

HEALTH TOURISM, CUSTOMER SATISFACTION AND QUALITY OF LIFE: THE ROLE OF SPECIALTY HOSPITALS

Dina Lončarić
Damir Lončarić
Suzana Marković

Received 15 April 2015
Revised 20 April 2015
30 April 2015

Abstract

Purpose – The purpose of this research is to clarify the role of specialty hospitals in improving patients' health and their quality of life. The study is focused on establishing how patients perceive the influence of the services of a specialty hospital for medical rehabilitation on their physical quality of life and life satisfaction. Further, the goal is to establish if there is a connection between the patients' perception of physical quality of life and their satisfaction with the hospital services, and to establish whether the satisfaction of patients influences their loyalty to the hospital.

Methodology – The paper is based on the survey of a sample of patients who used health services of a specialty hospital for medical rehabilitation that contributes to the Croatian health tourism market. The WHOQOL-BREF quality of life assessment was used in the research. Four hypotheses were tested by implementing partial least square structural equation modelling (PLS-SEM).

Findings – Results of the research conducted show that staying in a specialty hospital for medical rehabilitation significantly improves the physical quality of life of patients which is reflected in life satisfaction and customer satisfaction. Research has also confirmed that the patients' satisfaction has a positive impact on their loyalty to the hospital, a precondition to successful business performance on the health tourism market.

Contribution – This paper fills the gap in the literature where the topic of health tourism in the particular context of specialty hospitals is discussed. In a practical sense, the contribution of this paper is evident in proving the connection between the perception of the influence of health services on the improvement of health and satisfaction with hospital services, and their influence on the patients' satisfaction and loyalty to the hospital.

Keywords Health tourism, quality of life, life satisfaction, customer satisfaction, customer loyalty, specialty hospital

INTRODUCTION

In recent years, health tourism has become one of the fastest growing industries in the world, even though the desire for recuperation and relaxation has been a major driver of tourist flows since the distant past. Concern for the preservation of health and quality of life (rest and recuperation) are leading tourist motivations (Kušen, 2011). Numerous studies have pointed out the role of tourism in improving the quality of life of tourists (Kim, Woo and Uysal, 2015; Moscardo, 2009; Neal, Sirgy and Uysal, 2004; Neal, Uysal and Sirgy, 2007). However, the role of specialty hospitals in health improvement has not been researched so far. Specialty hospitals provide medical services to tourists

in the health tourism market as well as to patients. As the central role of these hospitals is to provide medical rehabilitation, it may well be said that the services of specialty hospitals help to improve the health of patients and, in turn, their quality of life. The assumption is that when patients feel their health has improved after therapy in a specialty hospital they will attain a higher level of customer satisfaction and customer loyalty, which will have a positive impact on the hospital's business and image. The purpose of this paper is to assess the impact of health services on physical quality of life and customer satisfaction in the health tourism sector with special emphasis on the role of specialized hospitals which are characteristic of the health system of the Republic of Croatia.

The main research objectives of this study are: (a) to study the correlation between the perception of physical quality of life and the life satisfaction of patients who have stayed in a specialty hospital for medical rehabilitation; (b) to establish the correlation between the perception of physical quality of life after staying in a hospital and customer satisfaction; (c) to study the correlation between customer satisfaction and life satisfaction after using the hospital's services; and (d) to establish the correlation between customer satisfaction and customer loyalty.

The paper is organized in five sections. First, we present the theoretical framework underpinning our study. Then we develop a conceptual model and formulate research hypotheses based on the reviewed literature. The next section lays out the methodology and is followed by results of the research. In the last section the results, the limitations of the study, and suggestions for future research are discussed.

1. THEORETICAL BACKGROUND

The following section is an overview of the literature dealing with the concepts of health tourism, quality of life, customer satisfaction and customer loyalty.

1.1 Health tourism

Numerous attempts have been made to define health tourism and its features. In 1973 the International Union of Tourist Organizations defined the concept of health tourism as "the provision of health facilities utilizing the natural resources of the country, in particular mineral water and climate" (IUOTO, p. 7). Today health tourism refers to the travel of individuals from their residences to other places with the purpose of receiving treatment (Altın, Bektaş, Antep and İrbán, 2012, p. 1004). Health tourism is "the borderland of medicine and tourism in which businesses in the field of tourism and health-care institutions organize the stay of tourists in therapeutic-climate and health resorts, primarily for the purpose of disease prevention, rehabilitation and therapy using natural factors" (Ivanišević, 2005, p. 16). Health tourism is based on the use of natural medicinal factors, which may be marine factors (sea water, algae, promenades, vegetation, sand, salt peloid, sea peloid, air quality and climate), spa or balneological factors (thermal-mineral waters, medicinal mud, naphthalene, climate, vegetation, air quality, promenades and solar radiation) and climate factors (change of climate, air quality and solar radiation) (Geić, 2011, p. 245). Although health tourism has been

known in Croatia for centuries, it is now in a phase of rapid growth that is in line with trends on the world market. The 2012-2020 National Strategy of Health Care Development (2012, p. 337) defines health tourism as “tourism that is linked with travel to health resorts or other destinations, the primary purpose of which is to improve the physical condition of tourists through a regime of physical exercises and therapy, and controlled nutritional and medicinal services relevant to health maintenance”.

In consideration of its historical development and available resources, Kesar and Rimac (2011, p. 115) specify four segments of health tourism in Croatia, ranked according to their volume of demand: sanatorium/hospital "tourism", spa/thermal/thalassotherapy tourism, wellness tourism and medical tourism. Sanatorium/hospital tourism refers to the stay of people in health resorts and so-called specialty hospitals for medical rehabilitation. A health resort is a health care institution providing preventative health protection, and specialist and hospital rehabilitation using natural medicinal sources (Health Protection Act, Official Gazette 150/08, 91). A specialty hospital is a health care institution engaged in the specialist-consiliary and hospital treatment of specific diseases and specific age-groups and possessing the facilities, in terms of beds, diagnostics, etc., required to carry out such treatment (Health Protection Act, Official Gazette 150/08, 87). Health resorts and specialty hospitals may provide health care services in tourism in accordance with special regulations governing business operations in tourism and hospitality. Spa, thermal or thalassotherapeutic tourism is the oldest form of health tourism in Croatia. Spa tourism is based on the preventative use of thermal, mineral or sea water. It is common for such institutions to make use of the thermal resources of specialty hospitals (Kesar and Rimac, 2011). Wellness tourism is a more recent concept within the broader scope of health tourism (Koncul, 2012) and it has been very well received in Croatia. The least developed form is medical tourism which is still in the market introduction stage (Kesar and Rimac, 2011). This paper focuses on the role of specialty hospitals in improving quality of life and customer satisfaction.

1.2 Quality of life

Quality-of-life studies have engaged the attention of numerous researchers for many decades. Quality of life is a multidimensional construct (Da Rocha et al., 2012) that can be viewed from different perspectives. Basically, the quality-of-life concept has two dimensions: macro and micro (Kirpalani, 1987, p. 205). At the macro level, quality of life is rooted in the physical and artificial environment. Quality of life at the micro level refers to the perceptions of the individual. In the same social, political and cultural setting, two different people will experience life and the quality of life in different ways (Kirpalani, 1987, p. 205). Given the topic of this paper, we deem it appropriate to accept the definition of the World Health Organization which defines quality of life as “an individual’s perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (WHOQOL Group, 1994). Other terms, such as life satisfaction, subjective well-being and happiness, are often used instead of “quality of life”, although they are not actually synonyms. Namely, life satisfaction “is the degree to which a person positively evaluates the overall quality of his/her life as a

whole. In other words, how much the person likes the life he/she leads”(Veenhoven, 1996, p. 6). Life satisfaction is part of the broader concept of subjective well-being, which encompasses life satisfaction as a cognitive component, together with positive and negative feelings as an affective component (Penezić, 1996). It involves judgments of the fulfilment of one's needs, goals, and wishes (Sirgy, 2012, p. 13).

Throughout their lifetimes, people play a variety of roles in their families and in society, so their lives evolve through different areas or domains. Campbell, Converse and Rodgers, the main proponents of the life domain approach to the study of quality of life (Sirgy, 2012, p. 237), argue that life satisfaction is a combination of satisfaction with various domains within the life space (Campbell, Converse and Rodgers, 1976). In previous studies, researchers established the existence of a differing number of domains in which quality of life is achieved (Andrews and Withey 1976; Campbell, Converse and Rodgers 1976; Cummins, 1996), but what is common to all is the domain of health as one of the most important determinants of quality of life and life satisfaction. According to research by Michalos, Zumbo and Hubley (2000), about 53% of variations in the answers of respondents regarding subjective satisfaction referred to satisfaction with health status and other indicators in the domain of health and health care. Studies conducted in the European Union also suggest that where quality of life is concerned, health is the first priority to respondents in all EU countries (Alber and Fahey, 2004). Satisfaction with good health is generalized and reflected in general life satisfaction. Many factors in this domain affect quality of life, such as general state of health, functioning ability, number of symptoms, length of illness, health care, satisfaction with health care and hospital treatment, satisfaction with the quality of health services, etc. (Sirgy, 2001, pp. 324 – 333).

In accordance with the above, it can be concluded that health care institutions that improve patients' health, help in their rehabilitation or provide preventative health care, together with companies that offer leisure and relaxation, have a positive effect on the quality of life and life satisfaction of patients. In this respect, specialty hospitals for medical rehabilitation contribute significantly towards the quality of life of their patients and guests.

1.3 Customer satisfaction and customer loyalty

The term “customer” in the health care systems differs from that in other industries. Namely, customers in the health care system include a group of external customers (i.e., patients, family members of patients and potential customers) and internal customers (i.e., employees and the employer) (Lee, Lee and Kang, 2012). To most authors of previous studies concerning customer satisfaction in the health care industry, the term refers to the patients of medical institutions (Altsech, 2012; Han, 2013; Zaim, Bayyurt and Zaim, 2010), so in this paper, “customer” will refer only to patients and not to other parties.

Customer satisfaction is in the focus of attention of all marketing experts. As with many other concepts, when defining the concept of customer satisfaction, there is no unique point of view among scholars. However, taken together, Giese and Cote (2002) highlight three general components that can be identified: 1) consumer satisfaction is a

response (emotional or cognitive); 2) the response pertains to a particular focus (expectations, product, consumption experience, etc.); and 3) the response occurs at a particular time (after consumption, after choice, based on accumulated experience, etc.).

Customer satisfaction in the literature is usually defined as the result of a cognitive process described by the disconfirmation of expectations theory (Bearden and Teel, 1983; Churchill and Surprenant, 1982; Oliver, 1980). It is a post consumption evaluative judgment concerning a specific product or service (Gundersen, Heide and Olsson, 1996). According to Oliver (1997, p. 13), satisfaction is "the customer's fulfilment response. It is a judgment that a product/ service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment including levels of under- or over-fulfilment." Zeithaml and Bitner (2003) define customer satisfaction as the customer's evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Customer satisfaction can be viewed as the result of particular transactions or cumulatively, as a result of previous transactions that the customer had with a particular company. Both forms of satisfaction include pre-selection of products, the purchase and certain experience with its use (Vranešević, 2000, p. 181).

Customer satisfaction leads to customer loyalty (Lei and Jolibert, 2012). Oliver (1997, p. 392) defines customer loyalty as "a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour". It is believed that satisfaction leads to repeat purchase and positive word-of-mouth, which are the main indicators of loyalty (Marković, Raspor and Šegarić, 2010).

There have been numerous studies that examine the concept of customer satisfaction and loyalty in the specific field of the health care industry (Alden et al., 2004; Almeida, Nogueira and Bourliataux-Lajoine, 2013; Chahal and Kumari, 2011; Lee, Lee and Kang, 2012; Lei and Jolibert, 2012; Zaim, Bayyurt and Zaim, 2010), medical tourism (Rad et al. 2010) and spa centres (EL-refae, 2012). However, the role of specialty hospitals in enhancing quality of life and customer satisfaction has been poorly researched. Hence this pilot study is deemed justified and represents a platform for further research.

2. CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

The purpose of this study is to assess the impact of services of specialty hospital on customer satisfaction and their quality of life. In this section, the relationships between the main concepts of this study are hypothesized and a conceptual model is developed.

Previous studies have indicated a correlation between tourism and health (Michalkó et al., 2009; Moscardo, 2009). The research of Carneiro and Eusébio (2012) confirmed that tourism exerts a positive influence in four domains: physical health, psychological, social relations and environment. The strongest effects are felt in the psychological and

social domains, and the weakest, in the physical domain. In their study, they applied the WHOQOL-BREF questionnaire, which is a 26-item version of the WHOQOL-100 assessment. The WHOQOL-100 instrument was originally developed by the World Health Organization as a cross-culturally valid assessment of well-being (Skevington, Lotfy and O'Connell, 2004). The fact that patient rehabilitation is the primary role of specialty hospitals suggests that the clients of specialty hospitals will experience the greatest improvement in the physical domain during their stay and through the use of hospital services. Quality of life achieved in the individual domains affects the general quality of life and life satisfaction by conveying positive or negative emotions and thus influencing general life satisfaction. This is in line with the bottom-up spillover theory which recognizes the spillover of affects from subordinate life domains to superordinate ones, specifically from life domains such as leisure, family, job, and health to overall life satisfaction (Sirgy, 2002, p. 240). This leads to the conclusion that if patients consider the services of a specialty hospital as having a positive effect on their physical quality of life, they will also feel greater life satisfaction. Therefore, we propose a hypothesis: *H₁: Physical quality of life is positively related to life satisfaction.*

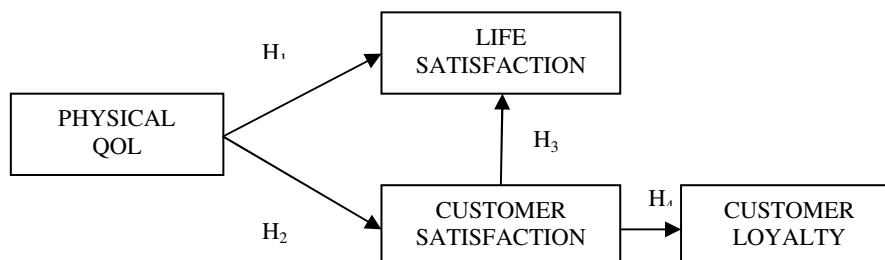
The literature on customer satisfaction suggests that client satisfaction is the result of a comparison of expectations and performance (Gundersen, Heide and Olsson, 1996; Zeithaml and Bitner, 2003). Considering that patients undergoing rehabilitation in specialty hospitals expect to improve their physical health and quality of life, it is reasonable to assume that those patients who feel their health and physical quality of life have improved following medical treatments in the specialty hospital will be more satisfied with hospital services. A hypothesis is therefore set as follows: *H₂: Physical quality of life is positively related to customer satisfaction in a specialty hospital.*

In addition, in accordance with the aforementioned bottom-up spill-over theory, we can set the following hypothesis: *H₃: Customer satisfaction is positively related to life satisfaction.*

The last hypothesis is linked to both customer satisfaction and customer loyalty. Previous studies have confirmed a positive correlation between customer satisfaction and customer loyalty in the health care industry (Lee, Lee and Kang, 2012; Lei and Jolibert, 2012; Marković, Lončarić and Lončarić, 2014). Hence, we set a hypothesis: *H₄: There is a positive relationship between customer satisfaction and customer loyalty in a specialty hospital.*

Based on the literature review, we propose a conceptual model, linking physical quality of life, customer satisfaction, life satisfaction and customer loyalty as seen in Figure 1. Empirical research was conducted to test the formulated hypotheses and is explained in the following section.

Figure 1: The conceptual model of this study



Source: Authors

3. METHODOLOGY

To accomplish the objectives of research and test the formulated hypotheses, a survey was conducted on a sample of patients in a specialty hospital for medical rehabilitation. The questionnaire was designed to gather empirical data from patients. The measurement scales were taken from the present literature. The first section measures the perception of physical quality of life using seven items based on the WHOQOL-BREF quality of life assessment (Skevington, S et al., 2004). Respondents evaluated their agreement with statements on a seven-point Likert-type scale ranging from 1 "strongly disagree" to 7 "strongly agree".

Life satisfaction was measured using three statements referring to satisfaction with health, quality of life and general life satisfaction. Three statements relating to satisfaction with overall hospital services, satisfaction with health care services and satisfaction with accommodation and food and beverages were used to measure client satisfaction. Customer loyalty was explored using two statements regarding intention to recommend hospital to friends and intention to repeat hospital stay. The same seven-point scale was also used to measure these constructs. Constructs and measurement items are shown in Table 2.

The empirical data were collected using a questionnaire on a convenient sample of patients of a specialty hospital for medical rehabilitation. The questionnaires were distributed to the patients upon check-in. Completed questionnaires were collected during check-out from patients who used the medical and accommodation services of the hospital. A total of 120 questionnaires were distributed. Data was collected during July and August of 2014. Of the 120 questionnaires distributed, 82 valid questionnaires were returned. Thus, data analysis is based on a sample of 82 questionnaires representing a response rate of 68.33 %.

4. RESEARCH RESULTS

Eighty-two patients participated in the survey. Socio-demographic structure of the sample is shown in Table 1. Women accounted for 53.7% and men for 46.3% of the sample. Half of the respondents (62.1%) were older than 56 and most (50%) were

retired. More than half (63.4%) have secondary school qualifications. Medical and health programmes were the main motivation (92.7%) for staying at the specialty hospital. Given that respondents were allowed to choose multiple replies, 14.6% of respondents chose *The beauty and attractiveness of the destination* as their motivation for coming to the specialty hospital, while 12.2% chose *Active vacation*. Respondents have mostly stayed at the hospital previous times; 34.1% have stayed once before, and 47.6% have stayed two or more times.

Table 1: Socio-demographic profile of respondents (N=82)

<i>Characteristics</i>	<i>Respondents</i>	
	<i>Frequency</i>	<i>Percentage</i>
<i>Gender</i>		
Male	38	46.3
Female	44	53.7
<i>Age</i>		
16 – 25	2	2.4
26 – 35	4	4.9
36 – 45	9	11.0
46 – 55	16	19.5
56 – 65	23	28.0
66 and more	28	34.1
<i>Occupation</i>		
Employed	25	30.5
Unemployed	13	15.9
Student	3	3.7
Retired	41	50.0
<i>Level of education</i>		
Primary school	8	9.8
Secondary school	52	63.4
Higher education	22	26.8
<i>Purpose of visit</i>		
Medical and health programs	76	92.7
Preventive medicine and wellness	7	8.5
Leisure and relaxation	8	9.8
Active vacation	10	12.2
The beauty and attractiveness of the destination	12	14.6
<i>Previous hospital stays</i>		
None, this is my first time	13	15.9
Once	28	34.1
Two or more times	39	47.6
Unknown	2	2.4

Source: Research results

The results of descriptive analysis are illustrated in Table 2.

Table 2: **Constructs, measurement items and results of descriptive analysis (N=82)**

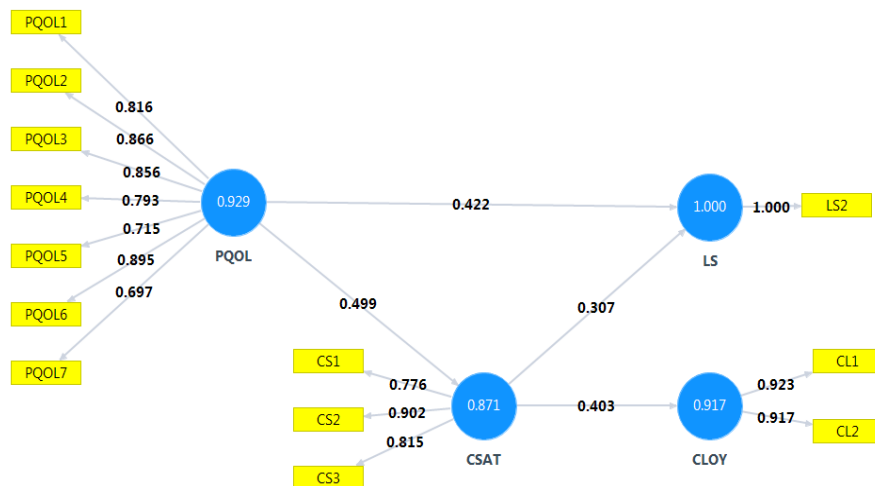
Items	Mean	SD
Psychical quality of life (PQOL)		
PQOL1: Reduced physical pain	5.93	1.54
PQOL2: Reduced addiction to medication	5.36	1.99
PQOL3: Increased energy levels	5.89	1.56
PQOL4: Increased ability to relax and sleep	5.83	1.61
PQOL5: Increased ability to carry out everyday activities	5.91	1.55
PQOL6: Increased ability to work	5.70	1.71
PQOL7: Enhanced mobility	6.02	1.42
Life satisfaction (LS)		
LS1: Satisfaction with health	5.19	1.89
LS2: Satisfaction with quality of life	5.40	1.79
LS3: General life satisfaction	5.66	1.67
Customer satisfaction (CSAT)		
CS1: Satisfaction with overall hospital services	6.29	1.20
CS2: Satisfaction with health care services	5.81	1.67
CS3: Satisfaction with accommodation and food and beverage services	5.57	1.81
Customer loyalty (CLOY)		
CL1: Intention to recommend to friends	6.35	1.24
CL1: Intention to repeat hospital stay	6.48	1.09

Source: Research results

The results of descriptive statistics indicate that respondents are very satisfied with the services of the specialty hospital, including health care services, and accommodation and food and beverage services. They perceive their stay at the hospital as having improved their physical quality of life. Above all, improvements refer to enhanced mobility (M=6.02, SD=1.42), reduced physical pain (M=5.93, SD=1.54), and increased ability to carry out everyday activities (M=5.91, SD=1.55). The patients' assessment that their stay at the specialty hospital has positively affected their quality of life, together with their satisfaction with hospital services, has resulted in their intention to repeat their hospital stay if required (M=6.48, SD=1.09) and their intention to recommend the hospital to friends (M=6.35, SD=1.24).

The hypotheses formulated were tested using the Partial Least Squares Structural Equations Modelling (PLS-SEM) method. PLS-SEM is effective when working with small samples, with data that deviates from normal distribution, or "when the goal is predicting key target constructs or identifying key 'driver' constructs" (Hair et al., 2014, p. 19). Because PLS-Path Modelling has also been described as an important research tool in social sciences, especially for satisfaction studies (Mateos-Aparicio, 2011), we assessed the method as being applicable to this paper. Modelling results are presented in Figure 2.

Figure 2: PLS-SEM model with indicator loadings and structural coefficients



Source: Research results

An evaluation of PLS-SEM results includes an evaluation of the measurement model followed by an evaluation of the structural model.

The model has four latent variables with reflective measurement models. The first step which refers to verification of the reflective measurement model comprises internal consistency, indicator reliability, and convergent and discriminant validity testing (Hair et al. 2014).

It is shown that almost all outer loadings of the reflective constructs are well above the threshold value 0.708 (Hair et al. 2014). The indicator PQOL7 has the smallest indicator reliability with a value of 0.697, while the indicator CL1 has the highest value of 0.923. The indicator PQOL7 was not deleted because removing the indicator would not lead to an increase in composite reliability. After deleting indicators LS1 and LS3 because of semantic redundancy, i.e., high loadings that exceed the threshold of 0.95 (Hair et al. 102), the latent variable LS is measured by the single item LS2.

The composite reliability values of 0.929 (PQOL), 1.000 (LS), 0.871 (CSAT) and 0.917 (CLOY) demonstrate that all four reflective constructs have high levels of internal consistency reliability exceeding the minimum requirement of 0.70 (Hair et al. 2014).

Convergent validity assessment is based on the average variances extracted (AVE). The AVE values of PQOL (0.654), LS (1.000), CSAT (0.694) and CLOY (0.847) are well above the cut-off of 0.50 (Hair et al. 2014). That indicates convergent validity for all four constructs.

Discriminant validity is checked by the Fornell-Larcker criterion and the cross loadings. The square roots of AVE values for all constructs are above the construct's highest correlation with other latent variables in the model. In addition, indicators' cross loadings with other constructs confirm the discriminant validity of the measurement model.

After evaluation of the measurement model we assessed the structural model. Evaluation of the structural model includes size and significance of path coefficients, calculation of coefficient of determination (R^2) and calculation of effect sizes. However, the first step in assessing the structural model is collinearity assessment. Only one latent variable (LS) is predicted by two constructs. The VIF value of 1.332 is far below the threshold of 5 (Hair et al., p. 189), therefore collinearity is not an issue.

The assessment of the structural model starts with path coefficients estimate followed by bootstrapping routine. The results are shown in Table 3.

Table 3: **Significance testing of the structural model path coefficients**

Path	Path coefficients	t values	p values	Effect size	Hypothesis
PQOL → LS	0.422	3.169	0.002*	0.224	Supported
PQOL → CSAT	0.499	5.104	0.000*	0.332	Supported
CSAT → LS	0.307	2.494	0.013**	0.119	Supported
CSAT → CLOY	0.403	2.943	0.003*	0.194	Supported

* p<0.01

** p<0.05

Source: Research results

As can be seen, all four relationships are statistically significant. In relation to hypothesis H1, the results show that PQOL significantly and positively influences life satisfaction (path coefficient=0.422, t=3.169, p=0.002). **This result supports H₁.** Further, PQOL positively influences customer satisfaction (path coefficient=0.499, t=5.104, p=0.000) which **confirms H₂**. Also, customer satisfaction positively impacts life satisfaction (path coefficient=0.307, t=2.494, p=0.013). **This finding supports H₃.** Ultimately, customer satisfaction significantly impacts customer loyalty (path coefficient=0.403, t=2.943, p=0.003). **This result supports H₄.** The total effect of PQOL to life satisfaction (LS) is 0.576 (t=6.233, p=0.000) which is considered pronounced.

Further, we examined the R^2 values of the endogenous latent variable. The obtained value of LS (0.402) can be considered close to moderate since the values of CSAT (0.249) and CLOY (0.163) are rather weak.

The assessment of the structural model was followed by the assessment of effect size. The effect size f^2 allows assessing an exogenous construct's contribution to an endogenous latent variable R^2 value. Using criteria specified by Cohen (1988), effect sizes for all constructs fall into medium range. The f^2 effect size 0.332 for predictive value of PQOL on CSAT has the highest value. It indicates that physical quality of life

has close to a large effect on predicting life satisfaction. In contrast, the smallest value of f^2 is 0.119 which means that CSAT has medium effect in producing the R^2 for LS.

CONCLUSION

The research described in this paper demonstrates that patients using the services of the specialty hospital expressed a positive attitude towards hospital services. Medical rehabilitation services helped to improve the physical quality of their lives, and patients experienced enhanced mobility, reduced physical pain and medication addiction, increased energy levels and increased ability to carry out everyday activities. All this had a positive effect on their life satisfaction. The patients of the specialty hospital who experienced an improvement in their physical quality of life following medical rehabilitation therapy were also satisfied with the medicinal and hospitality services provided by the hospital, and this too had a positive effect on their life satisfaction and on their loyalty to the hospital.

The results of this research contribute to theory and practice. The theoretical contribution is reflected in the testing of the WHOQOL-BREF quality of life assessment (Skevington, Lotfy and O'connell, 2004) in the specific context of a specialty hospital for medical rehabilitation. Although only seven statements were applied that refer to physical quality of life, the results confirm that the scale that some authors have used to study the impact of tourism on quality of life (Carneiro and Eusébio, 2012), and others in the field of health care (Skevington, Lotfy and O'connell, 2004), can also be successfully applied in the area of health tourism. The contribution of the study to practice is evident in proving the correlation between the patients' perception of improving their quality of life using hospital services and their satisfaction with services, life satisfaction and loyalty to the hospital. In the long run, this can positively reflect on the distinctiveness, image and competitiveness of the specialty hospital in the health tourism market.

To ensure scientific objectivity, it is necessary to specify the limitations of this paper with regard to the sample and research instrument. Foremost, research was conducted on a small sample of patients in only a single specialty hospital. The respondents were mostly elderly people whose primary motivation for going to the hospital was medical rehabilitation. Future research would need to be conducted on a larger sample and should include other specialty hospitals. It would also be interesting to compare this paper's results with those from research carried out on a sample of people whose primary motivations for staying at the hospital were wellness or disease prevention. In addition, research could involve other types of hospitals or health resorts as well. Another limitation of this paper is the application of an abbreviated WHOQOL-BREF quality of life scale. Namely, only the construct of physical quality of life was applied, while social, psychological and environmental quality of life constructs were not studied and should be included in future research. In that context, the results of this study should be seen as a platform for similar research in the field of health tourism and quality of life.

REFERENCES

- Alber, J., Fahey, T. (2004), *Perceptions of living conditions in an enlarged Europe*, European Fondation for the Improvement of Living and Working Condition, Dublin.
- Alden, D. L., Do, M. H., Bhawuk, D. (2004), "Client satisfaction with reproductive health-care quality: integrating business approaches to modeling and measurement", *Social science & medicine*, Vol. 59, No. 11, pp. 2219–2232.
- Almeida, R., Nogueira, L., Bourliataux-Lajoine, S. (2013), "Analysis of the user satisfaction level in a public physical therapy service", *Brazilian journal of physical therapy*, Vol. 17, No. 4, pp. 328–35.
- Altın, U., Bektaş, G., Antep, Z., İrbán, A. (2012), "The International Patient's Portfolio and Marketing of Turkish Health Tourism", *Procedia - Social and Behavioral Sciences*, Vol. 58, pp. 1004–1007.
- Altsech, M. (2012), "Back to Square One: How Patient Satisfaction Survey Flaws Bias Assessments of Health Care Quality", *ATINER's Conference Paper Series*, No. BUS2012-0032, pp. 5–15.
- Andrews, F.M., Withey, S.B. (1976), *Social Indicators of Well-Being: American's Perceptions of Life Quality*, Plenum Press, New York, NY.
- Bearden, W.O., Teel, J.E. (1983), "Selected determinants of customer satisfaction and complaint reports", *Journal of Marketing Research*, Vol. 20, No. 1, pp. 21–8.
- Campbell, A., Converse, P.E., Rodgers, W.L. (1976), *The Quality of American Life: Perceptions, Evaluations, and Satisfaction*, Russell Sage Foundations, New York, NY.
- Carneiro, M., Eusébio, C. (2012), "Segmentation of the tourism market using the impact of tourism on quality of life", *Tourism & Management Studies*, No. 7, pp. 91–100.
- Chahal, H., Kumari, N. (2011), "Consumer Perceived Value and Consumer Loyalty in the Healthcare Sector", *Journal of Relationship Marketing*, Vol. 10, pp. 88–112.
- Churchill, G.A. Jr, Surprenant, C. (1982), "An investigation into the determinants of customer satisfaction", *Journal of Marketing Research*, Vol. 19 No. 4, pp. 491–504.
- Cohen J. (1988), *Statistical power analysis for the behavioral sciences*, Hillsdale, NJ.
- Croatian Government, Ministry of Health (2012), *National Strategy of Health Care Development 2012-2020*, Zagreb.
- Cummins, R. A. (1996), "The Domains of Life Satisfaction: An Attempt to Order Chaos", *Social Indicators Research*, Vol. 38, pp. 303-32.
- Da Rocha, N. S., Power, M. J., Bushnell, D. M., Fleck, M. P. (2012), "The EUROHIS-QOL 8-item index: Comparative psychometric properties to its parent WHOQOL-BREF", *Value in Health*, Vol. 15, No. 3, pp. 449–457.
- EL-refae, B. A. A. G. A. (2012), "The Relationships between Service Quality, Satisfaction, and Behavioral Intentions of Malaysian Spa Center Customers", *International Journal of Business and Social Science*, Vol. 3, No. 1, pp. 198–206.
- Geić, S. (2011), Menadžment selektivnih oblika turizma, Sveučilišni studijski centar za stručne studije, Sveučilište u Splitu, Split
- Giese, J. L., Cote, J. A. (2002), "Defining Consumer Satisfaction", *Academy of Marketing Science Review*, Vol. 1, pp. 1–24.
- Gundersen, M. G., Heide, M., Olsson, U. H. (1996), "Hotel Guest satisfaction among Business Travellers: What Are the Important Factors?", *The Cornell Hotel and Restaurant Administration Quarterly*, Vol. 37, No. 2, pp. 72–81.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M. (2014), *A Primer on Partial least Squares Structural Equation Modeling (PLS-SEM)*, Sage Publications, Los Angeles
- Han, H. (2013), "The healthcare hotel: Distinctive attributes for international medical travelers", *Tourism Management*, Vol. 36, pp. 257–268.
- Health Protection Act, Official Gazette, 150/08
- IUOTO (1973), *Health Tourism*, United Nations, Geneva.
- Ivanišević G (2005), "Zdravstveni i lječilišni turizam – Metode i programi", Knjiga izlaganja na znanstvenom skupu Veli Lošinj, 9.-11. rujna 2005., Zagreb 2005.
- Kesar, O., Rimac, K. (2011), "Medical Tourism Development in Croatia", *Zagreb International Review of Economics and Business*, Vol. 14, No. 2, pp. 107–134.
- Kim, H., Woo, E., Uysal, M. (2015), "Tourism experience and quality of life among elderly tourists", *Tourism Management*, Vol. 46, pp. 465–476.
- Kirpalani, V. H. (1987), "International Marketing and the Quality-of-life", in Samli, A.C. (Ed.), *Marketing and Quality-of-life Interface*, Quorum Books, New York, NY, pp. 204–219.
- Koncul, N. (2012), "Wellness: a new mode of tourism", *Ekonomika Istraživanja*, Vol. 25, No. 2, pp. 525–534.

- Kušen, E. (2011), "Positioning medical tourism in the broader framework of health tourism", *Turizam: Znanstveno-Stručni Časopis*, Vol. 59, No. 1, pp. 95–99.
- Lee, S. M., Lee, D., Kang, C.-Y. (2012), "The impact of high-performance work systems in the health-care industry: employee reactions, service quality, customer satisfaction, and customer loyalty", *The Service Industries Journal*, Vol. 32, No. 1, pp. 17–36.
- Lei, P., Jolibert, A. (2012), "A three-model comparison of the relationship between quality, satisfaction and loyalty: an empirical study of the Chinese healthcare system", *BMC Health Services Research*, Vol. 12, 436.
- Marković, S., Lončarić, D., Lončarić, D. (2014), "Service Quality and Customer Satisfaction in the Hotel Industry", *Tourism and Hospitality Management*, Vol. 20, No. 2, pp. 155–170.
- Marković, S., Raspor, S., Šegarić, K. (2010), "Customer Satisfaction and Customer Loyalty Measurement in Hotel Settings: An Empirical Analysis", *Tourism & Hospitality Management 2010: New Trends in Tourism and Hospitality Management*, pp. 125–137.
- Mateos-Aparicio, G. (2011), "Partial Least Squares (PLS) Methods: Origins, Evolution, and Application to Social Sciences", *Communications in Statistics - Theory and Methods*, Vol. 40, No. 13, pp. 2305–2317.
- Michalkó, G., Kiss, K., Kovacs, B., Sulyok, J. (2009), "The Impact of Tourism on Subjective Quality of Life among Hungarian Population", *Hungarian Geographical Bulletin*, Vol. 58, No. 2, pp. 121–36.
- Michalos, A.C., Zumbo, B.D., Hubley, A. (2000), "Health and the Quality of life", *Social Indicators Research*, Vol. 51, No. 3, pp. 245–286.
- Moscardo, G. (2009), "Tourism and quality of life: Towards a more critical approach", *Tourism and Hospitality Research*, Vol. 9, No. 2, pp. 159–170.
- Neal, J. D., Uysal, M., Sirgy, M. J. (2007), "The Effect of Tourism Services on Travelers' Quality of Life", *Journal of Travel Research*, Vol. 46, No. 2, pp. 154–163.
- Neal, J., Sirgy, M., Uysal, M. (2004), "Measuring the effect of tourism services on travelers' quality of life: further validation", *Social Indicators Research*, Vol. 69, No. 3, pp. 243–277.
- Oliver, L. R. (1997), *Satisfaction: A behavioral perspective on the consumer*, McGraw-Hill, New York, NY.
- Oliver, R. L. (1980), "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, Vol. 17, No. 4, pp. 460–469.
- Penezić, Z. (1996), *Teorije, mjerenja i korelati zadovoljstva životom*, Sveučilište u Splitu, Filozofski fakultet Zadar, Vol. 35.
- Rad, N. F., Puad, A., Som, M., Zainuddin, Y. (2010), "Service Quality and Patients' Satisfaction in Medical Tourism", *World Applied Sciences Journal*, Special Issue of Tourism & Hospitality, Vol. 10, 24–30.
- Sirgy, M. J. (2002), *The psychology of quality of life*, Kluwer Academic Publishers, Dordrecht.
- Sirgy, M. J. (2012), *The Psychology of Quality of Life: Hedonic Well-Being, Life Satisfaction, and Eudaimonia*, Second Edition, Springer, Dordrecht.
- Sirgy, M.J. (2001), *Handbook of Quality-of-Life Research: An Ethical Marketing Perspective*, Kluwer Academic Publishers, Dordrecht.
- Skevington, S. M., Lotfy, M., O'Connell, K. A. (2004), "The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial A Report from the WHOQOL Group", *Quality of Life Research*, Vol. 13, pp. 299–310.
- The WHOQOL Group, (1995), "The World Health Organization Quality of Life assessment (WHOQOL): position paper from the World Health Organization", *Social Science and Medicine*, Vol. 41, No. 10, pp. 1403–1409.
- Veenhoven, R. (1996), "The Study of Life Satisfaction", in: Saris, W.E., Veenhoven, R., Scherpenzeel, A.C., Bunting B. (Eds), *A comparative study of satisfaction with life in Europe.*, Eötvös University Press, pp. 11–48.
- Vranešević, T. (2000), *Upravljanje zadovoljstvom klijenata*, Golden marketing, Zagreb.
- Zaim, H., Bayyurt, N., Zaim, S. (2010), "Service Quality And Determinants Of Customer Satisfaction In Hospitals: Turkish Experience", *International Business & Economics Research Journal*, Vol. 9, No. 5, pp. 51–58.
- Zeithaml, V. A., Bitner, M. J. (2003), *Services marketing: Integrated customer focus across the firm*, 3rd Edition, McGraw-Hill, New York, NY.

Dina Lončarić, PhD, Assistant Professor

University of Rijeka

Faculty of Tourism and Hospitality Management, Opatija

Primorska 42, P.O.Box 97, 51410 Opatija, Croatia

Phone: ++51 294187, Fax: +51 291965

E-mail: dina.loncaric@fthm.hr

Damir Lončarić, MA

Thalassotherapia Crikvenica

Gajevo šetalište 21, 51260 Crikvenica, Croatia

Phone: ++51 407610, Fax: +51 785189

E-mail: damir.loncaric@thalasso-ck.hr

Suzana Marković, PhD, Full Professor

University of Rijeka

Faculty of Tourism and Hospitality Management, Opatija

Primorska 42, P.O.Box 97, 51410 Opatija, Croatia

Phone: ++51 294681, Fax: +51 291965

E-mail: suzana.markovic@fthm.hr