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SOCIO-PSYCHOLOGICAL ASSUMPTIONS OF THE INHABITANTS IN THE KLIS AREA FOR THE USE OF MEDICINAL HERBS AND HERBAL PREPARATIONS

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Abstract

Because of the diverse climate in Croatia, it has been recorded a large number of medicinal and aromatic species (herbs). In recent times, regardless of the place of residence, inhabitants are increasingly turning to a healthier lifestyle and the use of medicinal herbs, and therefore today there are many products placed on the market but of different quality based on the latter on. The aim of this study was to test attitudes and behaviour related to the use of medicinal plants and herbal products of the Klis area. The results showed that Klis inhabitants possess mediocre knowledge about the usage of medicinal herbs. They consider that treatment with natural preparations is effective, and they get the most information about the use of medicinal herbs through friends and the Internet. Generally, they do not collect plants in nature, and the most consumed are teas and other preparations. This preliminary research can be exploited for the more extensive research on a given topic, when introducing and popularizing new products on the market.

Key words: medicinal herbs, herbal preparations, attitudes and behaviours, Klis.

INTRODUCTION

Today, between 160 and 170 indigenous, medicinal and aromatic plant species are collected and cultivated in Croatia (Šiljković and Rimanić, 2005). Because of the diverse climate, in our country is growing a large number of medicinal and aromatic herbal species. Most of these species have been recorded off the coast and on islands. The use of medicinal herbs for the medical purposes requires products that are not contaminated with pesticides and similar substances (Roša, 2010).

The greatest practical application of medicinal herbs in human life was encouraged by the Charlemagne (742 - 814); in his work "Capitulare de villis" he described the instructions for farming of such plants. Also, the Benedictines during the 6th century had started to grow medicinal species (Kolak, et al., 1997). In terms of the Franciscan medicine, the beginnings of the herbal medicine are traced in neighbouring Herzegovina in the 13th century and such practice lasted to the beginning of the 20th century. The Franciscans used various books, codices and pharmaceutical supplies from Italy and the Republic of Dubrovnik (Mandić and Tomić, 2020).

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Grlić (1990) cited in Krželj and Vitasović Kosić (2020) quotes experiences from times of scarcity and world wars that has shown that people have often died of hunger without paying attention and without knowing of the available source of food, i.e., the wild plants. In the modern period, man returns to the collection of wild plants due to the popularization of "healthy diet" (Krželj and Vitasović Kosić, 2020). The time of harvesting medicinal herbs should coincide with the period when the plant has the highest content of active ingredients. Usually are picked: flowers, leaves, fruits, seeds, bark, rhizome, roots, tubers or bulbs (Kantoci, 2009).

In the struggle for survival set in unfavourable conditions, for instance because of the lack of water or nutrients in the soil and unfavourable climatic conditions, plants produce secondary bioactive metabolites, and that may have positive implications and to reduce the risk of various diseases (Skandamis, 2001., cited in Jurica et al., 2018).

The use of medicinal herbs needs to be constantly encouraged, and knowledge about it must be passed on to the future generations. There is also literature data on the creditable implementation of some projects, such as "Folk medicine-With the use of medicinal herbs to health" where preschool children are introduced to the diversity and application of medicinal herbs (DV Budućnost, 2002). Although the inhabitants of the City of Klis in the modern times due to the enhanced way of life are less attached to nature and plants, as well as the majority of residents in larger Croatian cities, recently, more and more of them are trying to return to the natural lifestyle and make the usage of medicinal plants. Therefore, the aim of this paper was to investigate the attitudes and behaviours of respondents related to the use of medicinal plants and herbal products in the Klis area.

MATERIALS AND METHODS

Area characteristics

The Klis municipality is situated in the coastal micro-region of the Split - Dalmatia County (SDŽ). Klis is best known for its fortress. Klis is 5 km away from Split, and when seen from Split, the top of Klis acts as a cliff where the Kozjak mountain massif stretches from the west and Mosor mountain from the east side. When observing the climatic conditions of the municipality of Klis area, such conditions can be divided and pertained to coastal and hinterland areas. During the vegetation period, prevail the small amounts of precipitation, and the majority of arable soils in the Zagorje (hinterland) area are located on karst-limestone substrates. In the Zagorje area of the Klis municipality, sub-Mediterranean deciduous vegetation is widespread (Development Strategy of the Klis Municipality, 2014-2020).



Figure 1. Research area.

(Source: <https://www.openstreetmap.org/>)

Survey research

Survey research was used as a source of collecting primary data during the preparation of the paper. Professional and scientific publications and papers were used for the obtaining of secondary data. The aim of the survey was to examine attitudes and behaviours of respondents related to the use of medicinal herbs and herbal preparations in the Klis area. The survey was conducted during the second half of 2020 on a sample of 40 respondents (35 % men and 65 % of women) originating from Klis area. The age structure of the sample was as follows: respondents up to 20 years of age (5 %), from 20 to 30 years (27,5 %), from 30 to 40 years (25 %), from 40 to 50 years (12,5 %), from 50 up to 60 years (12,5%), 60-70 years (7,5 %) of respondents and those of more than 70 years of age (10 %) of respondents. In terms of level of education, the sample structure would be as follows: the percentage of respondents with the primary school (10 %); those with the secondary education (32,5%), higher education (20%), and those with the university degree amounts 37,5 %. Processed data are expressed as percentages (%). Statistical data processing was performed using the SPSS 14 program for the Windows interface.

RESULTS AND DISCUSSION

In Table 1 are presented the results of the attitudes and behaviour of the respondents related to the use of herbs and herbal preparations on the Klis area.

Ord. number	Questions	Offered answers	Replies (%)
1.	From where do you get information about the use of medicinal herbs?	a) books b) friends and acquaintances c) the Internet	a) 25,0 b) 35,0 c) 40,0
2.	Do you collect medicinal herbs for your own use?	a) very often b) occasionally c) almost never	a) 25,0 b) 27,5 c) 47,5
3.	Do you use herbal preparations from herbalists and alternative doctors?	a) very often b) occasionally c) almost never	a) 30,0 b) 47,5 c) 22,5
4.	What types of herbal preparations do you use the most?	a) teas / brews / stews b) tinctures c) compresses	a) 75,0 b) 17,5 c) 7,5
5.	Do you find treatment with herbal remedies expensive?	a) distinctly b) mediocre c) insufficient	a) 30,0 b) 60,0 c) 10,0
6.	Do you think that treatment with the herbal medicines is effective?	a) distinctly b) mediocre c) weak	a) 65,0 b) 27,5 c) 7,5
7.	Do you think that the Dalmatian karst climate has enough medicinal plants for harvesting and use?	a) distinctly b) mediocre c) insufficient	a) 82,5 b) 15,0 c) 2,5
8.	Do you think that the wild medicinal herbs originating from our (Mediterranean) climate are more effective in treatment than the medicinal herbs of continental cultivation?	a) distinctly b) mediocre c) a little	a) 65,0 b) 27,5 c) 7,5
9.	Do you think that the inhabitants of Klis have enough knowledge about the use of medicinal herbs?	a) distinctly b) mediocre c) a little	a) 2,5 b) 57,5 c) 40,0
10.	Do you own professional and popular literature on the use of medicinal herbs?	a) a lot b) mediocre c) a little	a) 15,0 b) 30,0 c) 55,0
11.	Do you order herbal medicines from the European countries?	a) very often b) occasionally c) almost never	a) 7,5 b) 17,5 c) 75,0
12.	Do you use herbal cosmetics?	a) very often b) often c) sometimes	a) 25,0 b) 20,0 c) 55,0

13.	Did you know that your ancestors more often used medicinal herbs?	a) yes b) no c) I don't know	a) 75,0 b) 5,0 c) 20,0
14.	Have you attended workshops or expert gatherings on the use of medicinal herbs?	a) very often b) occasionally c) almost never	a) 2,5 b) 25,0 c) 72,5
15.	Are you satisfied with the offer of products, based on medicinal herbs, on the Croatian market?	a) distinctly b) mediocre c) weak	a) 22,5 b) 60,0 c) 17,5

- Two-fifths of respondents obtain information about the use of medicinal herbs from the Internet, while a third of them find out such information's from friends.
- Slightly less than half of the inhabitants of Klis almost never collect medicinal herbs for their own use, while a quarter of them do so only occasionally, and only 25% of respondents do so very often.
- The largest number of respondents, slightly less than a half, use herbal preparations from herbalists and alternative doctors, while a third of respondents do so very often.
- To the greater extent, the respondents use teas, and only one fifth of the respondents also use tinctures.
- The largest number of respondents, three fifths of them, think that treatment with herbal medicinal preparations is moderately expensive, but slightly less than one third of the respondents consider that it is very expensive.
- Two-thirds of the respondents think that the treatment with herbal medicinal preparations is extremely effective, and a quarter of the respondents perceive that the mentioned treatment is only moderately effective.
- More than 80% of respondents believe that the Dalmatian karst climate has enough quantity of medicinal plants for harvesting and usage.
- More than 65% of respondents believe that medicinal plants of the Mediterranean climate are by far more effective than medicinal plants applied to the continental cultivation.
- Two-fifths of respondents believe that the inhabitants of Klis have scarce knowledge about the use of medicinal herbs, while slightly less than three-fifths of them believe that the inhabitants have herbal mediocre knowledge, respectively.
- Slightly more than half of the respondents have little literature sources on the use of medicinal herbs, while a third of them possess a moderate amount of literature.
- Three-quarters of respondents almost have never ordered any of the herbal medicines from the European countries, while 17,5% of the surveyed respondents orders them from time to time.
- A quarter of the respondents very often use cosmetic preparations based on medicinal herbs: one fifth of them do it very often, and sometimes more than half of the respondents (55 %) use them.

- Three-quarters of the respondents believe that their ancestors used medicinal herbs more often, while one fifth of the respondents do not know whether their ancestors did so.
- The majority of respondents almost have never attended workshops or conferences on the use of medicinal plants. However, occasionally do attend them the quarter of the respondents.
- Slightly more than a fifth of all of the respondents are extremely satisfied with the offer of products based on preparations of medicinal herbs placed on the Croatian market. Three-fifths of the respondents is averagely satisfied, but 17,5 % of them are not satisfied with the above mentioned.

It should be emphasized that in the course of the last decade there has been a growing interest in the production, processing, use and marketing of medicinal plants in Europe, as well as in our country (Kolak et al., 2002).

The man has never really abandoned the use of wild plants and collect it today as it has in the time of poverty and hunger when it has been a means of survival, and such knowledge is transmitted from generation to generation (Krželj and Vitasović Kosić, 2020).

Similar research by Dorbić et al. (2018) showed, for the example that Knin residents are looking to supplement to their own diet with herbs and their products. They get the most information about it through the use of the Internet. The most popular herbal preparation is tea. These products are poorly ordered with the use of Internet and is considered that residents of Knin have limited knowledge on the use of medicinal herbs. Some other research done by Dorbić et al. (2019) showed that the respondents also highly evaluate mint and chamomile teas, which are traditionally used in the Klis area as well.

Natural, i.e., ecologically acceptable cosmetics are becoming more and more popular and represented on the market today, with the great potential for growth (Malenica and Dorbić, 2014).

Although medicinal and aromatic herbs are intensively used in food and cosmetics industry, one of the most important applications of these herbs is found in the pharmaceutical industry (Jašić et al. 2014, cited in Dorbić et al. 2015).

CONCLUSION

In recent times, even more residents are inclining to a healthier lifestyle and consequently reach out for the use of medicinal herbs. Therefore, this research was conducted and it was found that the residents of Klis acquire the most information about the use of medicinal herbs throughout the Internet and from their friends. They generally do not collect plants in nature. Most of them sporadically seek the services of herbalists. They mostly use tea as a form of herbal preparation. They are also convinced that treatment with the natural medicinal preparations is effective. The Klis's residents have only a mediocre or little knowledge of the use of medicinal herbs. Only occasionally do they use some of the herbal preparations. They are moderately satisfied with the offer based on medicinal herbs on our market. They believe that their ancestors used medical herbs to a greater extent.

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