



Original Contribution

THE ATTITUDES OF THE BULGARIAN CITIZENS TO ALTERNATIVE MEDICINE METHODS

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ABSTRACT

The purpose of the study was to research the attitudes of the Bulgaria citizens to alternative medicine methods among students at the Medical university in the city of Varna and administrative personnel - working people who are under a risk of professional diseases.

Methods

Randomly selected Bulgarian citizens were interviewed and divided in two groups: Group A – 129 students from the medical university of Varna age 18 to 30 years old and Group B – 121 people working in the in the administrative departments age 31 to 66 years old.

Results

The 37,2% of the people from Group A and 52, 1% of the people in group B were aware of the essence of the methods of the alternative medicine. The 62% of the students and the 75,2% of the administrative personnel thought that alternative methods used in the countries from the East are protecting and preventing diseases. The actual personal experience in using those methods in both groups was very low –below 10% for Group A and below 25% for Group B.

Conclusions

Bulgarian citizens are still not informed enough for the non-conventional methods and their application which needs to be directed in informing, educating and more practical work towards the targeted groups.

Key words: non-conventional methods, medical students, administrative personnel

INTRODUCTION

A decreased physical activity and participation in sports activities during leisure time is observed among all age groups in the population worldwide. The estimated decrease in the physical activity also is one of the leading factors for chronic diseases. Although the medical estimate and the thesis that the optimal physical activity is a one of the tools for preventing from diseases and supports the longevity, the percentage of people who are actively doing sports is still low. The decreased level of physical activity arising from the modern lifestyle justifies that the problem of the overall treatment of the chronically ill people is becoming more relevant too probably

due to the changing age structure of the population towards aging and the chronic polimorbidity.

The medical science now days affirm the holistic approach as the most effective for mentaining the health of an individual (1). Using this approach the effect is reflecting not only on the sytoms, the reason for the deseases but it also applies methods for profilactics (2).

A successful application of the holistic paradigm in the healthcare is only possible if there is a joint application of the established classical medicine and the alternative one. To support that, the World Health Organization specialists have designed a program for integrating the traditional folk medicine in the national healthcare systems (3).

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The essence of this integration is to store the authenticity of the healing practices that have proved its effectiveness and to arrange their legal and safe practice (4, 5). The experience of the countries in the East for centuries, the data collected during the last decades in the countries from the West along with results from clinical and health trials research and practice are witnessing with confidence the effect from the alternative medicine and often even in those cases where the traditional medical approach has been less effective or not effective (6).

In this regard the Bulgarian folk medicine is famous with its traditions for centuries which have started many years from now even before the foundation of the Bulgarian country (7-9). The Slavs, for example, have used healing properties of some trees - birch, pine, willow, come, linden, squat, clear. In the first documentaries for the usage of the herbal treatments in Bulgaria is described the treatment of pleurisy with willow, buckwheat and poplar. Bogomils were also famous for using alternative methods (10).

In the past century Bulgaria became famous with the research and the accomplishments in this area. Medical doctor Dimitar Paskov discovered the "galantamine" (alkaloid from the marsh snowdrop which is used in the treatment of poliomyelitis. There were also other new Bulgarian products based on plants (10-12).

The usage of herbs in the complex treatment is a method which refers to the non-conventional methods for the beneficial effects on the health of an individual. Based on the Bulgarian law those methods include: usage of non-medical products with an organic origin; usage of non-medical products with mineral origin; usage of non-traditional physical methods: homeopathy; acupuncture and acupressure; iris, pulse and auricular methods for diagnostic; diet and healing starvation (13).

There is a long list of the possible alternative methods offered and used in our country as part of the holistic approach. As part of that holistic approach there is an interest noticed in the following methods: Reflexotherapy, Shiatsu, Anmo, Acupressure, Su Jok, Cigun and others (5, 14-16). Those methods are used with a huge success in our country too. One of the most famous specialists in this field is Assoss. Prof. Zoya Goranova.

Despite the rich history of the country in the area of the non-conventional methods because of psychological, social, and other reasons the fact is that the Bulgarians don't have an established model for preventive care for their health. Bulgarians are not very convinced to use methods that are not recommended by medical staff and are not part of the traditional model for medical treatment. On the other hand, we can assume that the young people who have a lot of sources for information would have a more set approach for having a healthy lifestyle and would be more open for trying alternative methods for treatment (18).

This is especially relevant to the students from the medical university in Varna (MU-Varna) although in their education program of study those topics are not included. We believe that the medical personnel nowadays has to be educated in the methods of the alternative medicine so they can benefit from using them and also inform and direct their patients when applicable. To support that a University center for Alternative medicine was opened recently at the Medical University of Varna.

The purpose of the study was to research the attitudes of the Bulgarian citizens to alternative medicine methods among students at the medical university in the city of Varna and administrative personnel - working people who are under a risk of professional diseases. To achieve the goal an analysis for the level of information and the readiness for application of the methods of the alternative medicine among the medical students group and the group of people working in an administrative departments was conducted.

MATERIALS AND METHODOLOGY

The study is conducted in October and November 2018. Randomly selected Bulgarian citizens were interviewed and divided in two groups: Group A – 129 students from the Medical University of Varna age 18 to 30 years old and Group B people from administrative departments – 121 age 31 to 66.

The people from the administrative departments were selected to be part of the study mainly because of their daily routine which is connected with risks from decreased physical activity, bad postural habits because of their working posture. Probably those people will have problems with their locomotor system because of the prolonged time in the forced posture that requires their

work. This makes those people potential users of the methods of the alternative medicine which can lead to an improvement in their quality of life.

An interview protocol has been developed with sixteen questions, two of which have more than one possible answer. The questions have been designed for collecting information in the following fields:

- Socio-demographic characteristic of the included in the study subjects
- Awareness of the people in regards to the non-conventional methods (used in the Bulgarian folk medicine and the Eastern medicine)
- Attitudes towards the usage of these methods

In the development of the study quantitative methods were used to analyse the data.

Descriptive Analysis was used for describing the basic characteristics of the sample of the indicators included in the study. To compare the results X^2 analysis is used for determining the correlation between two values.

The results are presented in table and Microsoft Office (Word, Excel) is used. The data is processed and an IBM SPSS for Windows, v.19.0 software package for statistics is used.

RESULTS

Based on the data analysis we defined that both groups have a similar distribution by sex: Group A is $n=94(72\%)$, while in Group B is $n=88(72,7\%)$. The number of men in Group A is 35 (27,1%), while in Group B is 33 (27,3%) and there is no statically considerable difference between the groups that are part of the study.

The interviewed responders from Group A are almost half of all participants in the study ($n=129 - 51,6\%$). The interviewed responders from Group B, $n=121, 48,4\%$. which were interviewed are age 31 to 66 years old. The average age for all responders is 32,42 years. $SD=13,82$.

The results have been processed and we noticed that almost half of the interviewed people are not aware of the essence of the East medicine $n=139(55,6\%)$. From the rest who are aware in total 111, $n=48(37,2)$ are from Group A, and $n=63(52,1\%)$ are from Group B.

The primary sources for information for the sample are internet (47,2%), doctors' recommendations (29,2%), relatives and friends (17,6%) or the media (6%). The expected results for Group A were that the people are getting the information mostly from the internet (**Table 1**).

Table 1. The primary sources for information, presented for the different groups.

Which are your primary sources for information?"	Group A		Group B	
	n	(%)	n	(%)
Media	0	0	15	12,4
Recomended from the doctor	35	27,1	38	31,4
Internet	77	59,7	41	33,9
Relatives and friends	17	13,2	27	22,3
Total	129	100	121	100

Note: n-number; % - percent

The results from the crosstabs for awareness of both groups are statistically different (Pearson Chi-Square $p < 0,05$) and show that 48 (37,2%) from the interviewed from Group A are aware of the non - conventional methods and the East medicine while 81 (62,8%) are not informed. In Group B - 63 (52,1%) from the interviewed people are informed while 58 (47,9%) are not.

Those who are informed about the alternative medicine methods state that

they are used as an additional therapy in a number of disorders of the muscular skeletal system, oncological diseases, some neuro mental diseases, gynaecological diseases and others (headache, cold, allergies, endocrine diseases). There is no statistically significant difference in the responses of the two groups.

Majority of the total number of interviewed people $n=71(68,4\%)$ think that the alternative methods help preventing diseases. When comparing the

responses of the two groups there are statistically significant differences ($p < 0,05$) for Group A, $n=80$ (62%), and for Group B, $n=91$ (75,2%).

There is a statistically significant difference between the two groups in the responses of the question: "Do you think that those methods could be included in the whole treatment plan?". In Group A most of the people think that the non-

conventional methods and the East medicine can be included in the whole treatment plan, followed by the opinion of those who think that they can be used only in not very complicating cases. Most of the people from Group B think that the alternative medicine is applicable as an additional supportive therapy for any disease (**Table 2**).

Table 2. Rating of the non-conventional methods in the treatment plan presented in groups.

"Do you think that those methods could be included in the whole treatment plan?"	Group A		Group B	
	n	(%)	n	(%)
Yes for all diseases	7	5,4	27	22,3
Yes but only for not complicated cases	22	17,1	19	15,7
Yes but as an additional treatment	89	69	67	55,4
No	9	7	7	5,8
No response	2	1,6	1	0,8
Total	129	100	121	100

Note: n-number; % - percent

There is a difference in the motivation of the two groups for using the non-conventional methods as part of the treatment plan for a disease. When researched about their personal experience there were statistically significant

differences found between the two groups. Almost two thirds of Group A did not have any health issues which required using the alternative methods (**Table 3**).

Table 3. Motivatrion for choosing the non conventional methods and the East medicine by groups.

„Have you ever used the methods of the East medicine?“	Group A		Group B	
	n	(%)	n	(%)
Yes, my choice	15	11,6	28	23,1
Yes because they were recomnded by a medical doctor or a medical personel	5	3,9	10	8,3
No, because I didn't need to	94	72,9	68	56,2
No because I don't believe in those methods	9	7	5	4,1
No because they are not covered from the Health care unit	3	2,3	4	3,3
Other	3	2,3	6	5

Personal experience from using non-conventional methods was shared only by a few of responders. The biggest number of the interviewed people (8%) have experienced using the herbal therapy and massage, acupuncture 4%, acupressure -1,6%, homeopathy -2,4%, diet and healing starvation -1,2% as part of their treatment plan (**Figure 1**).

The most used methods in Group A - 5, 4% have used healing massage, 3,1% have used herbs as part of their treatment plan or as a prevention from diseases. In Group B - healing

massage has been chosen by 10,7% and 13,2% have used herbs.

An important role for the future of alternative medicine in Bulgaria will have the established attitudes of the participants in the study about the usage of non-conventional methods. The most important part in decision making for the interviewed people was the recommendation of their medical doctor and their personal experience. There are also statistically significant differences in the answers of both groups (**Figure 2**).

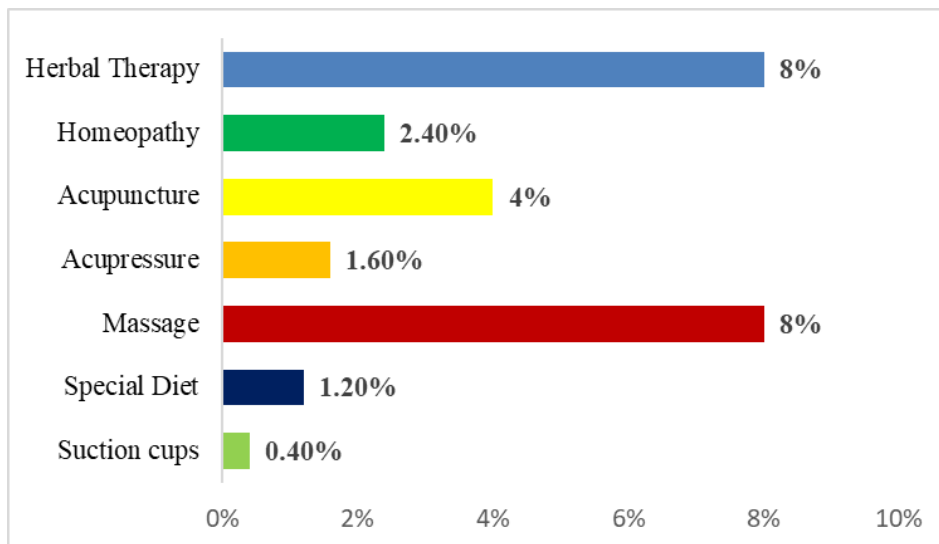


Figure 1. Percent distribution of the methods used by the surveyed people.

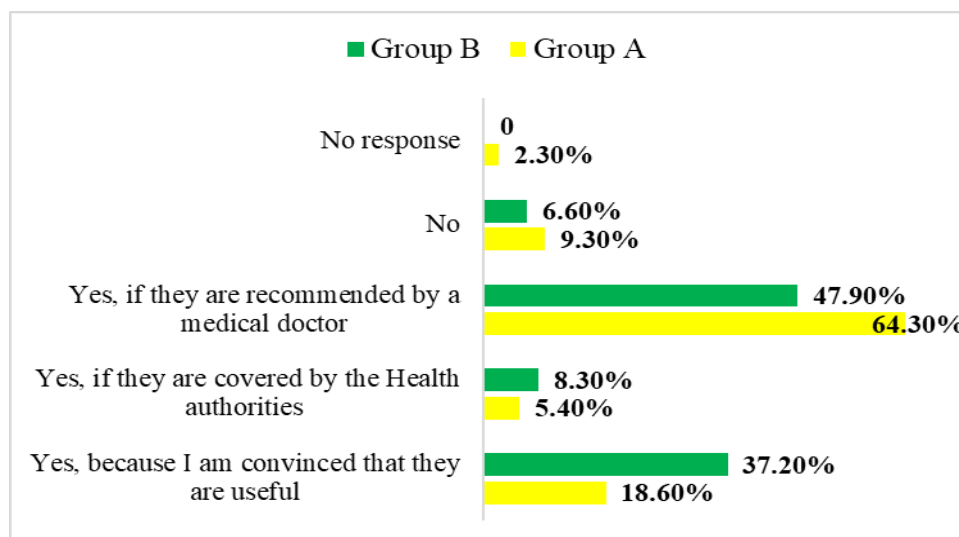


Figure 2. Trends in the usage of the non- conventional methods of the Medicine of the East in the future.

DISCUSSION

Although the young people from Group A who have access to modern sources of information only one third of the students are informed about the alternative methods, while in group B about a lit bit more than half of the people in the group were informed. The reason might be that young people still don't have any chronic diseases and that is why they are not interested in getting information about those methods of treatment.

The surveyed people who were part of this study didn't mention other alternative methods they have been exposed to which means that although there are specialists who use and apply those methods, the articles and the books that were published by Bulgarian authors have

not made those methods popular among the general population of the Bulgaria citizens yet.

On the other hand a research on the content of the curriculum of the medical students highlights that only the students who are studying physiotherapy have a few topics about the alternative medicine included in their curriculum.

The younger people from Group A would have used those methods mostly if recommended by a medical doctor.

The study showed that the most preferred methods are the herbal therapy and the massage therapies.

The interest in using herbal therapy is provoked by the long-lasting traditions and practice of the Bulgarian folk medicine. In Bulgaria, there are about 4100 plants out of which 770 (19%) are medical plants. About 200 medical plants are mostly used as a source for 270 different herbs which are used in the pharmacology, cosmetics, and perfume and food industries (7-9).

The healing massage is also widely used in Bulgarian folk medicine as an additional therapy for some diseases.

The conducted analysis showed that the hypothesis that the students from Medical University (Group A) are more informed and with more positive attitude towards using the alternative methods as a method for preventing diseases did not prove to be true.

It was expected that the people working in the administration departments despite the risk factors are also not informed and also react with caution and mistrust towards the alternative methods.

This is leading to the conclusion that both of the targeted groups need more additional interventions. There is a need of developing and applying a group training in the alternative medicine methods. The main reference points in the content of such training are: introducing the essence and the philosophy of the alternative methods, the law for human health and the regulations in the country, some practical applications of those methods as a prevention or if necessary as part of the complex treatment of the patients.

There is a need of developing a complete educational program which has to be interactive and could potentially be based partially as an on line course and partially as a practical course.

Group interventions could be applied and offered to the people from the administrative personnel too. They can be directed towards informing and also involving them in practical sessions too. The specialists from the University Center for Alternative medicine can be involved in the practical sessions. First, the potential users can be informed about the theory of the applied methods and afterwards the specialists from the Alternative medicine center can demonstrate some of the methods that can be used to reduce the risk factors

associated with the administrative personnel daily routine. It is possible also to offer group sessions with some suitable exercises at their work place too.

THE WEKNESSES OF THE STUDY

Until now there is now a study conducted to research the attitudes of the Bulgarian people towards the usage of non-conventional methods that go under the law for health and human regulation in the country and there is no data available to compare the results from this study.

This is a pilot study that includes a small number of participants and is addressing only the students from the Medical University of Varna and administrative departments in Varna too. There should be a follow-up and additional evaluation is needed.

CONCLUSIONS

Bulgarian citizens are still not informed enough for the non-conventional methods and their application. This trend is also true for young people. The interviewed people traditionally prefer methods from traditional folk medicine (herbal therapy and healing massage) than those used by traditional east medicine. Older people trust the east medicine methods more maybe because they rely more on their personal experience while the young people expect that the usage of those methods is recommended by medical personnel.

This conducts a necessity of prompt development and application of specialized educational programs for alternative methods.

Medical doctors still are not informing and are not directing the patients towards this additional possibility for treatment. The reasons are still not studied. The possibility to advertise the nonconventional methods is prohibited by the Bulgarian law and the only possibility to have those methods be more popular among the people might be to focus on the general practitioners who have direct contact with the people. It will be interesting to conduct a survey among them too and based on the results more effort to be put on informing the medical personnel towards the alternative methods and their positive effect on different diseases.

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