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I



**UNIVERSITY OF KRAGUJEVAC
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INFLUENCE OF SOCIO DEMOGRAPHIC CHARACTERISTICS OF CONSUMERS OF MEDICAL TOURISM SERVICES IN SERBIA

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Abstract

The subject of the research is to determine whether and to what extent in a process of making a decision on choosing a medical treatment in Serbia consumers' demographic characteristics influence the valuation of certain parameters. The findings on whether there are differences in consumer behavior when making a decision on treatment in Serbia, depending on sex, education, and amount of income, are very important in creating an offer for medical tourism. Medical tourism service providers are able to identify the social demographic profiles of their current and potential consumers, and then accordingly create their marketing strategy, within the strategy of promoting Serbia as a tourist destination. In this paper, a survey method was used on a sample of 365 respondents. In conclusion, the authors have analyzed the influence of each socio-demographic characteristic of consumers in regard to the differences in their behavior in the decision-making process of choosing the medical treatment in Serbia.

Key Words: *medical treatment in Serbia, medical tourism*

JEL classification: *I15, L83, Z32*

Introduction

From a demand aspect medical tourism including patient/consumer characteristics and profiles or decision models based on types of information such as hard data (performance and quality) and soft (recommendation, information provided by websites, internet) has not been extensively scholarly researched (Lunt & Carrera, 2010; Gan &

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Frederick, 2013). The study that relates consumers' attitudes toward medical tourism including consumer characteristics (age, education, income, and insurance status) of 289 consumers from the USA resulted in three attitude-related factors: economic, treatment-related, and travel-related as the major findings reveal that the uninsured and low-income consumers are more sensitive to economic factors than the insured and the middle-income consumers; that 51- to 64-year-olds are less motivated by economic factors than young adults; the better one's health, the more one is motivated by treatment-related factors (Gan & Frederick, 2013). In a subsequent study, a principal components analysis has outlined three factors – risk, social-related, and vacation as the authors found that the middle-income earners and recipients of the federal health insurance program for the elderly, are more motivated by risk-related factors to travel for care, but the middle-aged and older, and the married are more motivated by social-related factors to travel for care (Gan & Frederick, 2015). The exploratory study of Guy et al (2015) tried to identify characteristics and factors U.S. citizens willing to participate in medical tourism from those who are not including several variables: the nature of the medical condition for which treatment is sought (life threatening, serious but not life threatening, medically optional, or life enhancing); respondents' reasons to consider or rule out medical tourism; (c) demographics (age, gender, marital status, education, income, and health insurance coverage); (d) risk aversion; and countries most and least likely to be considered for healthcare services.

Qualitative research on Canadian medical tourists has shown that the key factors in the process of deciding on medical treatment abroad are reliable information about the surgeon's reputation abroad as well as the testimonies of other patients who stayed in the hospital. Access to this type of information is bound to increase confidence in consumers' decision-making (Crooks et al, 2012). Still, little is known about the profile of the consumer of medical tourism services, taking into account the socio-demographic status, age, sex, state of health. It is also important to consider the factors that direct consumer not to use the services of local providers and/or to attract them to foreign providers. Generally, synthesis of existing evidence indicates that the following factors shape "willingness to travel' (WTT)" for the use of medical services outside the country (Exworthy & Peckham, 2006): specialist health care is associated with higher WTT; a good reputation increases WTT especially among groups with higher incomes; emergencies associated with higher WTT; frequent users of the service may exhibit lower WTT; men show higher

WTT than women; older people (over 60 years) are associated with lower WTT; high status (especially income) is associated with a higher WTT; parents or guardians of minors are associated with lower WTT; connection is poor or lower WTT is associated with some minority ethnic groups; and limited comparative evidence WTT in rural and urban areas. Smith & Forgione (2007) have defined the factors of medical tourism that act on a wider scale than the US market that play a major role in the presentation of medical tourism in the world market. Several factors are defined that influence patients to choose medical tourism as replacement for a classic medical service. For example, patients from America are willing to travel across the ocean in search of medical services that match their budget. In his work, Palvia (2007) divided these factors into two groups: external and internal. The influence of each of the factors individually cannot be fully responsible for the patient's decision. Therefore, these factors are divided into two groups: the choice of country/location and the selection of a medical institution. The first group includes external factors, such as economic stability, political stability, social behavior and regulatory standards. Internal factors are another group of factors, as costs, accreditation, quality of care and doctors' training. A key driver for the UK individuals to seek health care abroad is low-cost medical care and after care services, followed by desire to avoid long waiting times for certain medical procedures, or to consume a particular medical treatment for which are not eligible in their home country (Lunt et al, 2013). Krajnović et al (2013) have pointed out to the importance of establishing a system monitoring and control monitoring quality at national level in all countries that have developed medical tourism, as well as a system of destination management level for tourist destinations on the principles of IQM (Integrated Quality Management). Medical tourism as a major component of international trade in health care attracts the attention of many actors of the medical profession, the agency for the promotion of tourism, health analysts and policy makers. As the services are offered in developing countries the slogan "first-class treatment at Third World prices" may be emphasized (Čavlin & Ignjatijević, 2014). In the Strategy of Tourism Development of the Republic of Serbia for period 2016 - 2025, medical tourism has been outlined as one of the promising strategic tourism products (Strategy of Tourism Development of the Republic of Serbia for period 2016 – 2025). The assistance of international expert bodies in developing a Strategy of medical tourism would be highly recommended. The internet sites and web-based portals in Serbia need to be developed professionally having in mind the good practices of countries with developed medical tourism, in

line with the recommendations of OECD, European Commission and criteria of the Health on the Net Foundation, which can serve as precious guidelines (Vapa-Tankosić & Ignjatijević, 2017). Based on the previous research, the majority of respondents, in addition to medical services, came to Serbia and visit a friend or relatives and decided to use medical services in Serbia at the recommendation of friends and relatives, while the rest was decided on the basis of internet updates (Ignjatijević et al, 2017).

Methodology of research

The research was conducted in several cities on the territory of Vojvodina. The survey sample was presented by 365 respondents - patients who stayed in Vojvodina in order to receive the appropriate medical service. The research was carefully prepared. The treatment of the respondents is clearly and precisely defined. Clear, accurate and sufficiently detailed instructions were prepared for respondents and associates in the examination. The survey was modeled on various existing literature.

The survey was conducted using the survey method created in Google questionnaire so respondents responded directly to the questionnaire. All entered data in the Google questionnaire is automatically recorded in a unique excel table, making it easier to process data. The poll was anonymous. A list of specially formulated questions was prepared for the survey in accordance with the set goal of the research. The first questions were supposed to serve to see whether patients - users of medical tourism services had come to Serbia earlier, whether they went to other countries and how they decided now. The second part of the question concerned the basic geographical, demographic, economic and sociological characteristics of consumers. The questions were open and closed, depending on the degree of precision of the information we wanted to obtain. After the survey was completed, a questionnaire analysis was performed. In Google questionnaire, no question can be skipped and that all questions have to be filled in according to the instructions set, therefore there was no need for editing, or for rejecting individual questionnaires because all responses were automatically entered correctly and all the questionnaires were filled in correctly.

Google questionnaire enabled automatic data entry into a unique excel table, which enabled the use of the SPSS program for statistical data

processing. Furthermore, we tried to assess the parameters that respondents evaluated when making a decision on treatment in Serbia. We asked them 15 questions, which were supposed to give a grade of 1-5, depending on the importance of choosing a destination for medical tourism services. We calculated the mean values for each analyzed factor and standard deviation as an indicator of how much values deviate from the mean value. We classified the values in the following way: Less important factors (from 0 to 3.5), Very important factors (from 4.5 to 5) and Moderately important factors (from 3.5 to 4.5).

Research results

Below we list all the questions, i.e. the analyzed factors: Stable political situation and a healthy legal system, High standard of hospital accommodation, High quality of care, Accreditation of the institution, Confidentiality and privacy guaranteed, Recommendation of doctors, Good infrastructure (proximity to bigger towns, highways, airports), Secured travel safety, After treatment assistance provided, Treatment speed abroad, Cost saving, Cultural similarity, Nontraditional treatment, Availability of a place of rest (places for rest and relaxation), Treatment of persons with special needs (disabled). The ranking of the respondents is presented in Table 1.

Table 1: *Assessment of the significance of individual factors*

Assessment of the significance of individual factors	Mean	Std. Dev.
13. Nontraditional treatment	3.63	1.093
15. Treatment of persons with special needs (disabled)	3.84	1.022
1. A stable political situation and a healthy legal system	3.9	1.136
7. Good infrastructure (close to major cities, highways, airports)	3,95	1.050
12. The similarity of culture	3,97	1.021
14. Availability of a place for rest (places for rest and relaxation)	4	1.008
8. Secured travel safety	4.25	0.858
2. A high standard of hospital accommodation	4.33	0.772
4. Accreditation of the institution	4.42	0.793
5. Confidentiality and privacy guaranteed	4.42	0.902
10. Treatment speed abroad	4.52	0.665
6. Doctor's Recommendation	4.55	0.813

9. After treatment assistance	4.59	0.738
3. High quality care	4.6	0.658
11. Cost savings	4.6	0.736

Source: *Authors' calculations*

In the following text, a socio-economic character of respondents of medical tourism services users is given.

The first factor analyzed is the **Stable Political Situation**. Based on the previously presented classification, the respondents considered this factor less significant, with the mean value 3.88 and standard deviation of 1.136. Of the total number of respondents, 37% rated this factor with grade 5; 30% with grade 4 and 21.9% with grade 3, which accounts for the 89% of respondents. Only 11% of respondents rated the Stable Political situation with grades 1 and 2. The obtained value indicates that respondents value the most the quality of the service. On the other hand, providers, travel agencies or doctors who organize patient departures, medical tourism service providers, have concluded contracts with clinics in countries where the stability of the state and the political system is not in question. Thus, patients pay less attention to this factor and direct their attention to the medical service itself. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In the sample of 365 examinees, 50.7% were female respondents (185). Of this number, 37.8% rated this factor with grade 5 and for them this factor is considered to be the most significant, 29.7% rated with grade 4 and 18.9% rated with grade 3. We conclude that women rated this factor with grade 3.86. When it comes to men, 36.1% rated this factor with grade 5, 30.6% with grade 4 and 25% with grade 3. Finally, men rated this factor with grade 3.89. The Hi 2 test was carried out to determine the existence of a statistically significant difference in respondents' responses. Hi 2 has the value of 6,368 (df = 4), and $p = 0,173$, which indicates that there is no significant difference in the attitude of the respondents regarding this factor. ***Therefore, men and women do not differ by the evaluation of this factor.*** b) In the sample of 365 respondents, 41.1% has an income from 2000 to 4000 euros; 32.9% between 4001-6000 euros; 13.7% less than 2000 euros and 12.1% more than 6000 euros. The category of respondents with income from 2000 to 4000 euros rated with grade 3.67 this factor; respondents with a salary of 4001-6000 euros with grade 4.04; respondents with incomes less than 2,000 euros with grade of

4.2 and finally respondents with income of more than 6000 euros rated the significance of this factor with grade 4.10. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 39.92$ ($df = 16$), at $p = 0.001$. *We conclude that the category of respondents with the lowest and highest income have evaluated the significance of this factor with the highest grade when choosing a destination for a medical tourism service.* c) Of the total number of respondents, 12.3% have finished college or a higher school; 30.1% bachelor's degree; 34% bachelor's degree; 10.95% have master's degree or PhD and 15.1% of respondents have finished primary school. Respondents with a college or a higher school rated this factor with grade 3.89; respondents with a bachelor's degree with 3.72; high school respondents with 3.76; master's degree or PhD with 4.20. Finally, respondents with primary school graded this factor with 3.36. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 66.458$ ($df = 20$) and $p = 0.000$. *We conclude that respondents with the highest level of education evaluated the significance of this factor with the highest grade.*

The second factor analyzed is the **High standard of hospital accommodation**. Based on the previously presented classification, the respondents considered this factor as less significant, with mean value of 4.30 and standard deviation of 0.772. Of the total number of respondents, 49.3% rated this factor with grade 5; 31.5% with grade 4 and 19.2% with grade 3. The obtained value confirms the hypothesis that the respondents value the quality of the service most. As we have shown in the previous analysis the political situation is less important, but the accommodation is especially important, that is, patients pay more attention to this factor and direct their attention to the medical service itself. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In the sample of 365 examinees, 50.7% were female respondents (185). Of this number, 45.9% rated this factor with grade 5 and considered this factor the most significant, 32.4% grade 4, and 21.6% rated it with grade 3. We conclude that women rated this factor with grade 4.24. When it comes to men, 52.8% rated this factor with grade 5, 30.6% with grade 4 and 16.7% with grade 3. Finally, the men rated the significance of this factor with grade 4.36. Hi2 test has the value of 2,133 ($df = 2$), and $p = 0,344$, which indicates that there is no significant difference in the attitude of the respondents regarding this factor. *Therefore, men and women do not differ in the evaluation of this factor, but its significance is highly*

appreciated. b) The category of respondents with income from 2000 to 4000 euros rated this factor with grade 4.33; respondents with a salary of 4001-6000 euros with grade 4; respondents with incomes less than 2,000 euros rated this factor with grade 4.4 and finally respondents with incomes greater than 6000 euros rated this factor with grade 4.01. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 41.68$ ($df = 8$), at $p = 0.000$. ***We conclude that the categories of respondents with the lowest income of <2000 euros and the next group of 2000-4000 euros have evaluated the significance of this factor with the highest grade when choosing a destination for medical tourism service.*** c) Respondents with a college or a higher school rated this factor with grade 4.33; respondents with a bachelor's degree with grade 4.14; respondents with bachelor's degree with grade 3.88; master's degree or PhD with grade 4.33. Finally, respondents with primary school rated this factor with 4.45. The Hi2 test showed that respondents differ statistically in their grades. $Hi2 = 49.126$ ($df = 10$) and $p = 0.000$. We conclude that there is a statistically significant difference in the attitude of the respondents regarding the importance of this factor. We conclude that respondents with the lowest level of education and the highest grade have evaluated the significance of this factor with the highest grade, which is in correlation with the earlier crosstab analysis. The low level of income is also conditioned by very high expectations when it comes to the quality of hospital accommodation. They expect the top service in response to the allocated funds (and the share of allocations of funds for this purpose in their income is high, given the low incomes).

The third factor analyzed is **High quality of care**. Based on the previously presented classification, this factor was considered very significant by the respondents, with a mean value of 4.60 and a standard deviation of 0.658. Of the total number of respondents, 69.9% rated this factor with grade 5; 20.5% with a grade 4 and 9.6% with grade 3. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In the sample of 365 examinees, 50.7% were female respondents (185). Of these, 73% rated this factor with grade 5, 16.2% with grade 4, and 10.8% with grade 3. We conclude that women rated this factor with grade 4.62. When it comes to men, 66.7% rated this factor with grade 5, 25% with grade 4 and 8.3% with grade 3. Finally, men rated this factor with grade 4.43. Hi2 test has the value of 4,529 ($df = 2$), and $p = 0,104$, which indicates that there is no significant difference in the attitude of the

respondents regarding this factor. ***Therefore, men and women do not differ in the evaluation of this factor, but its significance is highly appreciated.*** b) The category of respondents with income of 2000 to 4000 euros rated this factor with grade 4.66; respondents with a salary of 4001-6000 euros with grade 4.67; respondents with incomes of less than 2,000 euros with grade 4.4 and finally respondents with incomes greater than 6000 euros with grade 4.43. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 50,009$, $df = 8$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes of 2000-4000 and 4001-6000 euros have evaluated the significance of this factor with the highest grade when choosing a destination for medical tourism service.*** c) Respondents with a college or a higher school rated this factor with grade 4.33; respondents with a bachelor's degree with grade 4.63; respondents with a high school with grade 3.53; master's degree or PhD with grade 4,67. Finally, respondents with primary school rated this factor with grade 4.55. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 54,046$ ($df = 10$) and $p = 0,000$. We conclude that there is a statistically significant difference in the attitude of the respondents regarding the importance of this factor. ***The low level of income is also conditioned by very high expectations when it comes to the quality of hospital accommodation. They expect the top service in response to the allocated funds.***

The fourth factor analyzed is **Secured travel safety**. Based on the previously presented classification, this factor was graded as the one with moderate significance with a mean value of 4.25 and a standard deviation of 0.858. Of the total number of respondents, 47.9% rated this factor with grade 5; 31.5% with grade 4; 19.2% with grade 3 and 1.4% with grade 1. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In the sample of 365 examinees, 50.7% were female respondents (185). Of these, 56.8% rated this factor with grade 5, 29.7% with grade 4, and 13.5% with grade 3. We conclude that women rated this factor with grade 4.43. When it comes to men, 38.9% rated this factor with grade 5; 33.3% with grade 4 and 25% with grade 3. Finally, men rated the importance of this factor with a grade of 4.03. Hi2 test has the value of 17,876 ($df = 3$), and $p = 0,00$, indicating that there are significant differences in the attitude of the respondents regarding this factor. ***Therefore, men and women differ according to the evaluation of this factor, i.e. women attach greater importance to this factor.*** b) The category of

respondents with income of 2000-4000 euros rated this factor with grade 4.30; respondents with income of 4001-6000 euros with grade 4.29; respondents with incomes less than 2,000 euros with grade 4.10 and finally respondents with income of more than 6000 euros with grade 4.01. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 59,732$, $df = 12$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes of 2000-4000 and 4001-6000 euros have evaluated the significance of this factor with the highest grade.*** c) Respondents with a college or a higher school rated this factor with grade 4.44; respondents with a bachelor's degree with grade 4.41; respondents with a high school with grade 4; master's degree or PhD with grade 4.50.; respondents with primary school with grade 4.27. The Hi2 test showed that respondents differ statistically in their grades. $Hi2 = 39.168$ ($df = 15$) and $p = 0.001$. ***We conclude that there is a statistically significant difference in the attitude of the respondents regarding the importance of this factor. We conclude that the significance of the given factor is also higher as the level of education increases.***

The fifth factor analyzed is **Confidentiality and privacy guaranteed**. Based on the previously presented classification, the respondents considered this factor as of moderate significance, with a mean value of 4.38 and a standard deviation of 0.902. Of the total number of respondents, 60.3% rated this factor with grade 5; 23.3% with grade 4; 12.3% with grade 3 and 4.1% with grades 1 and 2. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In the sample of 365 examinees, 50.7% were female respondents (185). Of this number, 56.8% rated this factor with grade 5, 29.7% with grade 4 and 13.5% with grade 3. We conclude that women rated this factor with grade 4.51. When it comes to men, 38.9% rated this factor with grade 5; 33.3% with grade 4 and 25% with grade 3. Finally, men rated the importance of this factor with grade 4.25. The Hi2 test has a value of 12.227 ($df = 3$) and $p = 0.000$, indicating that there is a statistically significant difference. b) The category of respondents with income of 2000-4000 euros rated this factor with grade 4.47; respondents with a salary of 4001-6000 euros with a grade 4.46; respondents with incomes of less than 2,000 euros with grade 4 and with incomes over 6,000 euros with grade 4.32. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 61,340$, $df = 16$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes of 2000-4000***

and 4001-6000 euros evaluated the significance of this factor with the highest grade when choosing a destination for medical tourism service.

c) Respondents with a college or a higher school rated this factor with grade 4.44; respondents with a bachelor's degree with grade 4.9; respondents with high school with grade 4.28; master's degree or PhD with grade 4.50; respondents with primary school with grade 4.27. The Hi2 test showed that respondents differ statistically in their grades. $Hi2 = 39.168$ ($df = 15$) and $p = 0.001$. ***We conclude that the significance of the given factor is also higher as the level of education increases.***

The sixth factor analyzed is **Accreditation of the institution**. Based on the previously presented classification, the respondents considered this factor as of moderate significance, with a mean value of 4.42 and a standard deviation of 0.793. Of the total number of respondents, 57.5% rated this factor with grade 5; 30.1% with grade 4; 11% of respondents with grade 3. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In the sample of 365 examinees, 50.7% were female respondents (185). Of this number, 64.9% rated this factor with grade 5, 21.6% with grade 4 and 10.8% with grade 3. We conclude that women rated this factor with grade 4.46. When it comes to men, 50% rated this factor with grade 5; 38.9% with grade 4 and 11.1% with grade 3. Finally, men rated this factor with grade 4.39. The Hi2 test has a value of 17.402 ($df = 3$) and $p = 0.001$, indicating that there is a statistically significant difference. b) The category of respondents with an income of 2000-4000 euro rated this factor with grade 4.50; respondents with a salary of 4001-6000 euros with grade 4.46; respondents with incomes less than 2,000 euros with grade 3.3 and finally respondents with incomes over 6,000 euros with grade 4.20. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 34,883$, $df = 12$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes of 2000-4000 and 4001-6000 euros evaluated the significance of this factor with the highest grade when choosing a destination for medical tourism service.*** c) Respondents with a college or a higher school rated this factor with grade 3.22; respondents with a bachelor's degree with grade 4.45; high school respondents with grade 4.4; master's degree or PhD with grade 4,67; respondents with primary school with grade 4.55. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 82.002$ ($df = 15$) and $p = 0.000$. ***We conclude that the significance of the given factor is also higher as the level of education increases.***

The seventh factor analyzed is the **Doctor's Recommendation**. Based on the previously presented classification, the respondents considered this factor as highly significant, with a value of 4.38 and a standard deviation of 0.813. Of the total number of respondents, 68.5% rated this factor with grade 5; 20.5% with grade 4; 8.2% with grade 3. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

c) In the sample of 365 examinees, 50.7% were female respondents (185). Of this number, 70.3% rated this factor with grade 5, 18.9% with grade 4 and 10.9% with grade 3. We conclude that women rated this factor with grade 4.59. When it comes to men, 66.7% rated this factor with grade 5; 22.2% with grade 4 and 5.6% with grade 3. Finally, men rated this factor with grade 4.47. The Hi2 test has a value of 14.001 (df = 4) and $p = 0.007$, indicating that there is a statistically significant difference. b) The category of respondents with income of 2000-4000 euros rated this factor with grade 4.27; respondents with a salary of 4001-6000 euros with grade 4.54; respondents with incomes less than 2,000 euros with grade 4.7 and finally respondents with income over 6,000 euros with grade 4.09 significance of this factor. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 41,110$, (df = 16), at $p = 0.001$. *We conclude that the categories of respondents with income of 4001-6000 euros and those with less than 2000 euros evaluated the significance of this factor with the highest grade when choosing a destination for medical tourism service.* c) Respondents with a college or a higher school rated this factor with grade 4.67; respondents with a bachelor's degree with grade 4.59; respondents with high school with grade 4.36; master's degree or PhD with grade 4.50 and primary school respondents with grade 4.73. The Hi2 test showed that respondents differ statistically in their grades. $Hi2 = 73.222$ (df = 20) and $p = 0.001$. *We conclude that students with high school and primary school tend to listen more to the advice of their doctor.*

The eighth analyzed factor is **Good Infrastructure**. Based on the previously presented classification, this factor was assessed by the respondents as less significant, with a value of 3.9 and a standard deviation of 1.05. Of the total number of respondents, 37% rated this factor with grade 5; 28.8% with grade 4; 23.3% with grade 3 and 11% with grades 1 and 2. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 respondents, women rated this factor with grade 4.05. Finally, men rated the importance of this factor with grade 3.75. The Hi2 test has a value of 12.105 (df = 4) and $p = 0.017$, indicating that there is a statistically significant difference. b) The category of respondents with income of 2000-4000 euros rated this factor with grade 3.93; respondents with a salary of 4001-6000 euros with grade 3.92; respondents with incomes less than 2,000 euros with grade 3.9 and finally respondents with income of more than 6,000 euros with grade 3.8. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 62.674$, $df = 16$), at $p = 0.000$. ***We conclude that all categories of respondents rated the significance of this factor with a low grade.*** c) Respondents with a college or a higher school rated this factor with grade 4; respondents with a bachelor's degree with grade 3.9; respondents with a high school with grade 3.84; master's degree or PhD with grade 4; primary school respondents with grade 3.91. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 82.02$ (df = 15) and $p = 0.000$. ***We conclude that there is a statistically significant difference in the attitudes of the respondents regarding the importance of this factor, although all the respondents assessed the significance of this factor with very low grades.***

Nine analyzed factor is the **Speed of treatment abroad**. Based on the previously presented classification, the respondents considered this factor as highly significant, with a mean value of 4.52 and a standard deviation of 0.665. Of the total number of respondents, 60.3% rated this factor with grade 5; 32.9 with grade 4; 6.9% with grades 2 and 3. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 respondents, women rated this factor with grade 4.46. Finally, men rated this factor with grade 4.58. The Hi 2 test was carried out to determine the existence of a statistically significant difference in respondents' responses. The Hi2 test has a value of 10,767 (df = 3) and $p = 0,013$, indicating that there is a statistically significant difference. b) The category of respondents with income of 2000-4000 euro rated this factor with grade 4.50; respondents with income of 4001-6000 euros with grade 4.58; respondents with incomes less than 2,000 euros with grade 4.20 and finally respondents with more than 6,000 euros with grade 4.32. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 46,237$, $df = 12$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes of 2000-4000 and 4001-6000 euros evaluated the significance of this factor with the***

highest grade when choosing a destination for medical tourism service.

c) Respondents with a college or a higher school rated this factor with grade 4.67; respondents with a bachelor's degree with grade 4.55; respondents with a high school with grade 4.56; master's degree or PhD with grade 3.83; primary school respondents with grade 4.64. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 107,300$ ($df = 15$) and $p = 0,000$. ***We conclude that there is a statistically significant difference in the attitude of the respondents regarding the importance of this factor. Contrary to expectations, respondents with lower levels of education evaluated the significance of this factor with the higher grade.***

The tenth factor analyzed is the **Similarity of Culture**. Based on the previously presented classification, this factor was assessed by the respondents as having small significance, with a mean value of 3.97 and a standard deviation of 1.021. Of the total number of respondents, 41.1% rated this factor with grade 5; 24.7% with grade 4; 24.7% with grade 3 and 9.6% with grade 2. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 subjects, women rated this factor with grade 3.89 while men with grade 4.06. The Hi2 test has a value of 24,015 ($df = 3$) and $p = 0,000$, indicating that there is a statistically significant difference.

b) The category of respondents with income of 2000-4000 euros rated this factor with grade 4.07; respondents with a salary of 4001-6000 euros with grade 3.83; respondents with incomes less than 2000 euros with grade 4.7 and respondents with incomes greater than 6000 euros with grade 3.45. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 70,949$, ($df = 12$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes less than 2000 evaluated the significance of this factor with the highest grade when choosing a destination for a medical tourism service.***

c) Respondents with a college or a higher school rated this factor with grade 4.56; respondents with a bachelor's degree with grade 3.73; respondents with high school with grade 4.08; master's degree or PhD with grade 3.33; primary school respondents with grade 4.09. The Hi2 test showed that respondents differ statistically in their grades. $Hi2 = 133.142$ ($df = 15$) and $p = 0.00$. ***We conclude that the significance of this factor decreases among those with higher education.***

Eleven analyzed factor is **Nontraditional Treatment**. Based on the previously presented classification, the respondents considered this factor less significant, with an average value of 3.63 and a standard deviation of 1.093. Of the total number of respondents, 27.7% rated this factor with grade 5; 34.7% with grade 4; 35.6% with grade 3 and 12.3% with grades 1 and 2. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 respondents, women rated this factor with grade 3.59 while men rated the importance of this factor with grade 3.67. The Hi2 test has a value of 20.380 (df = 4) and $p = 0.000$, indicating that there is a statistically significant difference. b) The category of respondents with income from 2000 to 4000 euros rated this factor with grade 3.63; respondents with income of 4001-6000 euros with grade 3.54; respondents with incomes of less than 2,000 euros with grade 4.2 and finally respondents with incomes above 6000 euros with grade 3.11. Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 78,344$, $df = 16$), at $p = 0,000$. *We conclude that the categories of respondents with incomes less than 2000 evaluated the significance of this factor with the highest grade when choosing a destination for a medical tourism service.* c) Respondents with a college or a higher school rated this factor with grade 4.11; respondents with a bachelor's degree with grade of 3.5; respondents with a high school with grade 3.64; master's degree or PhD with grade 2,83; primary school respondents with grade 3.91. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 131.409$ (df = 20) and $p = 0.000$. We conclude that there is a statistically significant difference in the attitude of the respondents regarding the importance of this factor. We conclude that all subjects evaluated this factor as not significant.

The twelfth analyzed factor is the **Availability of a place to rest**. Based on the previously presented classification, the respondents considered this factor as moderate, with mean value 4 and standard deviation of 1.008. Of the total number of respondents, 38.4% rated this factor with grade 5; 34.2% with grade 4; 17.8% with grade3 and 9.5% with grades 1 and 2. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 women rated this factor with grade 3.84 and men with grade 4.17. The Hi2 test has a value of 11.709 (df = 4) and $p = 0.02$, indicating that there is a statistically significant difference. b) The

category of respondents with income of 2000-4000 euros rated this factor with grade 4.03; respondents with a salary of 4001-6000 euros with grade 3.96; respondents with incomes of less than 2,000 euros with grade 4.30 and finally respondents with incomes above 6000 euros with grade 3.56. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 103,753$, $df = 16$), at $p = 0,000$. ***We conclude that the categories of respondents with income of more than 4001-6000 euros assessed with the lowest grade the significance of this factor when choosing a destination for the medical tourism service. The value obtained indicates that the respondents are consuming a medical service, and for tourism purposes they choose other destinations, regardless of this stay.*** c) Respondents with a college or a higher school rated this factor with grade 4.33; respondents with a bachelor's degree with grade 4.82; respondents with a high school with grade 3.92; master's degree or PhD with grade 3; primary school respondents with grade 4.45. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 138.275$ ($df = 20$) and $p = 0.000$. ***We conclude that with the higher level of education, there is growing indifference towards this factor and it would certainly not be decisive when deciding on the use of medical tourism services in a country.***

Thirteen analyzed factor is **Treatment of persons with special needs**. Based on the previously presented classification, the respondents considered this factor less significant, with a mean value of 3.84 and a standard deviation of 1.022. Of the total number of respondents, 30.1% rated this factor with grade 5; 35.6% with grade 4; 24.7% with grade 3 and 9.5% with grades 1 and 2. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 respondents, 50.7% were female respondents (185). We conclude that women rated this factor with grade 3.68 and men with grade 4. The Hi2 test has a value of 32.972 ($df = 4$) and $p = 0.000$, indicating that there is a statistically significant difference. b) The respondent category with income of 2000 to 4000 euros rated this factor with grade 3.63; respondents with a salary of 4001-6000 euros with grade 4.04; respondents with incomes less than 2,000 euros with grade 4.20 and finally respondents with income over 6000 euros with grade 3.46. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 74,024$, $df = 16$), at $p = 0,000$. ***We conclude that the categories of respondents with income from 2000-4000 and those with more than 6,000 euros assessed with the lowest grade the significance***

of this factor when choosing a destination for the medical tourism service. c) Respondents with a college or a higher school degree rated this factor with grade 4.22; respondents with a bachelor's degree with grade 3.59; respondents with a high school grade with grade 3.96; master's degree or PhD with grade 2.50; primary school respondents with grade 4.45. The Hi 2 test showed that respondents differ statistically in their grades. $Hi_2 = 146.596$ ($df = 20$) and $p = 0.001$. ***We conclude that as the level of education increases, the significance of the analyzed factor decreases.***

The fourteenth factor analyzed is **After treatment assistance**. Based on the previously presented classification, this factor was assessed by the respondents as very significant, with a mean value of 4.59 and a standard deviation of 0.738. Of the total number of subjects, 69.93% rated this factor with grade 5; 21.9% with grade 4; 6.8% with grade 3. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained:

a) In a sample of 365 respondents, 50.7% were female respondents (185). We conclude that women rated this factor with grade 4.62 and men with grade 4.56. The Hi_2 test has a value of 6,031 ($df = 3$) and $p = 0,1100$, indicating that there is no statistically significant difference. b) The category of respondents with income of 2000-4000 euros rated this factor with grade 4.67; respondents with a salary of 4001-6000 euros with grade 4.67; respondents with incomes of less than 2000 euros with grade 4.6, and finally respondents with a salary above 6000 euros with grade 4.33 significance of this factor. The Hi_2 test shows that there is a statistically significant difference between the subjects: $Hi_2 = 60,372$, ($df = 12$), at $p = 0,000$. ***We conclude that the categories of respondents with income from 2000-4000 and 4001-6000 euros and those with a higher income of 6000 euros evaluated the significance of this factor with the highest grade when choosing a destination for a medical tourism service.*** c) Respondents with a college or a higher school degree rated this factor with grade 4.56; respondents with a bachelor's degree with grade 4.59; respondents with high school with grade 4.52; master's degree or PhD with grade 4,67; primary school respondents with grade 4.73. The Hi_2 test showed that respondents differ statistically in their grades. $Hi_2 = 40.659$ ($df = 15$) and $p = 0.00$. ***We conclude that all categories of respondents value this factor highly.***

The fifteenth factor analyzed is **Cost savings**. Based on the previously presented classification, the respondents considered this factor as very

significant, with the median value of 4.6 and the standard deviation of 0.736. Of the total number of respondents, 71.2% rated this factor with grade 5; 20.5% with grade 4; 8.2% with grades 3 and 1. The crosstab analysis of the analyzed factor with variables of gender, income and education has been performed and the following values were obtained: a) In a sample of 365 respondents, women rated this factor with grade 4.61 and men with grade 4.61. The Hi2 test has a value of 6.651 ($df = 3$) and $p = 0.084$, indicating that there is no statistically significant difference. b) The category of respondents with income of 2000-4000 euros rated this factor with grade 4.60; respondents with a salary of 4001-6000 euros with grade 4.75; respondents with incomes less than 2,000 euros with grade 4.30 and finally respondents with incomes above 6000 euros with grade 4.44. The Hi2 test shows that there is a statistically significant difference between the subjects: $Hi2 = 43,299$, $df = 12$), at $p = 0,000$. ***We conclude that the categories of respondents with incomes of 2000-4000 and 4001-6000 euros evaluated the significance of this factor with the highest grade when choosing a destination for a medical tourism service.*** c) Respondents with a college or a higher school degree rated this factor with 4.; respondents with a bachelor's degree with grade 4.73; respondents with a high school with grade 4.72; master's degree or PhD with grade 3.17; primary school respondents with grade 4.64. The Hi 2 test showed that respondents differ statistically in their grades. $Hi2 = 162.064$ ($df = 15$) and $p = 0.00$. ***We conclude that respondents with the highest level of education evaluated the importance of the given factor with the lowest grade.***

Conclusion

There is no doubt that medical tourism attracts particular attention in the countries of Eastern Europe as one aspect of additional income in GDP. It is still developing as a separate branch in tourism with a surprising trend of growth and development in the world due to demographic changes and the emergence of an increasingly elderly population in developed countries, which creates the demand for health tourism services. Although health tourism relates exclusively to the elderly, more and more young people are using these services, especially in the area of medical tourism (aesthetic surgery and sex change). As a rapidly growing branch of tourism, countries with medical tourism potential must respond quickly and adopt development strategies and laws that will regulate this highly sensitive activity. The Republic of Serbia does not have the clearest vision in the development of medical tourism. For now, due to the low

prices of hospital and medical services in Serbia, health tourism is developing and in the last couple of years it has registered positive results. The results of the research show that respondents highly value the institution itself and the medical service. Thus, for the selection of a country or institution for medical services these are the most important factors: High standard of hospital accommodation (4.30); Accreditation of the institution (4.42); Confidentiality and privacy guaranteed (4.38); Treatment speed abroad (4.52); Doctor's Recommendation (4.53); After treatment assistance provided (4.59); High quality care (4.6) and Cost savings (4.6). The answers provided indicate that culture, infrastructure, good rest, or non-medical content were not so important to patients. The results of the research show that the respondents have graded with the lowest rating the following facts: Nontraditional treatment, Treatment of persons with special needs (disabled), Stable political situation and healthy legal system, Good infrastructure (proximity to major cities, highways, airports ...) and Similarity of culture. Factors that the respondents considered most important were: Doctor's Recommendation, After treatment assistance, High quality care and Cost saving. We conclude that the most important thing in the decision making process is the quality of the service that the patients can receive at the best possible price. Cross section analysis of all analyzed questions with sex, level of education and income of the respondents was performed. It is interesting that medical tourism is a mix of tourism and medicine, and according to respondents, we can conclude that the country-related parameters play a very small role in deciding on the destination of the service. The state-of-the-art medical services are offered in the larger cities of Serbia and Vojvodina, but at prices that are considerably below the prices in the country of origin of service users. All this confirms the thesis that the medical service is "a premium quality service at the third world countries' prices". The above answers indicate that users of these services are consumers with a more significant patient orientation than that of tourists. Patients stay briefly, tourist facilities are less important to them, they come for the intervention itself, the quality of service and prices are important to them.

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