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SATISFACTION OF USERS OF SERVICES IN SPA SPAS IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

ZADOVOLJSTVO KORISNIKA USLUGA U BANJSKIM LJEČILIŠTIMA U FEDERACIJI BOSNE I HERCEGOVINE

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ABSTRACT

It can be stated that quality is an integral part of our daily life. All people constantly insist on quality in certain areas of life, which indicates that quality can be found in all segments in which a person work. The main objective of this study is to examine the satisfaction of clients/users with the services of spa centers. The basic research methods used are: synthesis, analysis, induction and deduction, comparative and statistical methods. The collection of primary data was carried out through an online survey, which contains a standardized scale (SERVQUAL). The correlation analysis confirms the general objective, so it can be concluded that the Pearson coefficient is -0.158, from which it follows that there is a very weak negative correlation between these two variables. It is concluded that sociodemographic factors do not at all influence the attitude of respondents about the quality of service of spa resorts. But, Pearson coefficient indicates a high degree of correlation between respondents' satisfaction with the quality of service in spa resorts and other factors. There is a very high degree of correlation between respondents' satisfaction with service quality and other factors - 81%, which have an impact on the respondents' satisfaction with the quality of service in the spa: the first contact in the spa, the reason for coming to the spa, the distance from home to the spa, travel time and the manner the therapy is introduced.

Key words: Quality, safety of services, spa resorts, Bosnia and Herzegovina.

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SAŽETAK

Može se konstatovati da je kvalitet sastavni dio našeg svakodnevnog života. Svi ljudi neprestano insistiraju na kvalitetu u određenim oblastima života, što ukazuje na to da se kvalitet može pronaći u svim segmentima u kojima čovjek djeluje. Glavni cilj ovog istraživanja je ispitati zadovoljstvo klijenata/korisnika uslugama banjskih centara. Osnovne korištene istraživačke metode su: sinteza, analiza, indukcija i dedukcija, komparativna i statistička metoda. Prikupljanje primarnih podataka realizovano je putem online ankete, koja sadrži standardiziranu skalu (SERVQUAL). Korelaciona analiza potvrđuje opći cilj istraživanja, pa se može zaključiti da je Pearsonov koeficijent -0.158, iz čega proizlazi da postoji vrlo slaba negativna korelacija između ove dvije varijable. Zaključeno je da sociodemografski faktori uopće ne utiču na stav ispitanika o kvaliteti usluga u banjskim lječilištima. Međutim, Pearsonov koeficijent ukazuje na visok stepen korelacije između zadovoljstva ispitanika kvalitetom usluga u banjskim centrima i drugih faktora. Postoji vrlo visok stepen povezanosti između zadovoljstva ispitanika kvalitetom usluge i faktora kao što su: prvi kontakt u banji, razlog dolaska u banju, udaljenost od kuće do banje, vrijeme putovanja i način na koji se terapija predstavlja.

Ključne riječi: kvalitet, sigurnost usluga, banjska lječilišta, Bosna i Hercegovina.

INTRODUCTION

Quality is an integral part of our daily life. All people constantly insist on quality in certain areas of life, which indicates that quality can be recorded in all segments in which a person act. Quality means those properties of the product that meet the needs of customers and thereby ensure customer satisfaction (Hranilović, 2020).

In this sense, the meaning of quality is focused on income. The purpose of such higher quality is to enable greater customer satisfaction and increase revenue. However, providing more determinants of better quality usually requires investment and therefore usually involves increased costs. Higher quality in this sense usually "costs more". The "Quality" means the absence of defects - the absence of defects that require rework or that result in errors. in the field, customer dissatisfaction, customer demands and so on. In this sense, the meaning of quality is focused on costs, and higher quality usually "costs less" (Badr Eldin, 2011).

Therefore, it is quite logical that there is a certain disproportion between quality and costs, or that these two quantities are inversely proportional (Hrustemović et al., 2019). There are five basic approaches to defining quality: transcendent approach; product-based approach; production-based approach; value-based approach; and user-based approach. These approaches have been adapted, defined and extended throughout the literature to define quality (Elshaer, 2012).

Given that quality is an item that, in fact, represents a category that is of a scientific nature, it is quite logical that quality can be measured in some way. In the past, several different methods, scales, or measuring instruments have been developed with which it is possible to investigate how quality is measured (Huseinspahić, 2011). It can be said that the ways of

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measuring quality differ according to what quality is measured, because the way of measuring quality (as well as the experience of quality) is not the same in different areas of human activity.

The past decade was marked by the fourth industrial revolution, in which we note the special development of artificial intelligence and robotics, as well as the continuation of the digitization of certain industries. Such a combination of events resulted in the disruption of most traditional industries, where individual start-up companies seriously shook the operations of numerous large global corporations. The struggle for quality is the reality of these times and a guarantee of survival in every industry (Buntak et al., 2021).

The word "service" comes from the Latin word "servitium" which means slavery, the state of a slave, servitude (Kadrić et al., 2022).

Service concept definitions are of value to service managers in understanding what a service concept should be used, but many do not go far enough in helping practitioners with the difficult task of actually defining their individual service concept. In reviewing existing service concept definitions, a number of different definitions emerged. The concept of value is at the heart of many definitions of the service concept, and the service concept is seen by many as a means for the service provider to identify the value delivered to customers and the value customers expect from the organization (Fynes and Lally, 2008).

The concept of service quality is one of the most researched areas of marketing worldwide, which is why thirty years ago there was a need to develop a series of measurement models the quality of the service provided (Čolan, 2019).

Service quality in the health sector is a measure of the degree of discrepancy between the perception and expectations of consumers, and dissatisfaction occurs when consumer expectations are higher than the actual performance of organizations that provide services, and the perceived quality of service is less than a satisfactory level. In other words, service quality can be defined as a function of expectations, outcomes and image. Quality is a relative term, in the service industry, such as healthcare, the patient's experience plays a key role in evaluating and assessing the quality of primary healthcare services (Fazlović et al., 2015).

Hydrogeology and a part of terrestrial hydrology are sciences that, in addition to other research, also deal with the research of thermomineral waters. Any use of tremomineral waters for any purpose, health, preventive, recreational, during the stay is recorded as tourist traffic. In Bosnia and Herzegovina, most of the hot springs are connected to spas that are suitable for bathing, the temperature of which is identical to the human body. There are a lot of them in Bosnia and Herzegovina and we are even counted among the richest countries in terms of thermal and mineral waters. The most important resource for the development of health and wellness tourism in Bosnia and Herzegovina is thermal mineral waters. Fortunately, Bosnia and Herzegovina is a country that is quite rich in water resources, including these waters. Certain places where the springs of thermal mineral waters are located have today become spas that are centers of excursion, cultural and sports tourism, most often they are places where excursions, visits of pensioners and transit tourism are organized (Dizdarević, 2021). Spa is a form of therapeutic therapy. In spas that offers treatments, spa facilities, specialist care and health education. This form of treatment is recommended for patients who need continued treatment for further health improvement or rehabilitation. The

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spa is a supplementary treatment intended for people who should continue the treatment that was previously carried out in a hospital or outpatient clinic. As part of the spa treatment, therapeutic procedures prescribed for the patient are carried out. In addition, during the stay the patient enjoys the natural qualities of the area where the center is located, rests and uses natural methods of strengthening the body (Maccarone et al., 2023).
The main aim of the research is to examine the satisfaction of clients/users with the services of spa centers.

MATERIAL AND METHODS

Participants

Primary data were obtained on the basis of empirical research on a relevant sample, 100 clients of spa centers Olovo and Reumal Fojnica.

Measuring instrument

The collection of primary data was carried out through an online survey, which contains a standardized scale (SERVQUAL measuring instrument - survey questionnaire founded by the authors: Parasuraman, Zeithaml and Berry - 1991).

Statistical Analysis

The results are presented in a tabular form using the number of cases, percentages, mean with standard deviation and range, while regression analysis and Pearson's correlation coefficient were used to examine the impact of socioeconomic and other factors on satisfaction with provided services. The analysis was performed using the statistical package for sociological research, IBM Statistics SPSS v23.0.

RESULTS

It is very difficult to define the general population, or all persons who have used the services of spa centers in Bosnia and Herzegovina, given that there are no official data on this.
Given that total population is unknown, the sample includes 100 persons who provide their opinion about visiting one of the spa centers.

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Table 1. Overview of sociodemographic characteristics of respondents

		AM±SD	Minimum	Maximum
Age		45.46±14.37	25	84
Number of family members		3.00±1.39	1	7
Average monthly family income in KM		2276.9±1808.9	200	10000
			N	%
Gender	Male		57	57.0
	Female		43	43.0
Place of residence	Urban		54	54.0
	Rural		46	46.0
Health insurance	Insured		99	99.0
	Not insured		1	1.0
Level of education	Elementary school		4	4.0
	Secondary school		47	47.0
	I cycle of studies		26	26.0
	II cycle of studies		19	19.0
	III cycle of studies		4	4.0

The oldest user of spa services in the sample was 84, and the youngest 25 years old. The mean value is 45.46years, from which it can be seen that the average user of spa services in the sample was 45 years old. Out of the total number of respondents, the sample includes 57% male respondents, while 43% are female. Of the total number of respondents, 54% are respondents who are users of the services of a spa center who live in urban, while 46% are those who lives in rural areas.

As can be seen from the previous table, there are the fewest users of spa services in the sample who have only one family member, while the most are those who have 7 family members. It can be concluded that the average user of spa services has 3 family members.

Out of the total number of respondents, 99% have health insurance, while only one respondent does not have health insurance.

In this part of the exploration of the average monthly income of the family of the respondents, some very devastating data were recorded. Namely, based on the data in the sample, it is found that the family with the lowest income is the one that has 200 KM per month, which is insufficient for basic life needs. On the other hand, it is evident that there is also a family in the sample with a maximum income of 10,000 KM. In the end, it is concluded that the average user of the services of spa center has a monthly income of its household in the amount of 2276.9 KM.

Based on the data recorded in the sample, it can be concluded that there were no respondents in the "without formal education" category. There were 4% of those who completed primary school, and the highest number were those with secondary school, 47%.

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Table 2. Analysis of multiple regression analysis - The influence of sociodemographic factors on the respondents' general satisfaction with the quality of services in the spa

	Satisfaction with quality of services			
	B	SD	t	p
Age	-.003	.002	-1.260	.211
Gender	-.005	.061	.083	.934
Place of residence	.013	.060	.211	.833
Health insurance	-.996	.302	-3.297	.001
Education levels	-.048	.031	-1.534	.128

The only influence that was recorded in this sample is the influence of the place of residence, which as such is insufficient to consider that sociodemographic factors determine the respondents' attitude about the quality of service in the spa.

Table 3. Analysis of multiple regression analysis - The influence of other factors on the respondents' general satisfaction with the quality of services in the spa

	Satisfaction with quality of services			
	B	SD	t	p
The reason for coming to the spa	.036	.039	.911	.364
The distance of the spa treatment center from the house	.001	.001	.396	.693
The time required to arrive at the spa	.022	.043	.506	.614
The first contact in the center	.088	.064	1.387	.169
How long did you wait for the first service?	-.011	.005	-2.150	.034
The cost of the treatment compared to what was done for you is	-.037	.048	-.767	.445
My therapy is started	.013	.048	.265	.791

Based on the regression model, it can be seen that there are five factors that have an influence on the attitude of respondents about the quality of service in spa center. These are: the first contact at the spa, the reason for coming to the spa, the distance from home to the spa, the time it takes to get from home to the spa and the manner the therapy is introduced. There are two factors that have no influence on the attitude of the respondents about the quality of the service of the spa, the waiting time for the first service and the price of the treatment in the spa.

Table 4. Correlation analysis

	General user satisfaction with service quality	
	rho	p
Sociodemographic factors	-0.158	0.054
Other Factors	0.816	0.001

The preceding table further confirms the general objective. It can be concluded that the Pearson coefficient is -0.158, from which it follows that there is a very weak negative correlation between these two variables. It is concluded that sociodemographic factors do not at all influence the attitude of respondents about the quality of service of spa resorts.

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This part shows the Pearson coefficient, which indicates a high degree of correlation between respondents' satisfaction with the quality of service in spa resorts and other factors (81%).
Comparison with the similar studies from the Western Balkan region and Croatia indicate the similarities with our findings.
As stated by Knežević et al. (2014), visitors to spas have an excellent experience with accommodation, food and service (which is in line with our research), however, the physical appearance of the spas was not at an enviable level.
Also, Puška (2017) state that spa resorts have greatly helped patients with locomotor problems, neurological problems, etc. (which is in line with our research).
"Spa resorts ease health burdens" (which is in line with our research), according to research by Šišić (2005).
According to research by Vučetić (2004), patients who opt for spa resorts in Montenegro have similar affinities to them as those in Bosnia and Herzegovina.
Spa resorts are an important economic factor in the work process, which was discussed throughout the work. These results are fully consistent with the research results of Nikolić (2021).

CONCLUSION

The main conclusions of this study can be summarized as follows:

- The average waiting time for a service in a spa is 5 minutes.
- Spa resorts are expensive for 62% of respondents.
- There is a weak correlation between sociodemographic factors and user satisfaction with the quality of service in the spa - 15.8%.
- There is a very high degree of correlation between respondents' satisfaction with service quality and other factors - 81%.
- Other factors that influence respondents' satisfaction with the quality of service at the spa are: first contact at the spa, reason for coming to the spa, distance from home to the spa, travel time and the manner in which the therapy is introduced to client.

REFERENCES

1. Hranilović, I. (2020). *Determinante kvalitete i efikasnosti u uslužnim sustavima*. Sveučilište u Zagrebu. Ekonomski fakultet.
2. Badr, A. (2011). *IA-Quality - General concepts and definitions.* Modern Approaches To Quality Control, (November 2011). https://doi.org/10.5772/24211
3. Hrustemović, Dž., Mujičić, E., Katica, A., Salihagić, S., Ovčina, A., Dizdarević, D., Čaušević, R. (2019). Monitoring životnih aktivnosti pacijenata nakon infarkta miokarda. *Vox Scientiae PHARM-HEALTH*. Volume 7 - Number 2:25.
4. Elshaer, I. (2012). *What is the Meaning of Quality*. Suez Canal University. Management department.
5. Huseinspahić, N. (2011). Kvalitet kao pretpostavka za zadovoljstvo pacijenata. *South Eastern Europe Health Sciences Journal (SEEHSJ)*. Volume 1. Number 1.

Research in Education and Rehabilitation 2025; 8(1): 86-93 **DOI**: 10.51558/2744-1555.2025.8.1.86

6. Buntak, K., Baković, T., Mišević, P., Damić, M., Buntić, L. (2021. *Kvaliteta i sustavi upravljanja kvalitetom*. Vodič za uspješnu implementaciju i održavanje sustava kvalitetnog upravljanja u poduzećima. Sveučilište u Zagrebu.
7. Kadrić, A., Ovčina, A., Ramić, A., Hrapović, E., Eminović, E. (2022*). Management of the clinical health care standardization process*. SKEI–Međunarodni interdisciplinarni časopis. Vol. 3 No. 1.
8. Fynes, B., Lally, A. (2008). *Innovation in Services: From Service Concepts to Service Experiences*. Service Science. Manage Ment & engineering (SSMe).
9. Čolan, N. (2019). *Ispitivanje zadovoljstva pacijenata primjenom SERVPERF modela*. Sveučilište u Zagrebu. Farmaceutsko-biokemijski fakultet.
10. Fazlović, S., Kakeš, D. (2015). *Unaprjeđenje kvalitete usluga u javnom sektoru Bosne i Hercegovine implementacijom sustava upravljanja kvalitetom*. Poslovna izvrsnost Zagreb. 9 (2).
11. Dizdarević, A. (2021). *Potencijal banjskog lječilišta Gata za razvoj wellnesa i sportskog turizma*. Panevropski univerzitet „Apeiron".
12. Maccarone, M. C., Magro, G., Albertin, C., Barbetta, G., Barone, S., Castaldelli, C., Manica, P., Marcoli, S., Mediati, M., Minuto, D., Poli, P., Sigurtà, C., Raffaetà, G., & Masiero, S. (2023). Short-time effects of spa rehabilitation on pain, mood and quality of life among patients with degenerative or post-surgery musculoskeletal disorders. *International journal of biometeorology*, 67(1), 29–36. https://doi.org/10.1007/s00484-022-02381-4.
13. Knežević, M., Šaula, M., Dujaković, T. (2014). Značaj zdravstvenog turizma Republike Srpske za razvoj turizma u regionu. *Poslovne studije* 11–12.
14. Puška, A. (2017). Situation and Prospects of Balneo-climatic Treatment in Bosnia and Herzegovina. *Serbian Journal of Engineering Management*. Vol.2. No.1.
15. Šišić, A. (2005). O ljekovitim svojstvima gračaničkih "Termi". *Gračanički glasnik - Časopis za kulturnu historiju*.
16. Vučetić, A. (2004). *Razvoj uslužne ponude u banjskom turizmu Crne Gore u drugoj polovini XX vijeka*. Univerzitet u Crnoj Gori.
17. Nikolić, K. (2021). *Wellness turizam u Republici Hrvatskoj*. Sveučilište Jurja Dobrile u Puli.