the accommodation capacity. In the present, the company Bardejovské kúpele a.s. has the accommodation capacity of 1196 beds in 613 rooms, in the main season, available. The

number of employees ranges from 245 (+ 92 outsourcing), that makes it the second largest employer in the Bardejov District.

In 2016, the Bardejov Spa reached a pick of the visit rate with 25,863 clients which was 14.46% higher than in 2015, in 2017 there were 27,170 clients. Year-on-year, the number of overnight stays increased by 9% and reached 251,884. From the year 2003 the number of foreign tourists 11,955 reduced to the number 1,551 (in 2018). With the growth of domestic clientele, the share of the foreign clientele was reduced.

Discussion

In general, health and spa tourism are increasingly becoming an important economic and marketing strategy for hoteliers, resorts and tourist destinations that attract tourist visits. The importance of the Slovak spa tourism is determined by the fact that according the marketing strategy of its development, is considered the third most important form of tourism. The summer tourism, the water stays and winter tourism together with winter sports. Its priority status is also determined by the fact that the medical spa is considered to be the main product line of the Slovak tourism. The response to the mentioned problems was marketing activities strengthening at the level of the individual spa resorts and at the national level. Orientation is focused on the key markets represented by neighbouring countries with relatively good transport, respectively with historical and social linkage with the past (the Czech Republic, Hungary, Poland and Ukraine), as well as on countries that have significant long-term presence within the number of tourists (Germany, Russia, Italy, the United Kingdom) (Stratégia 2013 cit. in Matlovičová et al., 2013).

The average yearly spa treatment is 120,000 inhabitants of Slovakia. In 1996, they were 117,683 and in 2015 it was 119,424. However, while health insurance companies paid 100% of the cost of spa treatment 20 years ago, only 51% last year. In 1996, health insurance revenues amounted to € 1.14 billion, and in 2015 insurance choices amounted to € 4.23 billion. Overall in 2015, the Slovak spa visited 154,000 clients. Those foreign come mostly from Germany, the Czech Republic, Poland or Russia. On the contrary, the interest in the Slovak spa does not have the inhabitants of France, Portugal or Spain. Only about 60% of the bed capacity is used in health care in the Slovak spa. The Association also deals with specific insurance measures. "We have expressed dissatisfaction with the fact that reviewers to approve proposals for spa care make obstructions that we think are beyond the law," said Zálešáková, chairwoman of the Slovak spa association (Zálešáková, 2016).

Since January 1, 2019, VAT on accommodation from the original 20% to 10% has been reduced in Slovakia, also on the basis of the positive experience of other EU Member States, that such a legislative measure will increase the demand for accommodation services in the territory of the Slovak Republic, thus positively supporting further development of tourism in Slovakia (Tlačové správy 2020).

Conclusion

The main objective of the paper was to evaluate the impact of historical events on the visit rate of the Bardejov Spa in various periods of its development (in the years 1814-2016). In the time of the first records of Bardejov acidulous mineral waters stretching back to 1247, nobody anticipated the hidden potential of curative springs and future benefits for the region and all Slovak spa industry. Due to the article extent, we have not been able to do a comprehensive assessment of the state of all Bardejov Spa's development periods. Nevertheless, with the detailed field research, we have summarized all available information into the individual

periods that we have divided into the first period of flowering, the period of stagnation, the second period of flowering, the period of the First and the Second World Wars and the development of the Bardejov Spa from nationalization to the present. In our article, we have captured the historical development briefly, but only in the context of the spa visit rate, for the purpose of calculating the regression analysis. From the above-mentioned historical periods, we have evaluated two following periods. The first period, specified by the years 1814 to 1898, includes the period of the first great flowering, the period of stagnation to the period of the second great flowering of the Bardejov Spa. The second period - the period of development of the spa was defined by the years 1960 to 2015. Based on the regression analysis of the visit rates and the regression line for the given periods, we can conclude that the Bardejov Spa has always had and still has a huge potential in spa tourism, as evidenced by an increasing number of visitors. Although we have to note that some circumstances, such as the fire in 1856, the revolution of 1848 to 1849, stagnation in reconstructions, the First World War and the Second World War, amendments to the law, and often changing lessees, decelerated the progress of the spa. As far as the final evaluation of the individual periods is concerned, each of them has contributed, in a way, to spa tourism and to the development of the entire Bardejov Spa.

The value of the determination coefficient tells us how much variability we have been able to explain in these regression models. The increase in the visit rate in individual years was really affected by reconstructions, constructions, development of treatment and indications, and visits of well-known historical figures. The growth of the visit rate in each period was affected by the following development. In the visit rate graph of the Bardejov Spa, it is possible to identify an increase or decrease in the number of guests who stayed overnight in the spa in periods of the first great flowering from 1814, during the period of stagnation from 1848 to the period of the second flowering of the Bardejov Spa, finishing in 1898. Based on the results from the regression model, we can conclude that there was a high growth in the guest rate. As a result, there is a statistically significant linear relationship between these variables (year and visit rate), so we can say that the visit rate in individual years was also influenced by the development (reconstructions, constructions, indications, treatment). The value of the determination coefficient, in this case, is estimated at 0.742904, which is 74%, and represents a high dependency. The remaining 26% of the variability are caused by factors not included in the regression model and other accidental impacts. We have used HAC to correct standard errors, and our hypothesis has been confirmed.

By evaluating the data obtained over time, we can say that Bardejovské Spa has always had and has a tremendous potential in the sphere of spa tourism, despite the fact that some circumstances like the fire in 1856, the Revolution of 1848-1849, the stagnation in modifications, the first and second world the war and the amendments to the Law on Baths about tenants and others, have greatly marked the progress of these spas and spa tourism. At present, the number of guests has an increasing trend, as evidenced by the visit rate for 2016, as well as, current data for 2017. In 2016, the Bardejov Spa reached a pick of the visit rate with 25,863 clients, in 2017 there were 27,170 clients, 31,011 in 2018. The main clients are Slovaks, about 90%. 5% are clients from Ukraine, Belarus and Russia, and 5% are foreign clients from the Czech Republic, Poland, etc. (Tlačové správy 2020).

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