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**THEMATIC
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**UNIVERSITY OF KRAGUJEVAC
FACULTY OF HOTEL MANAGEMENT
AND TOURISM IN VRNJAČKA BANJA**



PHYTOTHERAPY FROM THE ASPECT OF SPA TOURISM

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Abstract

The subject of this research is the knowledge of the properties of medicinal herbs and their use by tourists from Vrnjacka Banja. The aim of the research is to examine the connection between knowledge of spa tourists about medicinal herbs and the possibility of their usage in everyday life. A prospective study is done using a survey questionnaire, that contains three groups of variables: demographic data, knowledge of the properties and use of medicinal herbs. The research has shown that the respondents are best acquainted with the healing properties of fruits and vegetables. As for the use of medicinal herbs (such as tea or fruits), most of the respondents use them periodically, while being healthy. After they get sick, the respondents under 50 years of age, start their treatment by combining medicinal herbs with the medicines from pharmacy, whereas the elder ones above 50 years of age, address the problem by going to their chosen doctor.

Key Words: *phytotherapy, spa tourism*

JEL classification: *M14*

Introduction

Medical tourism is a growing component of the tourist offer. Medical tourism is to be profiled according to the needs of market, as well as complex relationships including economic, social and political factors. Millions of tourists from developed countries are becoming beneficiaries of these tourist services, starting from wellness tourism (Smith, 2008), to complex medical services that are most often offered by countries with lower levels of economic development and hence lower prices (Horowitz,

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2007). It is clear that the medical and health service market is being globalized and that patients and users of these services can satisfy their needs in various places, without having geographical or any other constraints (Horowitz, 2007).

Bearing in mind the importance of health tourism, it is clear that the development and diversification of Serbia's tourist offer should include this component as well. On the other hand, there remains an open question about the direction, that is, the component of health tourism that needs to be taken into consideration. The problem of the health tourism development is complex, and, as already mentioned, it covers a wide range of possible services.

Traditional medicine takes a significant place and large number of countries have made significant steps in trying to define the legal framework as well as experience in the regulation of this supplementary or alternative medical branch (World Health Organization, 2005). Experience in different countries (Choi, S. K., & Kim, H. K., 2005, Lam et al., 2011, Kazemi 2008) has shown that it is possible (Chokevivat & Chuthaputti, 2005) to use the principles of traditional treatment procedures in the area of promoting or creating new tourist services. Phytotherapy and modern medicine based on the use of medicinal herbs are of great importance, both in modern medicine practice in the most developed countries (Parada et al. 2009, Rosa 2012), and as a component of traditional medical procedures in many countries of the world (Mills & Bone , 2000). Knowledge of the properties of medicinal plants and their use by the tourists of Vrnjacka Banja was chosen for the purpose of this research.

Based on this, the goal of the research was also profiled: the perception of the connection between the knowledge of the tourists of Vrnjacka Banja about medicinal herbs and the possibilities of its application in everyday life (Phytotherapy).

Medical health tourism is a type of tourism that includes, primarily, therapeutic and wellness segment, which is associated with the movement of tourists on their own initiative in a special resort areas that has all the necessary resources, the main purpose of the trip at the same time is any form of health improvement combined with recreation and end fun (Vetitnev & Kuskov, 2010).

Also, medical health tourism is defined as an active movement of the individual beyond the permanent place of residence having an impact on their health benefit and physical development (Vetitnev, 2011). According to the definition of the famous German scientist W. Nahrstedt (2004), medical health tourism includes local and foreign tourist visits to the balneological resorts and others by changing their permanent residence and provides them with health programs under their personal responsibility and as a rule by paying privately. Dr. Aris Ikkos (2002) believes that medical health tourism is associated mainly with thermal tourism and visits to the mineral springs for medicinal purposes. This kind of tourism is characterized by the strong natural-resource orientability. The natural resources of medical health tourism include mineral water, therapeutic mud, climatic resources, etc.

Benefits of using wellness are multiple, starting from muscle relaxation after manual massage that leads to pain relief and elimination of stress through vasodilatation which increases the tissue oxygenation which then leads to the better functioning of all organs and thus the whole organism. In case of simultaneous application of natural healing factors such as thermo-mineral waters, wellness represents a complex and holistic form of prevention which can be obtained as a product in spa resort (Artinović et al., 2012).

In the context of meteoroprofilax, health tourism is one of the key methods of preventing general, as well as specific illnesses, through a set of treatments such as air baths, UV-rays, inhalation with negative ions, etc. (Živanović & Manojlović, 2016). Thanks to these resources some of the most popular spa resorts in the world function. Modern medical health tourism is developing dynamically in almost all countries around the world with the recreational conditions available for it. According to the results of research, by a consulting firm McKinsey & Company (2016), the annual turnover of funds in this area in 2012 grew to \$ 100 billion, and the total number of customers amounted to approximately 800 million people. Medical health tourism share from the global GDP was 1.8% in 2012. According to a report presented at the Global Wellness Tourism Congress, the tourism sector will grow on average by 9.9% per year, which is almost two times higher than the tourism industry as a whole, and will reach \$ 678.5 billion by 2017 which is 16% of the total income from tourism. Nowadays the global medical health tourism centers are situated in the Asian-Pacific Region (58 countries and territories). According to the data presented at the Global Spa & Wellness

Summit, by 2017, 50% of the medical health tourism market will be situated in the Middle East, Asia and Latin America. Countries like India, Hungary, Mexico, Singapore, Thailand, Barbados, Brazil, Israel, South Korea and Turkey are among the ten countries that are leading in the number of tourists from medical and health sector. European and North American residents are the main consumers of medical tourism services. Japan, USA, Germany, France and Austria take up 63% of the world market in this segment (Medical Travel Today, 2013).

The modern destination of health tourism should include the following elements: a regular health institution and /or one that practices alternative medicine using professional staff, various therapies and treatments with healing water, mud or some other natural healing factor, adequate rooms for these purposes, open and closed water surfaces , various beauty treatments, various types of massages, high level hospitality, tourist services, authentic spa architecture, natural ambience with arranged green areas in a peaceful environment without traffic, noise and pollution, specialized restaurants, fitness, sports and recreation activities, cultural and entertainment events , animation and other leisure-time activities and attractions for visitors, in order to make the tourist stay and experience at the destination more pleasant (Milićević & Živanović, 2015) .

Alternative medicine is the fundamental method used by humans to preserve their health and avoid diseases since the dawn of time. It is an alternative for those who live far from medical facilities, in places where there are no physicians. Even where there are physicians, people still take the lead in their own health care. Alternative medicine can also be defined as the continuity of traditions, religious beliefs, and even quackery that non-specialists practice in many ways to treat people. Ordinary people provided with clear and simple information can prevent and treat many common health problems in their homes, which can stop maladies earlier and provide cheaper treatment.

By approaching the third millennium, and with the tremendous progress that we witness in the standard of technology and research in different sciences, especially in medicine, people still believe in complementary medicine as being safer and cheaper than conventional medicine. It has a great public demand and grows in popularity, especially in the Old World, but even in the developed countries like the United States (US Government Printing Office, 1994), where it has become increasingly prevalent (Fontanarosa & Lundberg, 1997) and is making a steady

incursion into the health budget of Americans. Unconventional therapies are medical practices that are not known in teaching programs or in the systems of medical institutions (Eisenberg, 1997). These therapies have branched out in the last few years to include categories such as homeopathy, balneology, climatotherapy, chiropractice, acupuncture, and many psychotherapeutic treatments.

The different types of complementary, alternative, unconventional, and integrative medicine in the Old World include the historical, cultural, social, traditional, and philosophical aspects of the various civilizations that prevailed mainly in Asian, African, Far Eastern, Middle Eastern, and Arabian countries. Most of that kind of medicine continues to be practiced today. Many people realize that it takes into account not only the individual's physiological and biological conditions but it also includes the psychological, social, environmental, and even spiritual dimensions that may reveal the underlying factors contributing to illness.

In general, human organism has the need to maintain stable internal ambiance (body temperature, neurotransmission, physical and chemical balance) which is known as homeostasis. This term includes maintaining constant physiological conditions within cells, which are ensured by enzyme, hormone and neuron mechanisms, enabling normal metabolism, normal use of oxygen from atmosphere, appropriate food intake and normal secretion (Živanović, 2015).

The Old Egyptian "Pharaohs" medicine is the oldest and goes back to 4500 BC, as documented in papyrus sheets. The Egyptians were the first to perform surgery on the human body. They were also experts in embalming (mummification), using aromatics and herbs to help preserve flesh for thousands of years. They also used the infusion pump method to extract oils from aromatic plants to create incense, one of the oldest ways of using aromatics. Aromatherapy began in ancient Egypt, and the medical papyri are believed to date back to 1600 BC and contain remedies for all kinds of diseases. Egyptians used oils of sweet and delicate odor and scent extracted from flowers and pine trees. In addition, they used different types of salts and alabaster to esthetically improve the skin shape. They also produced creams that contain fruit acids (glycolic acid) from sugarcane, mango, apple, and other fruits that were used by women of the royal family and the rich. They also used sour milk, which contains lactic acid, to smoothen the skin. They used many herbs for treating diseases and in particular skin diseases, such as alopecia and skin

infections. You can indeed find the detailed concepts of the mega trends in wellness tourism in the literature, which fit into the mainstream philosophy of wellness and spa (Berg, 2008). These are health, the pursuit of longevity, individualization, the dominance of women in the spa, modern soulfulness and mobility of health tourists. The analysis of five key trends (megatrends) in spa tourism seems to be especially important in the context of innovation to spas (Abram & Kosińska, 2016). These include the trends: medi spa, beauty spa, wellness spa, ethno spa, eco spa. This shows that modern innovations in health service spa tourism should focus not only on the phenomenon of wellness, but also on the use of advanced medical technology and cosmetic therapeutic tourism. In addition, you should “make use” of an innovative way with the elements of the culture, traditions and folk medicine in the resorts, in a larger scope than it was previously used in ecology. This document will try to answer the question of whether there exists, and to which extent, the culture of application of herbs (Phytotherapy) in the everyday life of spa tourists.

Methodology

A prospective study has been conducted using a survey questionnaire that contains three groups of variables: demographic data, knowledge of the properties and the use of medicinal herbs. The questionnaire was compiled according to a structured interview method, using closed type of questions, which contained replies based on the 3-point and 5-point Likert scale. The survey of tourists from Vrnjacka Banja was being carried out from July to September 2017. Randomly selected sixty-two respondents who visited Vrnjacka Banja during the mentioned period had participated in the survey. The respondents filled in questionnaires in the pleasant ambience of Vrnjacka Banja restaurant patios in the presence of interviewers (the face-to-face method). A database was created in Excel, descriptive and analytical statistics were made using the Excel Data Analysis package. Within the descriptive analysis framework, descriptive statistics were made, and within the frame of analytical statistics, t-tests of two unequal variation samples (t-Test: Two-Sample Assuming Unequal Variances) were made.

Results and discussion

The survey involved more women (37) than men (25), as indicated by the parameters of descriptive statistics - the average value is 1.4, the standard error is 0.06; standard deviation is 0.49; median and mod have the same

value: 1 (for females). In terms of sex, the observed sample is asymmetrical (0.404), shifted to the right, pointing out the fact that the percentage of female respondents (59.68%) is higher than those of male (40.32%), as shown in Table 1. The average age value of the respondents from the observed sample is 55.48 years. Standard error is 1.93; standard deviation is 15.18. The average age of respondents is 58 years (medians), predominated by 55-year olds (mod). The youngest respondent is 18, and the oldest one is 82 years old. The age pattern is asymmetrical (- 0.633), shifted to the left, indicating the fact that a larger number of respondents are over 58 years of age, as shown in Table 1. The biggest number of respondents have the secondary vocational education - 35, which is 56.45%; university and academic education- 19, which amounts to 30.65% and elementary education - 6, which is 9.68%, as indicated by the parameters of descriptive statistics - the average value is 3.15, the standard error is 0.09; standard deviation is 0.72; median and mod have the same value - 3. In terms of education, the observed sample is asymmetrical (0.769), shifted to the left, indicating that the majority of respondents have secondary vocational education, as shown in Table 1. When it comes to estimating their own material living condition, the majority of respondents opted for the options "moderate" (46.77%), and "good" (40.32%), resulting in an average score 3.55; the standard error being 0.097, and the standard deviation 0.76. Median is 3.5 and mod is 3. In terms of self-estimated material living condition, the observed sample is slightly asymmetrical (- 0.169), shifted to the left, indicating the fact that the major number of respondents opted for options "moderate" and "good", as well as "very good" (9.68%), as shown in Table 1. The majority of respondents live in the city (43.55%) and the suburban area (32.26%), as indicated by the parameters of descriptive statistics - the average value is 1.81, the standard error is 0.1, the standard deviation is 0.81, the median is 2 (suburban settlement), and the mod is 1 (city). In terms of the respondents' habitat, the observed survey sample is asymmetrical (0.371), shifted to the right, indicating the fact that the larger number of respondents live in the city and suburban area, while 24.19% of the respondents live in the village, as shown in Table 1. Majority of respondents come from Central Serbia (43.55%), Western Serbia (17.74%), Vojvodina (14.52%), Southern Serbia (12.9%) and Eastern Serbia (11.29%), as indicated by the parameters of descriptive statistics - the average value is 2.9, the standard error is 0.15, the standard deviation is 1.18; the median and mod have the same value: 3. In terms of where they come from, the observed sample is slightly asymmetrical

(0.131), shifted to the right, indicating that the majority of respondents come from Central Serbia, as shown in Table 1.

Table 1: *Values for parameters of descriptive statistics of DEMOGRAPHIC DATA of the respondents*

Descriptive statistics values	Sex	Age	Vocational Education	Material Living Condition	Habitat	Place where they come from
Mean	1,403226	55,48387	3,145161	3,548387	1,806452	2,903226
Stand. Error	0,062808	1,927664	0,091543	0,096686	0,102426	0,150286
Median	1	58	3	3,5	2	3
Mode	1	55	3	3	1	3
Stand. Deviat.	0,49455	15,17844	0,72081	0,761306	0,806504	1,18335
Samp. Varianc	0,24458	230,385	0,519566	0,579588	0,650449	1,400317
Kurtos.	-1,8988	0,041284	1,056735	1,058923	-1,36249	-0,47669
Skewn.	0,404408	-0,63343	-0,76857	-0,16851	0,370968	0,131418
Range	1	64	3	4	2	4
Minim.	1	18	1	1	1	1
Maxim.	2	82	4	5	3	5
Sum	87	3440	195	220	112	180
Count	62	62	62	62	62	62

Sources: *Authors*

Statistically, there is no significant difference in the survey participation between: female and male respondents, older than 50 and younger than 50, with high school and academic degrees, moderate and very good material living conditions, the ones living in the city and the ones living in the village, as well as those coming from Central Serbia in relation to those coming from Vojvodina, which indicates a properly selected sample of respondents. Based on the analyzed parameters of descriptive statistics of respondents' demographic data, we get the profile of an average respondent: a woman, 55.48 years of age, secondary vocational education, moderate material living condition, living in the city in Central Serbia. In terms of using medicinal herbs (tea, fruit), the majority of respondents opted for the options "occasionally, when I am healthy" (43.55%), "only when I get sick" (33.87%), and "daily" (22.58%), as indicated by the parameters of descriptive statistics - the middle value is 2.11, the standard error is 0.095, the standard deviation is 0.75; the median and mod have the same value: 2 ("occasionally, when I am healthy"). In terms of using medicinal herbs (tea, fruit), the observed sample is slightly asymmetrical (-0.189), shifted to the left, which indicates the fact that the majority of respondents opted for option 2, as shown in Table 2.

In answering the question “my family members’ usage of medicinal herbs”, most of the respondents opted for the option “occasionally, when they are healthy” (46.77%), “only when they’re sick” (43.55%), and “daily” (9.68%), as indicated by the parameters of descriptive statistics - the middle value is 2.34; the standard error is 0.083, the standard deviation is 0.65, the median and mod have the same value: 2 (“occasionally, when they are healthy”). In answering the question “when do my family members use medicinal herbs”, the observed sample is slightly asymmetrical (-0.473%), shifted to the left, indicating the fact that the majority of respondents opted for option 2, as shown in Table 2. Interestingly, family members of the respondents use medicinal herbs more “occasionally, when they are healthy” (46.77%), whereas only 43.55% of the respondents do that. Also, the respondents’ family members use medicinal herbs more “only when they get sick” (43.55%) in comparison to 33.87% of the respondents doing that. The respondents use medicinal herbs more “daily” (22.58%), while only 9.68% of respondents’ family members do that. The analysis of the use of medicinal herbs has shown that respondents have more developed culture of daily use (preventively), whereas respondents’ family members have a more developed culture of using medicinal herbs when they get sick (Phytotherapy). In terms of knowing medicinal properties of garlic, the majority of respondents (56.45%) opted for option 4 – “all above-mentioned” (“natural antibiotic, lowers blood pressure, enhances organism’s resistance to colds”); “lowers blood pressure” (17.74%); “natural antibiotic” (16.13%) and “enhances organism’s resistance to colds” (9.68%), as indicated by the parameters of descriptive statistics - the middle value is 3.06; standard error rate is 0.15, standard deviation is 1.19, the median and mod have the same value: 4 (“all above-mentioned”). In terms of knowing medicinal properties of garlic, the observed sample is asymmetrical (-0.738), shifted to the left, indicating the fact that the majority of respondents opted for the option 4, as shown in Table 2. In answering the question of knowing medicinal properties of onion, the majority of respondents (58.06%) opted for option 3 – “all above-mentioned” (“enhances organism's resistance to colds, improves blood circulation”); “improves blood circulation” (25.81%) and “enhances organism’s resistance to colds” (16.13%), as indicated by the parameters of descriptive statistics - the middle value is 2.42; standard error is 0.1, standard deviation is 0.76; median and mod have the same value: 3 (“all above-mentioned”). The observed sample is asymmetrical (-0.882) in relation to the knowledge of the medicinal properties of the onion, shifted to the left, indicating that the majority of respondents opted

for option 3, as shown in Table 2. In relation to the knowledge of the medicinal properties of onion, the observed sample is asymmetrical (-0,882), shifted to the left, indicating that the majority of respondents opted for option 3, as shown in Table 2. In terms of knowing the medicinal properties of fruits and vegetables, most of the respondents (77.42%) opted for option 3 – “all above-mentioned” (“contains a lot of vitamins and minerals, improves the resistance of the organism”); “contains a lot of vitamins and minerals” (19.35%) and “improves the resistance of the organism” (3.23%), as indicated by the parameters of descriptive statistics - the middle value is 2.58; standard error rate is 0.10, standard deviation is 0.801; median and mod have the same value: 3 (“all above-mentioned”). As far as the knowledge of medicinal properties of fruits and vegetables is concerned, the observed sample is asymmetrical (-1,461), indicating the fact that the majority of respondents opted for option 3, as shown in Table 2.

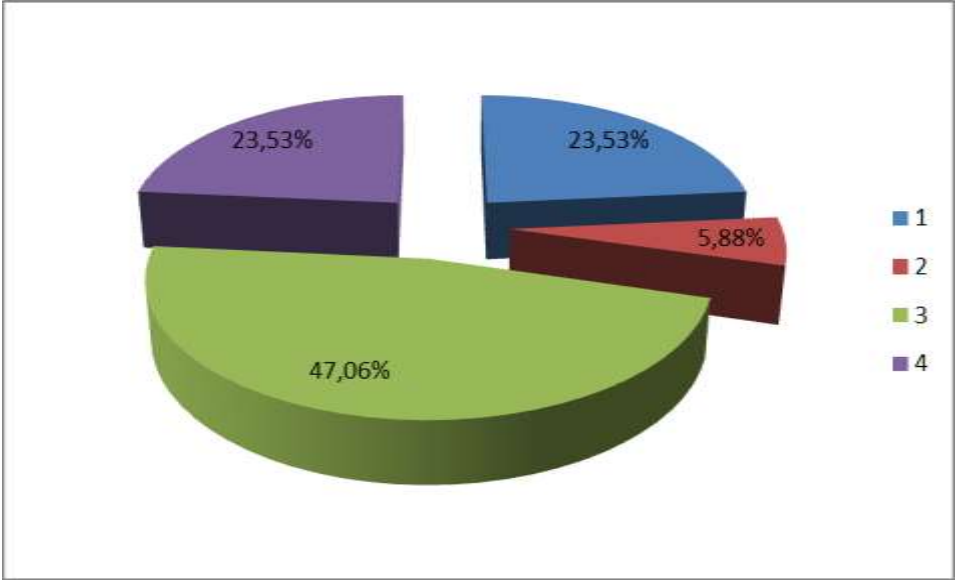
Table 2: *Values for the parameters of descriptive statistics of respondents' KNOWLEDGE OF PROPERTIES AND USE OF MEDICINAL HERBS*

Descriptive statistics values	Using of medicinal herbs (tea, fruit)	Family member's method of using medicinal herbs	Knowledge of medicinal properties of garlic	Knowledge of medicinal properties of onion	Knowledge of medicinal properties of fruits and vegetables	Method of starting the treatment after getting sick
Mean	2,112903	2,33871	3,064516	2,419355	2,580645	2,983871
Stand. Error	0,095107	0,082733	0,150569	0,096333	0,101674	0,149902
Median	2	2	4	3	3	3
Mode	2	2	4	3	3	4
Stand. Deviat.	0,748875	0,651444	1,185582	0,758523	0,800581	1,18033
Samp. Varianc	0,560814	0,424379	1,405605	0,575357	0,640931	1,393178
Kurtos.	-1,17006	-0,66098	-1,11546	-0,68513	0,220328	-0,95369
Skewn.	-0,18862	-0,47266	-0,73811	-0,88213	-1,46057	-0,77146
Range	2	2	3	2	2	3
Minim.	1	1	1	1	1	1
Maxim.	3	3	4	3	3	4
Sum	131	145	190	150	160	185
Count	62	62	62	62	62	62

Sources: *Authors*

The analysis of knowledge of properties of medicinal herbs has shown that the respondents have a solid knowledge in this area. The respondents are most familiar with: fruits and vegetables (77.42%), onion (58.06%) and garlic (56.45%). When it comes to increasing organism's resistance (to colds), most of the respondents believe that it is best enhanced by: onion (16.13%), garlic (9.68%), and fruits and vegetables (3.23%). In answering the question “after getting sick, I begin my treatment with...”, the majority of respondents (46.77%) opted for option 4; “I contact my chosen doctor; I combine medicinal herbs and medicines from the pharmacy (25, 81%); medicinal herbs (20.97%) and medicines recommended by the pharmacist” (6.45%), as shown in Table 3, indicated by the parameters of descriptive statistics - the middle value is 2.98; standard error is 0.15, standard deviation is 1.18, the median is 3 (“combining medicinal herbs with medicines from pharmacy”), and the mod is 4. In terms of starting the treatment after getting sick, the observed sample is asymmetrical (-0,771), shifted to the left, indicating that the majority of respondents opted for option 4, as shown in Table 2.

Chart 1: *Method of starting the treatment for people under 50 years of age*

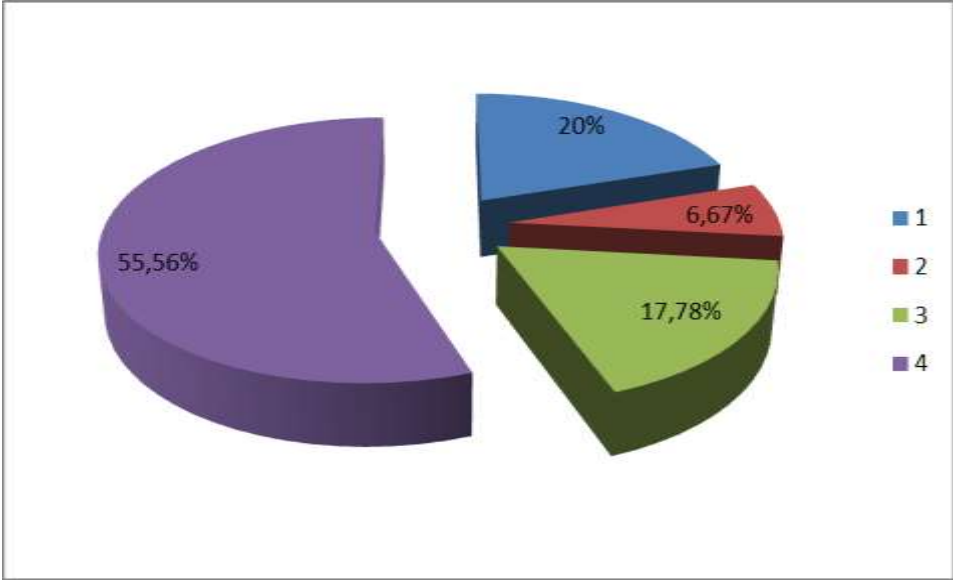


Source: *Authors*

In answering the question “after getting sick, I start my treatment with...”, most of the respondents under 50 (47.06%) opted for the option 3 – “I combine medicinal herbs with medicines from pharmacy and I turn

to my chosen doctor” (23.53%) “and the medicines my doctor recommends me” (5.88%), as indicated by descriptive statistics parameters - the middle value is 2.71; standard error is 0.27; standard deviation is 1,104; the median and mod have the same value: 3 (“combining medicinal herbs with medicines from the pharmacy”), as shown in Chart 1. In terms of starting the treatment after getting sick, the observed sample is asymmetrical (-0,595), shifted to the left, indicating that the majority of respondents opted for the option 3.

Chart 2: *Method of starting the treatment for people over 50 years of age*



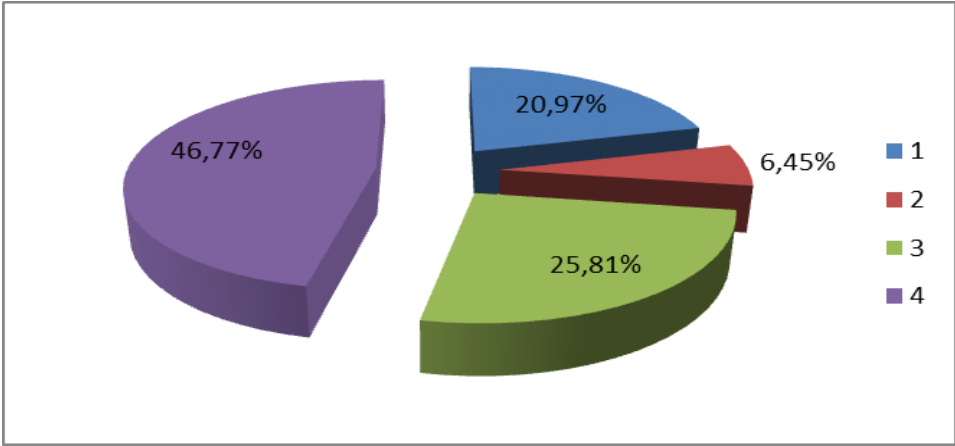
Source: *Authors*

In answering the question “after getting sick, I start the treatment with...”, the majority of respondents over 50 years of age (55.56%), opted for the option 4 – “I contact the chosen doctor”; “use medicinal herbs” (20%); “I combine medicinal herbs with the medicines from pharmacy (17.78%) and medicines recommended by the pharmacist” (6.67%), as indicated by the parameters of descriptive statistics - the middle value is 3.09; standard error is 0.18; the median and mod have the same value: 4 (“I contact my chosen doctor”), as shown in Chart 2. In terms of starting the treatment after getting sick, the observed sample is asymmetrical (-0,916), shifted to the left, indicating that the majority of respondents opted for the option 4.

The analysis has shown that, after getting sick, the respondents under 50 years of age start the treatment by combining medicinal herbs with

medicines from pharmacy, whereas those over 50 years of age contact the chosen doctor, in this case.

Chart 3: *Method of initiating treatment of the respondents*



Source: *Authors*

Statistically, there is no significant difference ($p_{Te} = 0,09 > 0,05$) in using medicinal herbs (tea, fruit) between the respondents who use it “occasionally, when they are healthy” and “only after getting sick” ($T_e = 7,07 < T_{t_{0,05}} = 12,71$, the degree of freedom 1).

Statistically, there is no significant difference ($p_{Te} = 0,2 > 0,05$) in using medicinal herbs by respondents’ family members between those using it “occasionally, when they are healthy, and those using them “daily” ($T_e = 1,39 < T_{t_{0,05}} = 12,71$, the degree of freedom 1).

Statistically, there is no significant difference ($p_{Te} = 0,2 > 0,05$) in knowing medicinal properties of garlic, between the given options “all above-mentioned” and “enhances organism’s resistance to colds” ($T_e = 1,37 < T_{t_{0,05}} = 12,71$, the degree of freedom 1).

Statistically, there is no significant difference ($p_{Te} = 0,18 > 0,05$) in knowing medicinal properties of onion between the given options “all above-mentioned” and “enhances organism’s resistance to colds” ($T_e = 1,61 < T_{t_{0,05}} = 12,71$, the degree of freedom 1).

Statistically, there is no significant difference ($p_{Te} = 0,25 > 0,05$) in knowing medicinal properties of fruits and vegetables between the given

options “all above-mentioned” and “enhances organism’s resistance to colds” ($T_e = 0,98 < T_{t0,05} = 12,71$, the degree of freedom 1).

Statistically, there is a significant difference ($p_{Te} = 2E-36 < 0.01$) between the age of respondents and methods of starting the treatment ($T_e = 27,15 > T_{t0,05} = 1,99$, the degree of freedom 62), as shown in Table 3.

Table 3: *Test for determining the significance in difference between the age of respondents and methods of starting the treatment.*

	Age	Method of starting the treatment
Mean	55,48387	2,983871
Variance	230,385	1,393178
Observations	62	62
Hypothesized Mean Difference	0	
df	62	
t Stat	27,15307	
P(T<=t) one-tail	2E-36	
t Critical one-tail	1,669804	
P(T<=t) two-tail	3,99E-36	
t Critical two-tail	1,998971	

Source: *Authors*

The analysis has shown that respondents under 50 years of age, after getting sick, start their treatment by combining medicinal herbs with the medicines from pharmacy, whereas those over 50 years of age contact their chosen doctor, in this case, which has been proven by the existence of statistically significant difference ($p_{Te} = 2E-36 < 0.01$) between the age of respondents and the methods of starting the treatment ($T_e = 27.15 > T_{t0,05} = 1.99$, the degree of freedom 62)

Conclusion

Based on the analyzed parameters of the descriptive statistics of the demographic data of the respondents, we get the profile of an average respondent: a woman, 56 years of age, of secondary vocational education, moderate material living conditions, living in the city in Central Serbia.

Statistically, there is no significant difference in the representation of participation in a survey between “male” and “female” respondents,

“under 50” and “over 50 years of age”, with “high school degree” or “academic degree”, “moderate” and “very good material living conditions”, the ones “living in the city” and the ones “living in the village”, as well as those “coming from Central Serbia” and those “coming from Vojvodina”, which indicates a properly chosen sample of respondents.

The analysis of knowing the properties of medicinal herbs has shown that the respondents have a solid knowledge in this area. The respondents are most familiar with medicinal properties of: fruits and vegetables (three quarters), onion (more than half), and garlic (more than half). When it comes to enhancing organism’s resistance (to colds), the majority of respondents believe that it is best enhanced by: onion (one fifth), garlic (one tenth), and fruits and vegetables (one twenty-fifth).

Interestingly, family members of the respondents use medicinal herbs more “occasionally, when they are healthy” (about half), whereas less than half of respondents do that. Also, family members of the respondents use more medicinal herbs “only after getting sick” (slightly less than half), compared to just over a third of respondents. Respondents use medicinal herbs more “on a daily basis” (slightly more than one fifth), whereas it is the case with one tenth of the family members of respondents.

The analysis of using medicinal herbs has shown that the respondents have more developed culture of everyday use (preventively), whereas the family members of respondents have more developed culture of using medicinal herbs “after getting sick” (Phytotherapy), proving that the alternative medicine is an art of offered choices, or several options, that exist and function outside the ordinary medical practice or system of any country or culture. The styles and methods being used are complementary, holistic and they tend to stimulate natural self-healing process and self-regulation of physical abilities (www.archdermatol.com, 2012).

The analysis has shown that respondents under 50 years of age, after getting sick, start their treatment by combining medicinal herbs with the medicines from pharmacy, whereas the ones over 50 years of age, contact their chosen doctor in this case, as evidenced by the existence of statistically significant differences. The results of this research will be a starting point for a new study that will try to answer the question of

whether there is a potential to include Phytotherapy into the health tourism corpus in Serbia.

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