## ORIGINAL ARTICLE

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# THE STUDY OF THE MOTIVATIONS AND PREFERENCES OF CONSUMERS WHEN CHOOSING HERBAL MEDICINES FOR TREATING CARDIOVASCULAR DISEASES



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**Summary.** The article presents the results of a study of herbal medicines for the treatment of cardiovascular diseases. We studied the motivational preferences of consumers. To obtain representative data in the course of sociological research methods used the method of random sampling without repetitions.

Key words: herbal medicines, cardiovascular diseases, motivational consumer preferences, the poll.

**Introduction.** More than 59% of herbal medicines for the treatment of cardiovascular diseases (CVD) are prescription drugs vacation, which allows the public to buy their own. In this regard, we have studied the motivational preferences of consumers. To obtain representative data in the course of sociological research methods appropriate to use the method of random sampling bezpovtornoyi. Calculating the number of respondents was determined by the formula [1]:

$$n = \frac{t2*G*N}{\Delta*N+t2*G2}$$

where: n - sample size;

N – chyselnist the population;

 $G_2$ - dispersion or measure of dispersion investigated the features that characterize the deviation from the average values in the general population;

t – confidence coefficient (criterion of authenticity)  $(t=2 \text{ at } \Pi=0.95);$ 

N-maximal sampling error.

Thus, it was necessary to ask the 400 respondents to explore the regional market drugs Poland, used in CVD. Since the number of sample calculations we used the estimated number of degree choice and number of users for representative data we have arbitrarily increased [2].

**Results and discussion.** Sociological survey was carried out in different forms of ownership pharmacies, clinics and hospitals (87 hospitals and 104 pharmacy branches). As a

result of processing forms was compiled socio-demographic portrait of the consumer medicines CVD, which is used to treat cardiovascular diseases, presented in Table 1.

As the data presented in Table 1, the social-demographic profile of consumers of herbal medicines can be described as follows: more than half (62.5%) – are women, 37.5% – men.

The largest percentage were ages 45 to 55 years (31.6%) and over 55 (34.4%).

As the of data presented in Figure 1, the majority of respondents – pensioners, employees and workers. Far fewer visitors among pharmacy students and persons engaged in entrepreneurial activity.

In addition, it was found that the highest percentage of respondents were university graduates.

As the results of the analysis, most of those polled respondents with income value from 3 to 6 thousand UA.

Thus, as a result of the research found that the modern consumer -a woman, a resident of the city, aged 55 years and above, having higher education, the level of income - from 3.0 to 6.0 thousand UA. (Figure 1).

Next, we examined the motivations of consumers when choosing herbal medicines for the treatment of cardiovascular diseases.

According to respondents, approximately equal factors when buying herbal medicines is a reasonable price, therapeutic efficacy and minimal side effects.

Sacia domagraphic characteristics	Consumers with CVD		
Socio-demographic characteristics	quantity, people	specific weight, %	
Gender:			
males	188	37,5	
women	312	62,5	
Age:			
25 years	14	2,8	
25 to 35 years	67	13,4	
35 to 45 years	111	22	
45 to 55 years	136	27,2	
over 55 years	172	34,5	
Place of residence:			
city	338	67,7	
village	162	32	
Social status:			
servants	5	0,5	
Working	152	19,1	
students	95	2,8	
pensioners	14	35,1	
businessmen	176	10,4	
other	52	2,1	
Education:			
higher	211 58	42,2	
incomplete higher	17160	11,6	
specialized secondary		34,2	
education High school		12,0	
Income:			
less than 1500 UA.	76 198 206	15,3	
1500 to 3000 UA.	20	39,7	
3001 to 6000 UA.		41,3	
more than 6000 UA.		3.7	

Socio-demographic characteristics of consumers of herbal medicines used in the CVD





Fig.1. The socio-demographic profile of consumers of herbal medicines used in cardiovascular diseases [3]

Half of the respondents in the consumer use of medicinal plants in the treatment process water extraction prefer: infusions, decoctions. Almost a third of respondents uses plant material in the form of tinctures. No more than 10% of visitors prefer pharmacies liquid extract or novogalenovyh drugs even fewer respondents – extracts oil and other dosage forms. Most respondents (70.3%) buy herbs in pharmacies. In the questionnaire for consumers has been given 64 names, of which the dominant (75.1%) were 30 plants and their products (Table 2).

As a result of studies, we found that patients with cardiovascular disease using a limited range of drugs that is probably due to insufficient awareness of the drug or its high cost [1].

According to all three categories of respondents – the price is a factor in the acquisition of herbal drugs by consumers and certainly affects their prescription. Therefore it was decided to Rankings herbal medicines, used to treat cardiovascular diseases by price indicator. The data presented in Table 3.

**Conclusion.** The analysis showed that most of the range of herbal medicines has a price limit within 50 UA (mostly domestically produced drugs, drops and tablets). From this we can conclude that the herbal medicines used to treat cardiovascular diseases available to consumers and most often prescribed by the doctor.

Analysis of the range of drugs for the treatment of CVD plants must be supplemented by an analysis of market saturation. As this analysis can be used ABC – and VEN – analysis, which helps identify not only highly efficient, but at the same time and most used herbal medicines for which should be further forecasting consumption.

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Table 2.

List of medicinal plants and herbal drugs used in cardiovascular diseases

N⁰	Name of herbal medicinal products	In % of respondents	N⁰	Name of herbal medicinal products	In % of respondents
1.	Hawthorn tincture	54,1	16.	Persen	21,3
2.	Valerian tincture	50,2	17.	Charges soothing	18,2
3.	Valerian extract	48,2	18.	Eleutherococcus tincture	18,1
4.	Motherwort tincture	44,9	19.	Ginseng tincture	17,8
5.	Peonies infusion	41,5	20.	Pumpan	17,9
6.	Valokordin	37,7	21.	Andypal	16,9
7.	Korvalol	32,8	22.	Kardiplant	16,8
8.	Validol	32,6	23.	Krystepin	16,6
9.	Valoserdyn	29,4	24.	Corvaldin	16,4
10.	Valeodykramen	26,5	25.	Pulsnorma	15,9
11.	Adelfan Ezidreks	25,3	26.	Drops Zelenin	15,9
12.	Raunatin	23,5	27.	Herovital	15,5
13.	Novo Passit	23,4	28.	Motherwort extract	14,7
14.	Landysheva-valerian drops	22,3	29.	Aralia tincture	13,9
15.	Landysheva-pustyrnykovi drops	22,3	30.	Eleutherococcus extract liquid	13,4

Table 3.

The distribution of herbal medicines in groups depending on price index

The price of drugs	Name of products		
	Korvalol	Zelenin drops	
	Kordiamin	Strophantine	
Up to 50 UA.	Aralia tincture	Tselanid	
_	Hawthorn tincture	Lily of the valley tincture	
	Valerian tincture	Konvaliyno-valerian drops	
	Valerian extract	Konvaliyno-drops Motherwort	
	Validol	Peonies infusion	
	Eleutherococcus extract liquid	Rhodiola extract liquid	
	Valokormid	Raunatin	
	Digoxin		
	Adonis-brom	Adelfan – Ezidreks	
50 – 100 UA.	Valokordin	Novo Passyt	
	Doppelherts energotoniki	Pumpan	
Over 100 UA.	Herovital	Persen forte	
	Doppelherts Biovital	Persen	

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#### ВИВЧЕННЯ МОТИВАЦІЙ І ПЕРЕВАГ СПОЖИВАЧІВ ПРИ ВИБОРІ ЛІКАРСЬКИХ ЗАСОБІВ РОСЛИННОГО ПОХОДЖЕННЯ ДЛЯ ЛІКУВАННЯ СЕРЦЕВО-СУДИННИХ ЗАХВОРЮВАНЬ

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Резюме. У статті представленні результати дослідження лікарських засобів рослинного походження для лікування серцево-судинних захворювань. На думку респондентів, приблизно рівними чинниками при купівлі лікарських засобів рослинного походження є доступна ціна, терапевтична ефективність і мінімум побічних ефектів.

Ключові слова: лікарські засоби рослинного походження, мотивація, переваги споживачів, показники. 2. Dremova N.B. Computer technology market research in the medical and pharmaceutical organizations / N.B. Dremova, S.V. Straw. – Kursk: KSMU, 1999. – 147 p.

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### ИЗУЧЕНИЕ МОТИВАЦИЙ И ПРЕДПОЧТЕНИЙ ПОТРЕБИТЕЛЕЙ ПРИ ВЫБОРЕ ЛЕКАРСТВЕННЫХ СРЕДСТВ РАСТИТЕЛЬНОГО ПРОИСХОЖДЕНИЯ ДЛЯ ЛЕЧЕНИЯ СЕРДЕЧНО-СОСУДИСТЫХ ЗАБОЛЕВАНИЙ

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Резюме. В статье представлены результаты исследования лекарственных средств растительного происхождения для лечения сердечно-сосудистых заболеваний. По мнению респондентов, примерно равными факторами при покупке лекарственных средств растительного происхождения является доступная цена, терапевтическая эффективность и минимум побочных эффектов.

Ключевые слова: лекарственные средства растительного происхождения, мотивация, предпочтения потребителей, показатели.