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## Health saving activity as a health-promoting factor: the gender aspect \*

The article analyses health-saving behaviour of population in the two countries – the Republic of Belarus and the Russian Federation (the case study of the Vologda Oblast) in the context of the gender aspect. The aim of the article is to highlight the specifics of behaviour of men and women in their choice of strategies of health-saving activity, which, in turn, influence their health condition.

The results of an international multidisciplinary research testify that gender determines the choice of health-saving behaviour strategy.

Health, health-saving activity, gender, self-assessment of health, men, women, population of the Vologda Oblast, population of Belarus.



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Health is an important factor in preserving the number and quality of population. It largely determines the level of mortality and quality of the future generation, thereby predetermining the country's demographic development.

Russia and Belarus are former Soviet states that have common trends in demographic development and population's health. The analysis of the general regularities of demographic development, health and behaviour strategies of the population of these states helps to work out more efficient measures for handling the existing demographic problems.

The World Health Organization recognizes that there are differences in the factors determining health and diseases among women and men and emphasizes the special importance of studying the dynamics of gender aspects of health, which has been neglected for a long time [2].

The concept *gender* came into Russian from the English language and is translated into Russian as "po<sub>A</sub>"; the adjective *gender* is used to describe those characteristics of women and men that are socially acquired, while the word *sex* is used for the description of biologically predetermined characteristics. Behavioural traits and attitudes that boys and girls acquire in the process of socialization form their gender identity and define the gender roles [2].

At the same time, most of the research on the population's health in the two countries does not often take into account gender differences in the choice of the behavioural strategies with regard to health, when developing the recommendations to the authorities and social structures concerning the improvement of mechanisms for reducing mortality and enhancing the quality of human potential.

One of the indicators of demographic development is life expectancy (LE). Health of Belarus and Russia's population is characterized by a low level of life expectancy: the difference between these countries and the countries leading in LE indicators is 6-8 years for women, 12-14 years for men (*tab. 1*). In Belarus in 2011 the indicator of life expectancy at birth amounted to 70.6 years (64.7 years for men, 76.7 years for men, 76 years for women). For more than 10 years, a significant gap in the life expectancy between women and men (12 years) is maintained in Belarus [3] and Russia [5].

Mortality rate from external causes at working age in men ranks 1st in Russia and 2nd in Belarus. This indicator decreased significantly in Belarus and in Russia in the 2009–2011 period (from 146.2 to 142.5 in the Republic of Belarus and from 329.3 to 291.8 in the Russian Federation). At the same time the given indicator differs considerably for men and women. For example, in 2011 in Russia mortality rate from external causes amounted

Territories	All population	Men	Women	Difference W/M	
	Life expe	ctancy at birth			
Russian Federation	70.0	64.0	76.0	12	
Republic of Belarus	70.6	64.7	76.7	12	
European Union	80.1	77.2	83.0	5.8	
	Life expectan	cy at the age of 65			
Russian Federation	14.8	12.1	16.7	4.6	
Republic of Belarus	14.9	11.8	17.1	5.3	
European Union	19.5	17.6	21.2	3.6	

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Table 1. Life expectance	v in the contex	t of gender in 2011	(number of vears)
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Sources: Belarus and Russia, 2012: statistical digest. The Permanent Committee of the Union State; National Statistical Committee of the Republic of Belarus; Federal State Statistics Service. Editorial board: Kostevich I.A. et al. Moscow: Rosstat, 2012; European Health for All Database. WHO, 2012 Available at: http://data.euro.who.int/hfadb/shell\_ru.html

to 273 cases per 100 thousand people among men, and to 59.6 cases among women. The similar indicator in Belarus made up 241.6 cases per 100 thousand people among men, and 56.4 among women; gender difference is even more pronounced at working-age, with the indicator amounting to 274.8 among men, and 47.9 among women [3].

Many reasons determining the gap between the health indicators in the post-Soviet states and the Western European countries have been understudied yet. However, leading analysts agree that about 30% of the lag is caused by the well-being differences, 50% is related to the factors specified by the way of life, 10% is connected with pollution and the risk of occupational diseases, 10% is due to the lack of preventive and therapeutic medical services [11].

At this stage it is important to know to what extent people strive for the preservation of health, whether they pay attention to nutrition and physical education issues, seek timely treatment; whether women and men take care of their health differently.

This paper presents some results of the analysis of population health-saving behaviour on the basis of an international multidisciplinary health study of the residents of the two countries, held in 2011 in Belarus<sup>1</sup> and on the territory of the Vologda Oblast<sup>2</sup> (one of the biggest regions of the Russian Federation). The aim of the article is to reveal the peculiarities in behaviour of men and women, when choosing the behaviour strategies, affecting their health.

The empirical indicators of the population attitude to health are the following: 1) health self-assessment as the main source of information about micro-level changes; 2) health care motives, indicating the true reasons for choosing health-saving behaviour; 3) population health-saving activity (passivity), reflecting the real choice of an individual with regard to health preservation issues<sup>3</sup>.

The application of sociological indicators along with statistical ones, such as life expectancy, mortality, morbidity, raises the correctness of the overall health status assessment at population level. Sociological methodologies allow investigating the health self-assessment of different population groups, in order to reveal the most secured of them, taking into account behaviour strategies and risk groups, aimed at the elaboration of targeted offers and recommendations for improving the situation. The method of health self-assessments (despite certain limitations) is considered sufficiently reliable and is recommended by WHO for health monitoring within individual countries and for crosscountry comparisons. Health self-assessment as an integral indicator involves the assessment of not only the presence or absence of disease symptoms, but also general psychological wellbeing.

<sup>&</sup>lt;sup>1</sup> A national survey of Belarus population was held by the Institute of Sociology of the NAS of Belarus in 2011. Sample volume is 2101 people. The sampling is random and route, controlling the quotas of the population aged 16 and older in compliance with the area of residence, sex, age and education. Representativeness of the sample is ensured by compliance to the following conditions: the sample proportionally represents the population of the Minsk Voblast (distinguishing Minsk), the Mogilev, Vitebsk, Grodno, Gomel and Brest voblasts; urban and rural population; the population of six 'zones' is proportionally represented within the regions (1 - Minsk and regional centers, 2 - cities with the population of 100 - 250 thousand people, 3 - cities with the population of 50 - 100 thousand people; 4 - cities with the population of 10 - 50 thousand people; 5 - urban-type settlements with the population of less than 10 thousand people; 6 - rural population); in each 'zone' the population is proportionally represented in accordance with such characteristics as: sex, age, education.

<sup>&</sup>lt;sup>2</sup> The public opinion poll on the state of population health was carried out by ISEDT RAS in 2011 in Vologda, Cherepovets and eight districts of the Vologda Oblast. The sample volume – 1500 respondents. The sample is purposive and quota. Representativeness of the sample is ensured by compliance to the following conditions: the proportions between urban and rural residents, between residents of different settlement types (rural settlements, towns and medium-sized cities), the proportions of the sex-age structure of the oblast adult population. Sampling error does not exceed 3%.

<sup>&</sup>lt;sup>3</sup> Data for comparative analysis was obtained in the course of the survey, conducted on the territory of Belarus and the Vologda Oblast, on the basis of the authorings of V.R. Shukhatovich.

Significant gender differences in health selfassessments of population are observed in Belarus, and in Russia *(tab. 2)*. They are much better for men than for women: the share of 'good' or 'rather good' assessments is almost twice higher, while the proportion of 'rather poor' and 'poor' assessments is almost twice lower; men noted that their health has deteriorated over the last year by 1.5 times less.

37% of the population of the Republic of Belarus with chronic diseases comprise 29% of men and 43% of women. The disproportion is similar for the Vologda Oblast: 18% of men and 29% women.

The disparity between the statistical indicators (average life expectancy, mortality) and health self-assessments by gender is observed in both countries: according to self-assessments the women's health is worse than men's, while according to the statistical indicators the situation is reverse: men's health is significantly worse than that of women.

This phenomenon, revealing itself in the fact that the average life expectancy is 12 years less for men, and individual capacity of women's health is on the average 10% lower,

is defined by famous Russian scientist and social politician N.M. Rimashevskaya as 'the gender paradox in health'. She accounts this phenomenon for objective and subjective, biological and social factors: greater responsibility for the well-being of children and higher inborn endurance of women; lower tendency of men to the vital (health-saving) behaviour and higher inclination to risk; men have greater energy, but are more vulnerable to stress: a male body is a sprinter, a woman's body is a stayer [8]. N.M. Rimashevskaya associates the social factors affecting health, with a double burden of women and high risks, taken by men.

When studying the behaviour strategies aimed at health preservation and the extension of life, it was revealed that women pay attention to healthy lifestyle and try to follow it to a greater extent than men.

Lifestyle is considered to be the determining factor affecting human health [9]. In general social category of 'healthy lifestyle' describes: a) the degree of the implementation of the capabilities of a particular society (individual, social group) to secure health; b) the degree of social welfare as the wholeness of the standard

A. 7 01 10 10	F	Republic of Belaru	S	Vologda Oblast			
Answers	Men	Women	Total	Men	Men Women		
What is the current state of your h	ealth?						
Good and rather good	36.7	20.9	28.1	48.7	37.5	42.5	
Satisfactory	46.2	52.2	49.4	36.2	42.6	39.8	
Rather poor and poor	12.6	22.1	17.7	12.0	18.7	15.7	
Don't know	4.6	4.4	4.3	3.0	1.2	2.0	
Has the state of your health chang	ed over the past ye	ar?					
Improved	5.5	4.6	5.1	9.2	7.5	8.3	
Remained the same	63.5	51.8	57.1	64.1	56.3	59.7	
Worsened	22.2	36.1	29.7	20.5	30.1	25.8	
Don't know	8.9	7.3	7.8	6.3	6.1	6.2	
Do you suffer from chronic diseas	e?						
Yes	28.9	43.4	36.8	18.2	29.3	24.4	
Do you suffer from aftereffects of	a serious illness, in	jury, limiting your	ability to work?				
Yes	7.2	6.3	6.7	10.7	8.7	9.6	
Are you qualified as disabled?							
Yes	4.4	5.6	5.1	6.6	7.9	7.3	

Table 2. Health self-assessments of the population of Belarus and the Vologda Oblast, 2011, by gender (% of respondents)

and quality of living; c) the efficiency degree of the social organization functioning in its correlation with the value of health.

The authors consider the health-saving activity as a social activity, characterized by consciousness, goal-setting, and result anticipation. A healthy lifestyle requires an active ability to cope with difficulties and to withstand health risks.

In the presented analysis the following indicators of the population's attitude to health have been selected: 1) the motives of health care, developing and predicting the activity directions of an individual; 2) population health-saving activity (passivity), reflecting the real choice of an individual with regard to health preservation. The results of the study confirmed the hypothesis that the prevalence of the indicators of health-saving activity is higher among the respondent groups with the highest health self-assessments, than among those with low self-assessments (*tab. 3*). Among the respondents, who gave the answer 'I do not undertake special efforts to preserve and improve my health', the share of individuals, assessing their health as poor, is 2 times higher than of those, rating their health as 'good' or 'rather good'.

Active workouts, strengthening of the body, weight control, the improvement of health in sanatoria and health resorts, steam baths, controlled drinking, walks, optimal combination of work and leisure activities, organization of free time with the advantage to health, control

Table 3. Prevalence of the indicators of health-saving activity in population groups with various health self-assessments (% of respondents)

What do you personally do to preserve and to improve your health?		How do you assess your health?					Tatal
	Subject	Good	Rather good	Satisfactory	Rather poor	Poor	Total population
Mark out officially atransition my body	BR	29.5	22.4	10.8	4.4	4.8	13.5
Work out actively, strengthen my body	VO	34.1	13.1	5.7	4.8	4.3	12.3
Use household appliances for water	BR	21.2	24.6	23.9	17.5	13.0	21.7
purification, buy bottled water, use water from special sources	VO	25.3	34.3	30.2	27.5	20.3	29.3
Control my weight	BR	33.9	27.4	27.3	18.7	17.8	26.2
Control my weight	VO	22.9	24.2	18.4	14.4	13.0	19.8
Do not smoke	BR	59.3	54.7	58.0	56.1	56.1	57.0
	VO	43.4	42.8	43.2	43.1	40.6	42.7
When possible, improve my health in a	BR	14.6	15.9	13.7	12.6	8.8	13.7
sanatorium, health resort, etc.	VO	8.8	9.0	10.6	15.0	13.0	10.3
Taka agunaa, ataam batha	BR	31.7	37.6	31.1	22.4	18.6	30.4
Take saunas, steam baths	VO	32.9	38.7	32.5	23.4	15.9	32.3
Control clockel drinking	BR	49.7	49.2	52.4	43.7	31.6	49.0
Control alcohol drinking	VO	25.7	25.5	27.5	26.9	13.0	25.9
Try to walk more, take walks in	BR	41.5	28.8	36.1	32.6	23.2	34.4
recreation areas	VO	21.7	22.2	30.8	28.1	21.7	26.2
Try to control my montal state	BR	33.8	25.4	27.2	20.3	14.8	26.3
Try to control my mental state	VO	15.7	13.7	12.7	9.6	8.7	13.0
Try to optimally combine work and leisure activities	BR	32.8	29.4	29.1	26.2	23.1	28.9
	VO	20.9	16.2	20.6	20.4	5.8	18.7
Try to use my free time with the advantage to health, self-development, self-realization	BR	29.8	22.5	20.5	10.2	8.2	19.9
	VO	20.5	16.8	13.1	10.2	14.5	14.9
Do not undertake special efforts	BR	13.5	18.1	21.1	21.9	31.0	20.5
Do not undertake special efforts	VO	14.9	18.6	26.3	28.7	39.1	23.4

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over the mental state are more frequently stated by the groups with the highest health selfassessments, and more seldom in groups with the lowest self-assessments.

The cross-country analysis revealed that the Belarusians are more inclined to lead a healthy life, in comparison with the Russians: for example, they much more often try not to smoke (57% vs. 42%), optimally combine work and leisure activities (29% vs. 19%), control their alcohol drinking (49% vs. 26%), as well as control their mental state (26% vs. 13%; tab. 3).

According to the authors, differences in the life expectancy of the main socio-demographic groups (men and women) can be explained by the substantial differences in attitudes towards health. Let us consider the prevalence of indicators characterizing the attitude to health, in the studied groups of men and women.

The results showed that Belarus and Russian women take greater health care than men: when answering the questions concerning nutrition, self-development and self-realization, organization of their free time, they more frequently stated controlled alcohol drinking, and less often – moderate smoking *(tab. 4)*.

In general, women take greater care of their health.

In both countries under review, men stated more frequently than women that they work out actively, strengthen their bodies, take steam baths, saunas. At the same time the share of smokers among men is 1.5 times higher; the percentage of men paying attention to nutrition is almost twice as low. The analysis of the table data shows that health behaviour provokes the risks of cardiovascular diseases, cancer, and diseases of the digestive system, i.e. the leading causes of mortality among working-age males, in men more frequently than in women.

According to the study, the feeling of wellbeing is the main motive for taking care of health for both men and women in Belarus and the Vologda Oblast *(tab. 5)*. Women are motivated by the desire to look good, to be liked by others.

In both countries, the share of women, by almost all the motives for health protection stated in the survey, exceeds the share of men, except by the answers 'Desire to achieve important goals in life' and 'Desire to have healthy offspring'.

What do you personally do	R	epublic of Bela	rus	Vologda Oblast		
to preserve and to improve your health?	Men	Women	Total population	Men	Women	Total population
Work out actively, strengthen my body	17.3	10.4	13.5	17.1	8.4	12.3
Control my weight	16.0	34.8	26.2	11.4	26.5	19.8
Do not smoke	45.3	66.9	57.0	33.5	50.1	42.7
Seek medical attention at the first signs of illness, regularly undergo full medical examination	20.6	29.4	25.4	12.6	22.2	17.9
When possible, improve my health in a sanatorium, health resort, etc.	12.8	14.4	13.7	7.4	12.7	10.3
Take saunas, steam baths	34.0	27.3	30.4	33.5	31.3	32.3
Control alcohol drinking	45.7	51.7	49.0	23.3	28.0	25.9
Try to walk more, take walks in recreation areas	29.0	38.9	34.4	20.5	30.8	26.2
Try to control my mental state	22.4	29.6	26.3	11.6	14.1	13.0
Try to optimally combine work and leisure activities	27.9	29.8	28.9	16.1	20.7	18.7
Try to use my free time with the advantage to health, self-development, self-realization	17.4	22.0	19.9	12.6	16.6	14.9
Do not undertake special efforts	23.9	17.6	20.5	30.2	18.0	23.4

Table 4. Health-saving activity of population, by gender (% of respondents)

What impale you to take care	R	epublic of Belaru	S	Vologda Oblast			
What impels you to take care of your health?	Men	Women	Total population	Men	Women	Total population	
Desire to have healthy offspring	23.1	20.5	21.7	22.7	19.6	21.0	
Desire to enhance (maintain) working efficiency	28.7	25.5	27.0	22.0	22.2	22.1	
Reluctance to give troubles, to be a burden on the relatives	33.1	40.1	36.9	20.8	30.5	26.2	
Need to feel good	46.1	55.4	51.2	32.9	45.4	39.9	
Fear of diseases	17.1	27.0	22.4	17.1	17.7	17.5	
Set the example for my children, relatives	16.9	20.6	18.9	13.4	18.0	15.9	
Desire to achieve important goals in life (at work, school)	13.9	9.3	11.4	13.1	9.6	11.1	
Striving for longevity	17.6	21.2	19.5	21.2	24.0	22.7	
Desire to look good, to be liked by others	23.8	40.9	33.1	19.7	29.5	25.1	
Health deterioration, disease	16.2	21.3	19.0	13.2	14.9	14.1	
Do not take care of my health	11.2	4.0	7.3	20.5	8.5	13.8	

Table 5. Motives for taking care of health, by gender (% of respondents)

The intersex comparison of two countries shows that Belarus women are motivated by 'Need to feel good' (55% vs. 45%), 'Desire to look good, to be liked by others' (41% vs. 30%), 'Reluctance to give troubles, to be a burden on the relatives' (40% vs. 31%).

The conducted analysis showed that the population of both countries in general has the same motives for health protection. At the same time for the Belarusians, contrary to Vologda residents, 'Reluctance to give troubles, to be a burden on the relatives', (37% vs. 26%), 'Need for good health' (51% vs. 40%), 'Desire to look good, to be liked by others' (33% vs. 25%) are more important. In turn, the share of those, who mentioned such motives as 'striving for longevity' (23% vs. 20%) among the population of the Vologda Oblast is by 4% higher, however the share of those, who are not motivated to take care of their health, is 2 times higher, as they 'do not take care of health' (14% vs. 7%).

Timely use of qualified medical care is known to be an important way of health preservation. According to the results of the survey, the population of the Vologda Oblast seeking medical attention at the early signs of the disease is divided the following way: 11.5% of the population seek medical advice always, 35% – not always, but in most cases. More than 40% of the oblast residents prefer self-treatment and consult a physician only when their state worsens significantly.

Proper health behaviour also comprises disease prevention, along with seeking qualified medical care, when being ill. Special attention was given to the aim of the respondents' visit to medical institutions in the year preceding the year of the survey. Based on the results, the groups with similar behaviour strategies with regard to health have been formed. It turned out that 17% of the oblast respondents go to a doctor for preventive purposes, 14% for periodic medical examination. One can assume that this group comprises active and relatively active citizens, taking care of their health themselves or with the assistance from the state and the employer. Mostly these are working age individuals, with good or satisfactory health assessment. Women go to a doctor for preventive purposes more frequently than men.

Another group is those, who maintain their health (46%), and consult a doctor, when they feel sick. It consists primarily of individuals,

self-assessing their health as poor (73% vs. 33% of those, assessing their health as good);persons belonging to the 20% of the wellto-do group (53% vs. 32% among 20% of the poorest); individuals over the working age (60% vs. 36% under the age of 30). The study showed that men seek qualified medical care, when being ill, less frequently than women (41% vs. 51%).

The third group includes passive residents of the region, neglecting their health. They either did not consult a doctor, opting for selftreatment (11%), do not recall the purpose of their visit to hospital (4% assumed not to undergo treatment at hospital), or did not go to a doctor, as they hadn't fallen ill (8%). The group mostly comprises young people. Selfmedication is more typical for representatives of the 20% of the poorest (15% vs.10% among the 20% of the well-to-do group). The vast majority of those, who do not go to a doctor, assess their health as good (23% vs. 4% with poor health). Men do not visit a doctor twice more often, as they do not fall ill (10% vs. 6%).

Similar results were obtained in other studies: for example, according to REMEZ data, during the last three months about 20% of the population attended medical institutions or underwent medical examination. Wellto-do people are more active in that respect: Among the individuals visiting a doctor, 19% get income above the median, 14% are with income lower than the median.

The analysis of in-depth interviews, conducted in accordance with the EQ-5D methodology, confirms the quantitative data and allows determining the main characteristics of the individuals seeking medical help in health institutions, i.e. relatively high income level; serious health problems (health deterioration, exacerbation); high level of health care [6, 7].

Thus, the study showed that healthpreserving behaviour and medical activity of the population of the two countries have similar characteristics (positions). In general, the health-saving activity of the population of Belarus and the Vologda Oblast can be characterized as insufficient: low prevalence of physical education and lack of preventive medical activity, high prevalence of smoking and alcohol drinking. The choice of the health-preserving behaviour strategy is mostly determined by gender characteristics. Healthsaving activity is more characteristic of women, while men tend to choose risky behaviour. The conducted analysis shows that 'quite good' health and the preconditions for longevity are inherent in men, but they make little efforts to maintain it.

This fact is proved by high mortality rate from external causes among working age males. It largely determines the gender difference in life expectancy at birth. Another evidence is that the difference in life expectancy at the age of 65 between men and women is significantly lower than in life expectancy at birth (5-year difference, not 12; see tab. 1).

Many health preservation traditions, formed over the centuries, have been gradually lost due to global changes (urbanization, migration). The norms and values of selfpreservation behaviour that are relevant to the modern lifestyle of both Belarus and Vologda Oblast residents, are only being formed and have not yet been sufficiently integrated in the culture of everyday life.

According to the authors, it is necessary to inform the population of the longevity factors, determining the lifestyle, including biological and social characteristics of people (gender, age, complexion, type of work, etc.). The scale and complexity of healthrelated problems associated with lifestyle go beyond medical knowledge and require the involvement of specialists of different scientific fields that are part of the study of human nature. When elaborating measures and mechanisms concerning health-saving activity, due attention should be given to the issue of formation of health-saving culture among the population with regard to gender characteristics; that will promote the changes in the negative trends of public health and will serve as the basis for economic growth, strengthening of social stability and demographic security of the country and a separate region.

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