HEALTH TOURISM IN SLOVAK MEDICAL SPAS

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Abstract

Spa tourism and wellness represent a significant part of the tourism structure in Slovakia, and

its importance is even more pronounced in the global perspective. Thanks to quality services

and a proven therapeutic effect, the Slovak Republic has an important position among

countries of the world in the providing spa services. Slovak spas are part of the public

healthcare system, which causes a high share of domestic tourists on spa tourism. However,

with the increasing opportunities within health tourism and due to the removal of barriers in

this sector, the potential for the development of this sector is growing in Slovakia, especially

in the area of spa care. Therefore, the aim of this article is to identify the potential of spa

tourism among domestic and foreign tourists and to assess the position and the development

of spa tourism in Slovakia and its contribution to the economy of the Slovak Republic.

Key words: spa tourism, health tourism, Slovakia, development

JEL Code: L83, Z38

Introduction

Increasing globalization, easier travel, developing ICT, and many other factors have

contributed to the internationalization of health care. Current patients travel not only for

cosmetic procedures, surgical operations, but also for non-invasive procedures, to improve or

support their health (Ondruš, 2014). In Slovakia, a health or medical stay is one of the most

frequent reason for the arrival of foreign tourists (Vašaničová, 2018). Visitors are increasingly

inclined to acquire a spa experience as a complementary activity to their traditional or

standard leisure activities during their stay. Thus, determining the contribution of spa tourism

to economic development have been becoming important in generating effective management

strategies for sustainable economic growth (Mak, Wong, Chang, 2009).

A large part of the existing literature mapping the health tourism focuses on the spa

area. The authors are trying to find a way, in which spa resources, facilities or people working

in this area may affect the economic development of a country or territory. Michalkó, Bakucz

and Rátz (2013) investigated the relationships between tourism and the quality of life of local

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residents in the spa-town. They found that even though the existence of the spa has significant benefits in the lives of the residents, the development of spa tourism has only limited effects on their quality of life. Bacsi, Kovács and Lőke (2012) tried to identify the key success factors of spa development, the level of tourist satisfaction and spa impacts on the local community. Dryglas and Rozycki (2017) dealt with the profiling of spa tourists in Poland, in order to provide important information to local government entities and managers of spa facilities to better develop and manage a spa resort product that meets the customer needs. Kučerová (2013) investigated how the economic crisis has influenced the attitude of spa management. An interesting finding was that the impact of the economic crisis on spa companies has been less pronounced in comparison with the decreasing performance of other accommodation establishments in Slovakia. This was probably caused by the existing legislation that regulates the operation of spa facilities in Slovakia, the lower impact of seasonality and the possibility to cover spa stays by clients, to whom health care is paid by health insurance. The impact of public health insurance on the occupancy of accommodation establishments and the analysis of financial position of spas in Slovakia provided Derco and Pavlišinová (2017).

1 Spa tourism

According to Mitríková et al. (2017), spa tourism is understood as providing health care (but also preventive health and therapeutic activities) aimed at treating physical and psychological problems of humans, while it is a type of tourism that requires the existence of spa facilities using natural healing resources under the medical supervision by specialists.

Slovakia, as a relatively small country, has a large number of mineral and thermal healing springs, extensive deposits of high-quality healing peat and mud, and also climatic conditions, suitable for the treatment and protection of the respiratory tract, which together inspired the creation of several spa tourism facilities (Drotárová, 2010). According to Čuka and Šenková (2012), spa and wellness tourism are among the most important types of tourism in Slovakia and spa resorts in Slovakia are a popular holiday destination, even though the offer of health tourism products does not exhaust the possibilities of more effective valuation of the overall spa environment. Healthcare management, and thus spa healthcare management, is complex problem in each country, because there are different conditions and also many economics, social and health bonds (Stefko, Gavurova, Korony, 2016). Derco and Pavlisinova (2017) point out that in Slovakia, the uncertainty in the legislation ensuring funding of the spa medical services provided by health insurance, limited spa care costs and the price regulation by health insurance companies oriented to the profit of insurance

companies and not to the needs of the spa, forced the spa facilities to look for the new opportunities for development in new products such as short stays associated with wellness.

At present, there are 30 operators of natural health spas and spa treatment centres in 21 spa resorts in Slovak republic that are grouped under the Slovak Spa Association. According to the use of natural healing resources, spa resorts in Slovakia are divided into climatic and thermal (balneological, springs, mineral) spas (Eliášová, 2007). Visitors can choose not only the type of bath, but also the way of accommodation or food services, the length of stay, relaxation and wellness procedures. Guests can also take part in many cultural activities or participate on trips to the surrounding of the spa area (Vystoupil, Šauer, Bobková, 2017).

2 Data and Methodology

The aim of this article is to identify the potential of spa tourism among domestic and foreign tourists and to assess the position and development of spa tourism in Slovakia and its contribution to the economy of the Slovak Republic.

We use data on tourism statistics and spa tourism statistics available on the website of the Ministry of Transport and construction of the Slovak Republic (performances of accommodation establishments of (spa) tourism in the Slovak Republic in 2005-2017). Specifically, it was number and structure of visitors (number of visitors divided into domestic and foreign visitors), number and average number of nights spent and receipts from accommodation services to visitors.

We conducted statistical analysis of (spa) tourism using correlation analysis, as well as using the methods required in processing time series (absolute increase Δy_t , relative increase δ_t and growth rate k_t). To verify the existence and strength of a statistically significant relationship between spa tourism and tourism in Slovakia (with different variables) we used Spearman's correlation coefficient, calculated according to formula (1),

$$r_{s} = 1 - \frac{6\sum_{i=1}^{n} d^{2}}{n(n^{2} - 1)},$$
(1)

where d is the difference between ranks for the paired observations and n is the number of paired observations. The significance of rank correlation is tested using test statistics in the form of (2)

$$t = \frac{r_s}{\sqrt{(1 - r_s^2)/(n - 2)}}.$$
 (2)

3 Results

Tables 1-4 show the development of selected indicators of performances of accommodation establishments of (spa) tourism and the share of spa tourism in tourism in Slovakia. The obtained data are supplemented by a graphical representation of the different development of individual indicators for tourism and spa tourism, which is shown in Fig. 1

Tab. 1: Trends in the number of visitors and spa visitors and the share of spa tourism in the total traffic of accommodation establishments

Year	V	Δy_t	δ_t	k_t	SV	Δy_t	δ_t	k_t	SV/V %
2005	3 428 083				228 822				6.67
2006	3 583 879	155 796	4.54	104.54	253 260	24 438	10.68	110.68	7.07
2007	3 777 754	193 875	5.41	105.41	276 164	22 904	9.04	109.04	7.31
2008	4 082 645	304 891	8.07	108.07	284 806	8 642	3.13	103.13	6.98
2009	3 381 354	-701 291	-17.18	82.82	241 309	-43 497	-15.27	84.73	7.14
2010	3 392 361	11 007	0.33	100.33	259 506	18 197	7.54	107.54	7.65
2011	3 571 093	178 732	5.27	105.27	261 515	2 009	0.77	100.77	7.32
2012	3 774 062	202 969	5.68	105.68	256 380	-5 135	-1.96	98.04	6.79
2013	4 048 505	274 443	7.27	107.27	278 429	22 049	8.60	108.60	6.88
2014	3 727 710	-320 795	-7.92	92.08	299 032	20 603	7.40	107.40	8.02
2015	4 330 249	602 539	16.16	116.16	304 975	5 943	1.99	101.99	7.04
2016	5 023 629	693 380	16.01	116.01	316 046	11 071	3.63	103.63	6.29
2017	5 375 475	351 846	7.00	107.00	311 138	-4 908	-1.55	98.45	5.79
Year	\mathbf{DV}	Δy_t	δ_t	k_t	DSV	Δy_t	δ_t	k_t	DSV/DV %
				-				-	/0
2005	1 913 103			-	139 877				7.31
2005 2006	1 913 103 1 972 071	58 968	3.08	103.08	139 877 159 339	19 462	13.91	113.91	
-		58 968 121 157		103.08 106.14			13.91 12.27		7.31
2006	1 972 071		3.08		159 339	19 462		113.91	7.31 8.08
2006 2007	1 972 071 2 093 228	121 157	3.08 6.14	106.14	159 339 178 895	19 462 19 556	12.27	113.91 112.27	7.31 8.08 8.55
2006 2007 2008	1 972 071 2 093 228 2 316 116	121 157 222 888	3.08 6.14 10.65	106.14 110.65	159 339 178 895 192 051	19 462 19 556 13 156	12.27 7.35	113.91 112.27 107.35	7.31 8.08 8.55 8.29
2006 2007 2008 2009	1 972 071 2 093 228 2 316 116 2 083 279	121 157 222 888 -232 837	3.08 6.14 10.65 -10.05	106.14 110.65 89.95	159 339 178 895 192 051 180 983	19 462 19 556 13 156 -11 068	12.27 7.35 -5.76	113.91 112.27 107.35 94.24	7.31 8.08 8.55 8.29 8.69
2006 2007 2008 2009 2010	1 972 071 2 093 228 2 316 116 2 083 279 2 065 722	121 157 222 888 -232 837 -17 557	3.08 6.14 10.65 -10.05 -0.84	106.14 110.65 89.95 99.16	159 339 178 895 192 051 180 983 194 705	19 462 19 556 13 156 -11 068 13 722	12.27 7.35 -5.76 7.58	113.91 112.27 107.35 94.24 107.58	7.31 8.08 8.55 8.29 8.69 9.43
2006 2007 2008 2009 2010 2011	1 972 071 2 093 228 2 316 116 2 083 279 2 065 722 2 110 732	121 157 222 888 -232 837 -17 557 45 010	3.08 6.14 10.65 -10.05 -0.84 2.18	106.14 110.65 89.95 99.16 102.18	159 339 178 895 192 051 180 983 194 705 196 085	19 462 19 556 13 156 -11 068 13 722 1 380	12.27 7.35 -5.76 7.58 0.71	113.91 112.27 107.35 94.24 107.58 100.71	7.31 8.08 8.55 8.29 8.69 9.43 9.29
2006 2007 2008 2009 2010 2011 2012	1 972 071 2 093 228 2 316 116 2 083 279 2 065 722 2 110 732 2 246 562	121 157 222 888 -232 837 -17 557 45 010 135 830	3.08 6.14 10.65 -10.05 -0.84 2.18 6.44	106.14 110.65 89.95 99.16 102.18 106.44	159 339 178 895 192 051 180 983 194 705 196 085 194 500	19 462 19 556 13 156 -11 068 13 722 1 380 -1 585	12.27 7.35 -5.76 7.58 0.71 -0.81	113.91 112.27 107.35 94.24 107.58 100.71 99.19	7.31 8.08 8.55 8.29 8.69 9.43 9.29 8.66
2006 2007 2008 2009 2010 2011 2012 2013	1 972 071 2 093 228 2 316 116 2 083 279 2 065 722 2 110 732 2 246 562 2 378 557	121 157 222 888 -232 837 -17 557 45 010 135 830 131 995	3.08 6.14 10.65 -10.05 -0.84 2.18 6.44 5.88	106.14 110.65 89.95 99.16 102.18 106.44 105.88	159 339 178 895 192 051 180 983 194 705 196 085 194 500 210 311	19 462 19 556 13 156 -11 068 13 722 1 380 -1 585 15 811	12.27 7.35 -5.76 7.58 0.71 -0.81 8.13	113.91 112.27 107.35 94.24 107.58 100.71 99.19 108.13	7.31 8.08 8.55 8.29 8.69 9.43 9.29 8.66 8.84
2006 2007 2008 2009 2010 2011 2012 2013 2014	1 972 071 2 093 228 2 316 116 2 083 279 2 065 722 2 110 732 2 246 562 2 378 557 2 252 693	121 157 222 888 -232 837 -17 557 45 010 135 830 131 995 -125 864	3.08 6.14 10.65 -10.05 -0.84 2.18 6.44 5.88 -5.29	106.14 110.65 89.95 99.16 102.18 106.44 105.88 94.71	159 339 178 895 192 051 180 983 194 705 196 085 194 500 210 311 230 343	19 462 19 556 13 156 -11 068 13 722 1 380 -1 585 15 811 20 032	12.27 7.35 -5.76 7.58 0.71 -0.81 8.13 9.52	113.91 112.27 107.35 94.24 107.58 100.71 99.19 108.13 109.52	7.31 8.08 8.55 8.29 8.69 9.43 9.29 8.66 8.84 10.23

Source: own processing in Statistica

Note: V – visitors, SV – spa visitors, DV – domestic visitors, DSV – domestic spa visitors, FV – foreign visitors, FSV – foreign spa visitors, SV/V share of spa tourism in the total traffic of accommodation establishments

Tab. 2: Trends in the number of foreign visitors and foreign spa visitors

Year	FV	FV/V	Δy_t	δ_t	k_t	FSV	FSV/SV	Δy_t	δ_t	k_t	FSV/FV
		70					/0				70

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2005	1 514 980	44.19				88 945	38.87				5.87
2006	1 611 808	44.97	96 828	6.39	106.39	93 921	37.08	4 976	5.59	105.59	5.83
2007	1 684 526	44.59	72 718	4.51	104.51	97 269	35.22	3 348	3.56	103.56	5.77
2008	1 766 529	43.27	82 003	4.87	104.87	92 755	32.57	-4 514	-4.64	95.36	5.25
2009	1 298 075	38.39	-468 454	-26.52	73.48	60 326	25.00	-32 429	-34.96	65.04	4.65
2010	1 326 639	39.11	28 564	2.20	102.20	64 801	24.97	4 475	7.42	107.42	4.88
2011	1 460 361	40.89	133 722	10.08	110.08	65 430	25.02	629	0.97	100.97	4.48
2012	1 527 500	40.47	67 139	4.60	104.60	61 880	24.14	-3 550	-5.43	94.57	4.05
2013	1 669 948	41.25	142 448	9.33	109.33	68 118	24.47	6 238	10.08	110.08	4.08
2014	1 475 017	39.57	-194 931	-11.67	88.33	68 689	22.97	571	0.84	100.84	4.66
2015	1 721 193	39.75	246 176	16.69	116.69	63 271	20.75	-5 418	-7.89	92.11	3.68
2016	2 027 009	40.35	305 816	17.77	117.77	65 290	20.66	2 019	3.19	103.19	3.22
2017	2 162 384	40.23	135 375	6.68	106.68	62 876	20.21	-2 414	-3.70	96.30	2.91

In the case of the total number of visitors and the number of domestic visitors, we see a similar pattern of development as with the same indicators of spa tourism. Over the reporting period, there was a significant decline, especially in 2009, as a result of the global financial crisis, but this decline was less pronounced in the spa area. On the other hand, the faster growth of indicators shows overall tourism. The development of the number of foreign spa visitors is significantly different compared to other indicators of attendance.

Tab. 3: Trends in the number and average number of nights spent of visitors and spa visitors and the share of spa tourism in the total number of overnight stays of visitors

Year	NNS V	ANNS V	Δy_t	δ_t	k_t	NNS SV	ANNS SV	Δy_t	δ_t	k_t	S SV%
2005	10 732 754	3.13				2 151 105	9.40				20.04
2006	11 137 565	3.11	-0.02	-0.74	99.26	2 277 187	8.99	-0.41	-4.35	95.65	20.45
2007	11 566 632	3.06	-0.05	-1.48	98.52	2 453 285	8.88	-0.11	-1.20	98.80	21.21
2008	12 464 104	3.05	-0.01	-0.29	99.71	2 606 848	9.15	0.27	3.04	103.04	20.91
2009	10 391 069	3.07	0.02	0.66	100.66	2 391 089	9.91	0.76	8.26	108.26	23.01
2010	10 367 330	3.06	-0.02	-0.55	99.45	2 490 040	9.60	-0.31	-3.16	96.84	24.02
2011	10 525 385	2.95	-0.11	-3.56	96.44	2 412 111	9.22	-0.37	-3.87	96.13	22.92
2012	10 908 200	2.89	-0.06	-1.94	98.06	2 381 599	9.29	0.07	0.71	100.71	21.83
2013	11 486 571	2.84	-0.05	-1.84	98.16	2 547 512	9.15	-0.14	-1.50	98.50	22.18
2014	10 900 434	2.92	0.09	3.06	103.06	2 617 209	8.75	-0.40	-4.34	95.66	24.01
2015	12 350 080	2.85	-0.07	-2.47	97.53	2 612 785	8.57	-0.19	-2.11	97.89	21.16
2016	14 138 420	2.81	-0.04	-1.32	98.68	2 741 550	8.67	0.11	1.25	101.25	19.39
2017	14 936 766	2.78	-0.04	-1.27	98.73	2 733 651	8.79	0.11	1.28	101.28	18.30
Year	NNS DV	ANNS DV	Δy_t	δ_t	k_t	NNS DSV	ANNS DSV	Δy_t	δ_t	k_t	S DSV %
2005	5 860 712	3.06				1 309 163	9.36				22.34
2006	6 004 032	3.04	-0.02	-0.62	99.38	1 423 916	8.94	-0.42	-4.52	95.48	23.72
2007	6 367 936	3.04	0.00	-0.08	99.92	1 600 110	8.94	0.01	0.09	100.09	25.13

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2008	7 202 628	3.11	0.07	2.22	102.22	1 815 615	9.45	0.51	5.70	105.70	25.21
2009	6 621 933	3.18	0.07	2.21	102.21	1 841 261	10.17	0.72	7.61	107.61	27.81
2010	6 560 721	3.18	0.00	-0.08	99.92	1 934 976	9.94	-0.24	-2.32	97.68	29.49
2011	6 486 103	3.07	-0.10	-3.25	96.75	1 890 640	9.64	-0.30	-2.98	97.02	29.15
2012	6 806 999	3.03	-0.04	-1.40	98.60	1 858 320	9.55	-0.09	-0.91	99.09	27.30
2013	7 146 562	3.00	-0.03	-0.84	99.16	1 978 344	9.41	-0.15	-1.54	98.46	27.68
2014	6 995 966	3.11	0.10	3.36	103.36	2 067 578	8.98	-0.43	-4.58	95.42	29.55
2015	7 893 672	3.03	-0.08	-2.58	97.42	2 107 912	8.72	-0.26	-2.84	97.16	26.70
2016	8 993 087	3.00	-0.02	-0.81	99.19	2 252 012	8.98	0.26	2.98	102.98	25.04
2017	9 507 435	2.96	-0.04	-1.40	98.60	2 251 339	9.07	0.09	0.97	100.97	23.68
Year	NNS FV	ANNS FV	Δy_t	δ_t	k_t	NNS FSV	ANNS FSV	Δy_t	δ_t	k_t	S FSV %
2005	4 872 042	3.22				841 942	9.47				17.28
2006	5 133 533	3.18	-0.03	-0.96	99.04	853 271	9.08	-0.38	-4.02	95.98	16.62
2007	5 198 696	3.09	-0.10	-3.10	96.90	853 175	8.77	-0.31	-3.45	96.55	16.41
2008	5 261 476	2.98	-0.11	-3.49	96.51	791 233	8.53	-0.24	-2.75	97.25	15.04
2009	3 769 136	2.90	-0.07	-2.51	97.49	549 828	9.11	0.58	6.85	106.85	14.59
2010	3 806 609	2.87	-0.03	-1.18	98.82	555 064	8.57	-0.55	-6.02	93.98	14.58
2011	4 039 282	2.77	-0.10	-3.60	96.40	521 471	7.97	-0.60	-6.96	93.04	12.91
2012	4 101 201	2.68	-0.08	-2.93	97.07	523 279	8.46	0.49	6.10	106.10	12.76
2013	4 340 009	2.60	-0.09	-3.20	96.80	569 168	8.36	-0.10	-1.19	98.81	13.11
2014	3 904 468	2.65	0.05	1.85	101.85	549 631	8.00	-0.35	-4.24	95.76	14.08
2015	4 456 408	2.59	-0.06	-2.19	97.81	504 873	7.98	-0.02	-0.28	99.72	11.33
2016	5 145 333	2.54	-0.05	-1.96	98.04	489 538	7.50	-0.48	-6.04	93.96	9.51
2017	5 429 331	2.51	-0.03	-1.09	98.91	482 312	7.67	0.17	2.31	102.31	8.88
C		C4									

Note: NNS – number of nights spent, ANNS – average number of nights spent, SV – spa visitors, DSV – domestic visitors, DSV – domestic spa visitors, SV/V share of spa tourism in the total traffic of accommodation establishments

The description of development of the number of nights spents is similar to the traffic development. In this case, however, from the point of view of the attractiveness of spa tourism, is an interesting indicator the average length of stay of spa visitors, which e.g. in times of crisis, rose slightly. The lower values of this indicator at high attendance signal the high attractiveness of spa tourism, the higher values mean that spas have mainly focused on the spa treatment, and less on offer of tourist attractions.

Tab. 4: Trends in the receipts (R) from accommodation services to spa visitors and share of spa tourism in total sales.

Year	R SV	δ_t	k _t	S SV %	R DSV	δ_t	k _t	S DSV %	R FSV	δ_t	k _t	S FSV %
2005	34 689 006			16.5	13 941 014			18.3	20 747 992			15.6
2006	38 557 326	11.15	111.15	16.6	18 561 044	33.14	133.14	21.2	19 996 282	-3.62	96.38	13.9

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2007	44 593 076	15.65	115.65	17.6	22 379 307	20.57	120.57	22.2	22 213 769	11.09	111.09	14.5
2008	47 046 538	5.50	105.50	16.7	27 060 678	20.92	120.92	22.1	19 985 859	-10.03	89.97	12.6
2009	43 908 192	-6.67	93.33	19.0	30 117 315	11.30	111.30	25.6	13 790 877	-31.00	69.00	12.2
2010	51 576 533	17.46	117.46	21.9	34 805 416	15.57	115.57	28.7	16 771 117	21.61	121.61	14.6
2011	50 321 486	-2.43	97.57	19.8	35 556 696	2.16	102.16	27.7	14 764 790	-11.96	88.04	11.7
2012	54 769 857	8.84	108.84	20.4	40 022 198	12.56	112.56	28.8	14 747 659	-0.12	99.88	11.4
2013	57 138 844	4.33	104.33	21.3	40 766 798	1.86	101.86	29.3	16 372 046	11.01	111.01	12.6
2014	57 857 817	1.85	101.85	21.6	41 165 565	0.98	100.98	28.1	16 692 252	1.96	101.96	13.8
2015	53 808 892	-2.19	97.81	17.4	38 394 527	-6.73	93.27	22.9	15 414 365	-7.66	92.34	10.8
2016	61 280 137	-1.96	98.04	16.5	45 431 728	18.33	118.33	22.9	15 848 409	2.82	102.82	9.2
2017	61 953 120	-1.09	98.91	15.6	45 133 232	-0.66	99.34	21.5	16 819 888	6.13	106.13	9.0

The share of foreign spa visitors in the total number of foreign visitors is currently approx. 3% (this indicator has a decreasing tendency, see Table 4), in the total number of visitors is this share only a little over 1% (not in the table). But as we can see, the share of spa tourism foreign visitors' in the total tourism receipts is up to 9%.

Fig. 1: Development of indicators of performances of accommodation establishments of tourism and spa tourism

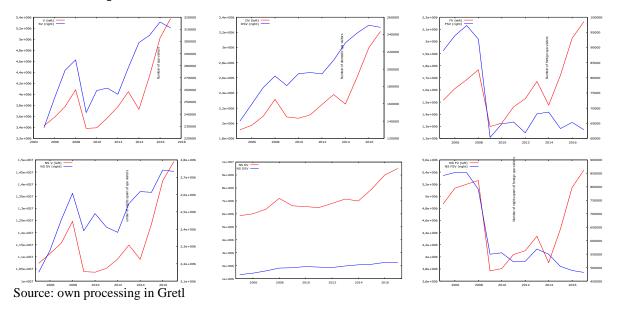


Table 5 presents the results of the calculated correlation coefficients that show, how selected performance indicators of accommodation establishments of spa tourism influence indicators of total tourism in Slovakia. We calculated the relationships between the number of visitors, the number of nights spent of visitors and the receipts from accommodation services to spa visitors (each of the total indicators was divided into the number of domestic visitors and the number of foreign visitors)

Tab. 5: Spearman rank correlation between indicators of performances of accommodation establishments of (spa) tourism

	V	DV	FV	FV/V	SV	DSV	FSV	FSV /SV	NS V	NS DV	NS FV	NS SV	NS DSV	NS FSV	R SV	R DSV	R FSV
V	1.00	0.88	0.95	0.13	0.86	0.64	0.01	-0.60	0.73	0.58	-0.45	0.96	0.79	0.74	0.65	0.57	0.10
DV		1.00	0.72	-0.26	0.91	0.87	-0.31	-0.83	0.86	0.82	-0.72	0.76	0.95	0.39	0.85	0.82	-0.28
FV			1.00	0.32	0.72	0.42	0.16	-0.38	0.58	0.36	-0.25	0.99	0.64	0.90	0.43	0.34	0.32
FV/V				1.00	-0.23	-0.53	0.78	0.65	-0.42	-0.62	0.63	0.27	-0.45	0.59	-0.45	-0.52	0.63
SV					1.00	0.86	-0.07	-0.75	0.96	0.82	-0.62	0.75	0.85	0.44	0.80	0.75	-0.04
DSV						1.00	-0.45	-0.93	0.87	0.99	-0.86	0.45	0.85	0.05	0.92	0.93	-0.42
FSV							1.00	0.64	-0.16	-0.52	0.73	0.14	-0.45	0.42	-0.42	-0.51	0.79
FSV/SV								1.00	-0.79	-0.95	0.87	-0.42	-0.86	0.01	-0.93	-0.94	0.49
NS V									1.00	0.86	-0.62	0.62	0.87	0.29	0.81	0.77	-0.09
NS DV										1.00	-0.85	0.39	0.83	-0.02	0.92	0.93	-0.45
NS FV											1.00	-0.28	-0.73	0.05	-0.76	-0.82	0.63
NS SV												1.00	0.68	0.86	0.47	0.38	0.25
NS DSV													1.00	0.29	0.82	0.80	-0.34
NS FSV														1.00	0.09	-0.03	0.62
R SV															1.00	0.97	-0.33
R DSV																1.00	-0.49
R FSV																	1.00

Note: Marked correlations are significant at p < 0.05.

We can see that there exist strong relationships between several variables. At the same time, results of analysis show several points of interest, e.g. there is no statistically significant relationship between number of foreign visitors and number of spa visitors (or domestic/foreign). This was also expected on the basis of Figure 1, in which we see completely different trends in the number of foreign spa visitors, which has a rather stagnating tendency compared to the increasing number of visitors to Slovakia. Also interesting is the high negative correlation between the number of nights spent of foreign tourists and the number of domestic visitors, domestic (spa) visitors, or the number of nights spent of (domestic) spa visitors. This can be caused by that an increasing number of domestic visitors, who prefer longer stays in their home country (e.g. few weeks in spa because of the rules of health insurance), reduce the capacity of accommodation establishments and opportunities for spa stay for foreign tourists, who prefer shorter holidays (a few days). For a similar reason, the higher share of foreign spa visitors to spa visitors shows a strong negative correlation with the receipts from accommodation services to spa visitors. Spa stay (treatment) is largely covered by health insurance (that is, subsidized by the state) of domestic visitors.

Conclusion

The use of natural healing factors (sea, land and atmosphere) has led to the development of healing medicine through three methods of natural healing: climatotherapy, thalassotherapy and balneotherapy. Due to the several factors (e. g. development of pharmaceutical industry) the natural healing factors are less used in medicine but their value is ever more recognized by tourism, especially health tourism (Vrkljan and Grazio, 2017). It is, in Slovakia, offered primarily through spa tourism. Aim of our article was therefore identifying the potential of spa tourism and assessing its contribution to the economy of the Slovak Republic. The research results confirmed the importance of spa tourism in Slovakia and pointed to the high potential of development of this type of tourism. Spa tourism is mostly made by domestic tourists, but the contribution of foreign visitors is significant. The major focus of spa strategic management should, therefore, be on the support of a wellness program that is favoured by various visitors and also increases the attractiveness of traditional spas.

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