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## Evaluation of the efficiency of regional health-preserving educational space formation



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**Abstract.** The article is devoted to the urgent problem of preserving children’s health. The author presents detailed characteristics of health-preserving educational space formation. It is regarded as a complex multilevel and multispectral system. The article defines the principles, methods, mechanisms of the health-preserving process on the municipal level.

The subject of research includes the background, conditions and resources of health-preserving educational space formation. The participants of educational process (students, teachers, parents) and representatives of local authorities are the object of the research. The study aims to evaluate the efficiency of health-preserving educational space formation within various conceptual and methodological approaches and the degree of involvement of the municipal authorities.

In the course of the experiment the author tests the method of estimating the models of regional health-preserving educational space formation and healthy lifestyle training, developed by the author. The article pays considerable attention to the justification of choosing the optimal strategy within the implementation of health preserving technologies on municipal level. It shows the crucial role of constructive inter-agency cooperation between the education system, health care and the authorities for effective and productive activities in this sphere.

**Key words:** children's health, health-preserving educational space, a comprehensive systematic and synergetic approach, health-preserving activity, inter-agency cooperation.

The federal target program of education development for 2011–2015 sets the most important task to improve the education quality by means of preservation and promotion of health and implementation of health saving forms and technologies in the pedagogical process. Nowadays the health of minor citizens is one of significant indicators of the state welfare.

In this regard, the quantitative and qualitative characteristics of the physical and psychological state of children reflect the real situation of the state of children's health [1, 5, 9, 10, 11]. The demographic crisis and decline in living standards that occurred in Russia in the 1990s (*tab. 1*) had a negative impact on all indicators of children's health. In 2000–2010 general morbidity of the population aged 0–14 increased by 31% in the country and by 38% in the Vologda Oblast [2, 3].

Today the regulatory support of health maintenance of pupils is presented by a wide range of legislative acts of all levels. The main provisions of health saving in this category of the population are reflected in Article 41 of the RF Federal Law of December 29, 2012, No. 273 [8].

It is very important to involve education departments, medical institutions and local

authorities in the process of children's health maintenance. Under the Federal Law of September 24, 2003, no. 131-FL "On general principles of organization of local self-government in the Russian Federation" the authorities should create favorable conditions for comprehensive development and life activity of children. It requires interagency cooperation of all actors interested in this activity at the level of municipality.

Therefore, since 2004 the Vologda Oblast has been conducting an experiment to test a model assessing the effectiveness of regional health saving educational space (RHSES) with different levels of the municipality's involvement in this process.

The Vologda Oblast consists of 26 municipalities and 2 urban districts. Within the framework of existing programs the following municipalities take active part in the RHSES formation: Vologdsky District, Cherepovetsky District, Kirillovsky District, Velikoustyugsky District, Gryazovetsky District, Kharovsky District, Vozhegodsky District, Totemsky District, Nyuksensky District, Nikolsky District, Tarnogsky District, Chagodoshchensky District, Kaduysky District.

Table 1. Natural movement of the population in the Vologda Oblast (VO) and the Russian Federation (RF)

Year	Population*, thousand people		Total fertility rate, ‰		Overall mortality rate, ‰		Natural decrease (increase), ‰	
	RF	VO	RF	VO	RF	VO	RF	VO
1990	147 969.4	1 354.1	13.4	13.4	11.2	12.0	2.2	1.4
1992	148 538.2	1 352.5	10.7	10.2	12.2	13.1	-1.5	-2.9
1995	148 375.8	1 336.2	9.3	8.7	15.0	16.4	-5.7	-7.7
1999	147 214.8	1 304.7	8.3	8.0	14.7	16.1	-6.4	-8.1
2000	146 596.9	1 295.0	8.7	8.8	15.3	16.0	-6.6	-7.2
2001	145 976.5	1 284.5	9.0	9.4	15.6	17.4	-6.6	-8.0
2002	145 306.5	1 272.7	9.7	10.1	16.2	18.4	-6.5	-8.3
2003	144 648.6	1 261.4	10.2	10.4	16.4	19.8	-6.2	-9.4
2004	144 067.3	1 250.8	10.4	10.7	16.0	19.1	-5.6	-8.4
2005	143 518.8	1 240.4	10.2	10.5	16.1	18.8	-5.9	-8.3
2006	143 049.6	1 230.4	10.4	10.9	15.2	17.1	-4.8	-6.2
2007	142 805.1	1 222.8	11.3	11.6	14.6	15.9	-3.3	-4.3
2008	142 742.4	1 217.0	12.1	12.0	14.6	16.3	-2.5	-4.3
2009	142 785.3	1 211.2	12.4	12.4	14.2	16.2	-1.8	-3.8
2010	142 849.5	1 204.8	12.5	12.5	14.2	16.8	-1.7	-4.3
2011	142 960.9	1 199.9	12.6	13.0	13.5	15.7	-0.9	-2.7
2012	143 201.7	1 197.4	13.3	14.0	13.3	15.1	-0.02	-1.1

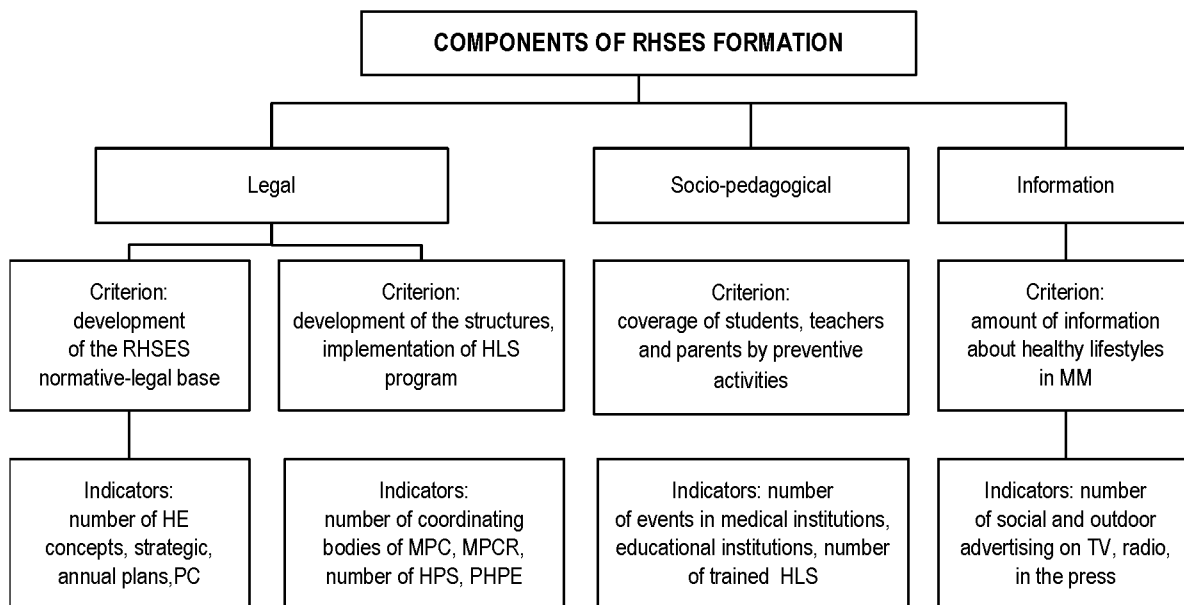
\* Yearly average  
Sources: *Edinaya mezhvedomstvennaya informatsionno-statisticheskaya sistema* [Unified Interdepartmental Statistical Information System]. Available at: <http://www.fedstat.ru/indicator/data.do>; *Estestvennoe dvizhenie naseleniya v razreze sub'ektov Rossiiskoi Federatsii za yanvar'-dekabr' 2012 goda* [Natural Movement of the Population in the Subjects of the Russian Federation in January–December 2012]. Available at: [http://www.gks.ru/free\\_doc/2012/demo/edn12-12.htm](http://www.gks.ru/free_doc/2012/demo/edn12-12.htm)

Vozhegodsky District and Kharovsky District are selected for the experiment. They have typical economic activity, demographic and administrative structures (the administrative centers of the greater part of districts are small towns). In the future it will be possible to extend the results to all territorial units of the region.

We single out the main components of the RHSES development: **legal, socio-pedagogical, information** (*figure*).

The RHSES development levels are classified on the basis of the analysis of national, regional and foreign concepts and strategies for protecting and promoting public health.

Components of formation of regional health saving space



HLS – healthy lifestyle,  
 MM – mass media,  
 HE – health establishments,  
 PC – prevention centers,

Legend:  
 MPC – medical prevention centers,  
 MPCR – medical prevention consulting rooms,  
 HPS – health promotion schools,  
 PHPE – preschool health promotion establishments.

The efficiency of formation of health saving educational space is assessed on the basis of the analysis of its components dynamics.

The state statistics institutions monitor one of the main indicators of the efficiency of RHSES formation, a level of health. However, it can not give information about the performance of the target technologies implementation.

Therefore, we require such indicators, which could reveal the dependence of this process efficiency on the specific measures taken by the RHSES subjects.

The evaluation criteria and indicators of its development should be quite informative, transparent, covering the full range of the analyzed data. In this regard, the level of formation of regional health saving educational space should be evaluated

according to the following indicators: **high, average and low**. This rating will allow us to analyze the effectiveness of this process comprehensively, taking into account all components. The level of the RHSES development was determined by the coefficients assessing the effectiveness of legal, socio-pedagogical and information criteria and indicators by comparing the obtained results [4].

All secondary schools in Vozhegodsky District took part in the experiment due to the decision of the local executive authorities in the sphere of education; 5 schools in Kharovsky District decided to participate independently. The coordination and evaluation of the results was carried out by the education departments, with the scientific and methodological support provided by the SHI Vologda Regional Center for Medical Prevention. The experiment included the study of health saving space in the municipality as a center of the integrated health environment. The study aimed to compare the effectiveness of health saving technologies according to the following approaches: synergistic (in Kharovsky District) and system (in Vozhegodsky District).

In 2004 the state of students' health in the pilot areas was characterized as bad. The experiment registered not only a significant proportion of smokers and drinkers, but also several cases of substance use, and it revealed the trend of the loss of spiritual and moral values (including healthy lifestyle) among the pupils, contributing to decreased physical activity and increased morbidity. However the regions, rural settlements and educational

institutions have not developed the programs protecting children's health.

Let us note that at the regional, municipal and local levels the experiment was preceded by the implementation of the package plan that had promoted the health saving processes in these areas:

- in accordance with the Vologda Oblast Governor Decree “On the concept of long-term policy for protection and promotion of health in the Vologda Oblast “The Vologda Oblast – Health-21” of May 15, 2000, No. 416, the main task was to protect and strengthen children's health;

- in 2002 in accordance with this document the Strategic plan for protection and promotion of health in the Vologda Oblast for 2002–2010 was adopted;

- in 1999–2002 under the EU TACIS international program “Preventive Health Care Systems” the WHO program “Health promotion school”, which showed high efficiency, was implemented in three pilot schools (secondary schools No.18, 24, 3 in Totma);

- the leaders of educational departments participated in the regional interagency conference devoted to the results of the WHO project “Health promotion school” in Totma in 2003. The recommendations on the study of this experience and its use at local health institutions were adopted;

- in 2004–2014 the municipalities of the region regularly hosted interagency training conferences (31 in total) concerning the development and implementation of the programs to promote healthy lifestyles among children and adults;

– the Vologda Institute of Education Development and the Vologda Regional Center for Medical Prevention carried out seminars on the development of health saving technologies in the specialized institutions for their heads;

– the seminars for teachers to develop health saving programs were conducted. The rural educational institutions were attended by the specialists of the Vologda Regional Center for Medical Prevention, other health care centers and dispensaries, the laboratory of health and the center of prevention of drug addiction among children and adolescents of the Vologda Institute of Education Development.

The regional concept and strategic plan for the protection and promotion of the population's health, the experience in the implementation of school health programs with international participation and the training events have become a methodological basis for the health processes development in the educational institutions in Kharovsky and Vozhegodsky districts.

The experimental study included: narrative recitals, a forming part, comparative-analytical components and findings.

To promote a healthy lifestyle among children it was necessary to expand the range of preventive activities of first-aid stations and consulting rooms of medical prevention, created by the decision of the regional administration. The medical staff studied special programs; their job responsibilities included those related to primary prevention of non-communicable diseases in children.

Thus, the qualitative content of the functions and activities of medical institutions expanded, including in areas such as:

– coordination of interaction between medical services and education in the framework of health care;

– informational and methodological support for the implementation of health programs in schools, with the regional prevention centers and dispensaries being attracted in it;

– monitoring of the implementation of health programs in educational institutions;

– assessment of the effectiveness of health care activities in the educational institutions in cooperation with the regional education department and the regional center for medical prevention.

To implement these measures the network of medical institutions has been formed. They aim to protect and promote children's health. The next stage is combining the resources of different society sectors and their actions in this direction, increasing the responsibility for children's health of all participants of the educational process, expanding the functions of medical institutions.

Thus, the medical prevention structures have begun to perform the functions of the centers responsible for health maintenance due to the synergetic effect. The region has created a two-tier network of responsibility centers: at the municipal level it is a department for medical prevention in the central regional hospital; in the rural areas it is consulting rooms of medical prevention at district hospitals or first-aid stations.

The responsibility centers are solving the following tasks:

1. Participation of government officials in the process to develop a healthy lifestyle in educational institutions.

2. Preparation of the meetings of the interdepartmental coordinating councils on the protection and promotion of health.

3. Coordination of the interagency working groups elaborating health care programs.

4. Provision of methodological assistance in developing and implementing programs for healthy lifestyles at school.

5. Interaction with the regional education department in order to organize pedagogical support for healthy lifestyles programs, spread information about health and healthy lifestyles among students by means of mass media.

6. Monitoring development and methodological support of health saving programs in educational institutions.

7. Evaluation of the effectiveness of health programs implemented by educational institutions.

The analysis of the activities of the health responsibility centers has revealed that they

are able to effectively exercise their functions when cooperating with local authorities; municipal governance and educational institutions; other government departments, public organizations and business representatives interested in solving the children's health problems; pupils' parents; volunteer groups, movements for a healthy generation; mass media.

Considering the subject and experimental nature of the study, we assessed the implemented measures by means of a questioning poll. The target audience was junior and high senior students, their parents and teachers.

The educational institutions were selected by means of a random number generator in Excel. The study covered 3 secondary schools in Vozhegodsky District and 4 schools in Kharovsky District, including 25% of the pupils in the 5–7th and 8–11th grades, taking into account the ratio between the pupils of the district center (46–48%) and villages (52–54%). The adult population was represented by parents and teachers. The experiment was conducted in the following years: 2004/2005, 2007/2008, 2013/2014 academic years (*tab. 2*).

Table 2. Sample size of the study, people

Number	Years of the study		
	2004–2005	2007–2008	2013–2014
Pupils (Vozhegodsky District)	246	241	116
Pupils (Kharovsky District)	227	232	120
Teachers (Vozhegodsky District)	64	55	9
Teachers (Kharovsky District)	63	60	10
Parents (Vozhegodsky District)	214	203	116
Parents (Kharovsky District)	207	226	120

The statistical database was processed by means of SPSS Statistics. The research tools were developed on the basis of a standard questionnaire of the international program for the integrated prevention of noninfectious diseases developed by the world health organization “CINDI” (“CINDI–Children”, “CINDI–adults”) with the changes, made by the authors, to meet the goals of the study.

The basic conditions for the effective formation of health saving educational space are characterized through the dynamics of the **legal component development**:

1. Regulatory indicators:

– the number of the developed and implemented concepts for the protection and promotion of children’s health (at the regional and municipal levels);

– the number of the developed and implemented long-term interdepartmental strategies (plans) for the protection and promotion of children’s health (at the regional and municipal levels);

– the number of the developed and implemented annual interdepartmental plans for the protection and promotion of children’s health in the municipalities and rural settlements;

– the number of the developed and implemented regional and municipal interdepartmental target programs for healthy lifestyles of children and adolescents.

The RHSES effectiveness in terms of the normative-legal base indicators can be evaluated by the representation coefficient, defined as a ratio between the number of the elaborated normative-legal acts to their

required number either in the region or in the municipality or in the rural settlement.

2. Organizational and structural indicators:

– the number of established and functioning regional, municipal and rural interagency coordinating bodies on the health problems of children and adult population;

– the number of regional and municipal centers of medical prevention;

– the number of departments (consulting rooms) of medical prevention in the health care organizations;

– the number of preschool institutions implementing the program of healthy lifestyle formation;

– the number of schools implementing the program of healthy lifestyle formation;

– the number of the organizations and enterprises implementing the program for healthy lifestyle formation at the workplace (organizations and enterprises employing over 100 in urban areas and over 50 people in rural areas).

The RHSES effectiveness in terms of the actors involved can be assessed by the participation coefficient, defined as a ratio of the number of structures that implement healthy lifestyles programs to the total number of such structures either in the region or in the municipality or in the rural settlement (or to the required number).

The dynamics of the **socio-pedagogical component** characterizes the effectiveness of the process and the result of the formation of a healthy lifestyle among the subjects of the educational process.



At the first stage the effectiveness of the socio-pedagogical component was estimated by the indicators identified on the basis of the analysis of theoretical material and experimental work in educational institutions, and by such an indicator as the coverage of students, teachers and parents by preventive activities.

The following indicators are taken into account:

- the number of preventive measures implemented by medical institutions and their coverage of the educational process participants at the regional and municipal levels;

- the number of preventive measures implemented by educational institutions and their coverage of the educational process participants at the regional and municipal levels;

- the number of preventive measures implemented by other institutions and their coverage of pupils, teachers and parents at the regional and municipal levels;

- the number of experiment participants trained in healthy lifestyle.

The participation of municipalities in the formation of health saving educational space was evaluated by the monitoring of annual plans for protection and promotion of the population's health in the municipalities and rural settlements, for training in a healthy lifestyle.

The number of conducted events and the number of people trained in healthy lifestyle in absolute numbers (per month, quarter and year) are necessary for comparative evaluation of the educational process participants' activity.

At the second stage the following indicators were identified: dynamics of physical activity, dynamics of medical activity and dynamics of psychological activity.

The development of **the information component** characterizes the efficiency of the process of information support for the RHSES formation.

The evaluation indicator is the amount of information on TV, radio and in the press, contributing to the formation of a healthy lifestyle.

The indicators are the following:

- the number of released TV shows, published articles, sections on the topics such as behavioral risk factors and healthy lifestyles (regional and municipal TV channels);

- the number of newsletters, newspapers, magazines, covering the topic of behavioral risk factors and healthy lifestyles, published in the region and municipality, and their circulation;

- the frequency of social advertising on disease risk factors and healthy lifestyles (regional and municipal mass media);

- the number of units of outdoor social advertising on disease risk factors and healthy lifestyles and its display per day (in the regional center, municipality, rural settlement).

The effectiveness of the RHSES formation in terms of the amount of information about a healthy lifestyle, spread in mass media, is assessed by means of the monitoring that requires an information support sufficiency coefficient.

We should mention an additional source of information necessary for the analysis, such as data on the number of pupils assigned to different health groups, the number of lessons missed due to illness and a number of days the teachers have been on sick leave in the current academic year. These data are also compared with the previous year. For the same purpose the objective indicators of the schoolchildren's health can be compared, such as the results of periodic health examination and medical examination.

Health saving activities of parents and teachers are theoretical knowledge and practical skills for healthy lifestyles. The main task of adults is to teach their children not only knowledge, skills, but also a healthy lifestyle. The obtained data help to evaluate the effectiveness of the formation of healthy lifestyle among pupils and their immediate environment – parents and teachers, and the dynamics of health saving educational space in the educational establishments and municipality, in general.

According to the analysis of morbidity in pupils in Vozhegodsky and Kharovsky districts, the implementation of the programs "Health saving school" had a positive impact on promotion of children's health. The results of the experiment show that Kharovsky District is marked by the growth of pupils' physical, environmental and psychological activity at schools implementing health saving programs.

The research into the formation of health saving educational space in two municipalities

of the Vologda Oblast (Kharovsky and Vozhegodsky districts) in the context of synergistic and systemic approaches confirms the hypothesis, put forward in our work, and indicates high performance of municipal education authorities.

However, the research analysis reveal the advantage of the synergistic approach applied in the educational institutions of Kharovsky District over the systematic approach applied in the educational institutions of Vozhegodsky District (*tab. 3*).

According to the experiment results, Kharovsky District is marked by the growth of pupils' physical, environmental and psychological activity at schools implementing health saving programs. In Vozhegodsky District there is an increase of only two types of activities – physical and medical.

The objective indicators of the health state of children include health groups singled out in accordance with the recommendations of the Institute of Hygiene of Children and Adolescents. Health group I includes children who do not have deviations by all health indicators, or have minor deviations that do not affect the state of health and do not require special treatment.

Group II includes healthy children with high load according to the biological, genealogical, social anamnesis and with the risk of chronic diseases development. Group III includes children with chronic diseases or congenital disorders. Groups IV and V include children with rare and chronic diseases, who constitute a small part of pupils or undergo training in special educational establishments.

Table 3. Comparative analysis of the health saving educational space formation in the municipalities by the dynamics of the types of health saving activities in the educational institutions of Kharovsky and Vozhegodsky districts

No.	Types of health saving activities	Dynamics of the formation of the types of health saving activities	
		Educational institutions of Kharovsky District	Educational institutions of Vozhegodsky District
1.	Physical	+	+
2.	Environmental	+	0
3.	Medical	0	+
4.	Psychological	+	0
5.	Moral	0	0
6.	The sum of the effectiveness indicators: - activities growth	3	2
	- unchanged activities	2	3
	- reduced activities	-	-

Legend of the dynamics of the formation of activities:  
 "+" – growth or a growth trend of activities;  
 "-" – reduction or a reduction trend of activities;  
 "0" – unchanged activities.

Table 4. Dynamics of pupils' health at schools of Vozhegodsky and Kharovsky districts in accordance with health groups

Region	Health group	9 grade		10 grade		11 grade		Growth rate (+ or -)
		2004–2005		2005–2006		2006–2007		
		Number	%	Number	%	Number	%	
Vozhegodsky District	1	85	30.5	42	32.1	48	38.4	7.9
	2	180	64.5	81	61.8	66	52.8	- 11.7
	3	14	5.0	8	6.1	11	8.8	3.8
Kharovsky District	1	82	28.8	37	25.8	24	21.1	- 7.7
	2	121	42.4	70	49.0	66	57.8	15.4
	3	82	28.8	36	25.2	24	21.1	- 7.7

To facilitate the assessment of the health technologies effectiveness in educational institutions in practice, as a rule, the first three groups of children's health are used.

The objective data on the health state of pupils at schools of Kharovsky and Vozhegodsky districts, obtained due to the study of medical cards, are presented in *table 4*.

In 2004–2007 the number of children with health group I at schools of Vozhegodsky District increased by 8%, in Kharovsky District this indicator declined by 8%. The positive changes in Vozhegodsky District are caused by the influx of healthier junior senior students. Accordingly, the number of children with health group II declined (12%) in Vozhegodsky District and increased (15%) in Kharovsky District.

Moreover, the share of children with health group III in Vozhegodsky District increased by 4% and in Kharovsky District decreased by 8%, which proves insignificant advantages in the implementation of health programs at schools of Kharovsky District.

In 2004–2007 the number of teachers being on sick leave declined in both regions insignificantly (*tab. 5*): by 4 cases in Vozhegodsky District and by 15 in Kharovsky District. However, the number of work days missed due to illness and the average

duration of one case increased by 113 days and 1.8 days, respectively in Vozhegodsky District and by 6 days and 1.6 days in Kharovsky District.

The number of cases and days of teachers’ temporary incapacity to labor in the 2004/2005 academic year in Kharovsky District exceeded those in Vozhegodsky District, in the 2006/2007 academic year the opposite situation was observed.

The parents and teachers take active part in promotion of a healthy lifestyle among schoolchildren. In Kharovsky District there are more people interested in children’s health maintenance than in Vozhegodsky District.

The study indicates that the factors that undermine the efficiency of measures aimed to promote teachers’ health and disease prevention are the following:

- the average age of teachers: 57 years in Vozhegodsky District; 54 in Kharovsky District;

Table 5. Dynamics of teachers' morbidity in Vozhegodsky and Kharovsky districts (2004–2007)

Indicators of temporary disability	2004–2005	2005–2006	2006–2007
Vozhegodsky District			
Number of cases	89	99	85
Number of days	789	986	902
Average duration of one case, days	8.9	10.0	10.7
Kharovsky District			
Number of cases	99	105	84
Number of days	827	885	833
Average duration of one case, days	8.3	8.5	9.9
Note: Indicators of employees' disability per 100 people.			

– the high prevalence of chronic diseases and a low level of clinical observation and treatment of teachers. So, only 7% of the teachers in Vozhegodsky District and 15% in Kharovsky District undergo medical examination on their own initiative. The clinical examination of teachers increases significantly, if school principals participate actively. The rate of teachers' clinical examination conducted once a year has grown up to 65% in Vozhegodsky District and to 67% in Kharovsky District.

In 2004–2007 119 teachers in Vozhegodsky District and 123 in Kharovsky District were surveyed on the issue of smoking. The results reveal that the share of smoking teachers has declined from 8% to 2% in Vozhegodsky District and from 29% to 5% in Kharovsky District. It should be noted that smoking cessation of teachers in these municipalities has led to the reduction of the number of smoking adolescents. In Vozhegodsky District the number of smoking pupils has decreased by 5% by 2007 and by 17% in 2014. In Kharovsky District in 2007–2014 the decline was 3%.

The most important factor determining the effectiveness of the formation of health saving educational space is a degree of decision-makers' involvement. To determine the dependence of the RHSES formation results at the municipal level on the local authorities' competence the questionnaire was conducted in 2004. In Vozhegodsky and Kharovsky districts 13 experts representing the executive power were surveyed: the administration heads and their deputies.

According to the study, the heads of local executive authorities indicate the following factors hazardous to health:

- smoking (77% and 33% of the heads in Vozhegodsky and Kharovsky districts, respectively);
- excessive alcohol consumption (85 and 87%, respectively);
- a low level of life (85% and 80%).

All heads in Vozhegodsky and Kharovsky districts participating in the survey believe that the state of health of the younger generation depends primarily on the family. Seventy percent of the heads in Vozhegodsky District and 53% of Kharovsky District consider school as an important factor that affects children's health. Thirty-nine and thirty-three per cent of the respondents, respectively, mention the role of medical institutions in maintaining and improving the state of health of the younger generation.

So, the heads of local administrations contribute to the formation of health saving educational space in their municipalities.

The study identifies the main features of the formation of health saving educational space in Vozhegodsky and Kharovsky districts:

- coordination of the process to promote a healthy lifestyle by the subjects of the educational process;
- developing relations in this sphere between the subjects of the educational process;
- creation of healthy environment in educational institutions.

The study revealed that health saving processes are the result of either strategic management (a system approach) or self-organizing process (a synergetic approach). The level of the formation of health saving educational space in Vozhegodsky District where the system approach was implemented is characterized as average; this indicator in Kharovsky District where the synergetic approach was implemented is considered as high.

We should note the ambiguity of the synergetic approach application, both advantages and disadvantages of this process.

The advantages are the following:

- the process to elaborate health saving programs is not limited to the policy guidelines set by the higher education authorities and standard models, which allows to implement the activities promoting healthy lifestyles in the educational institutions;

- the decision to develop and implement health saving programs is taken by the school staff that forms a collective responsibility for the program results;

- there are possibilities to implement new health care technologies with the involvement of external scientific resources in the educational institution.

The disadvantages are the following:

- there is no single scientific approach to the implementation of health saving activities in the educational institutions;

- there is no system of interaction and exchange of experience between the educational institutions that implement health saving programs;

- the choice of the optimal program is limited to a small number of schools implementing health saving programs.

The analysis of such programs discloses that the conducted activities are focused on maintenance and promotion of children's health at school. The task to create a healthy lifestyle is reflected to a lesser extent.

The main tools to maintain children's health include modular, problem, project, socio-cultural and self-development training. Game and group teaching methods are widely used.

Thus, according to the survey, we can draw the following conclusions:

1. The effectiveness of the RHSES formation is determined by a complex of organizational-pedagogical, social-pedagogical, information and pedagogical conditions that can be evaluated in quantitative terms.

2. The parameters of the effectiveness of the RHSES formation are closely interrelated:

- with the development of the main features of the investigated space formation;

- with the process to promote a healthy lifestyle among the subjects of the educational process and its main components, types of health saving activity: physical, environmental, medical, psychological and moral.

3. The choice of the management strategy and the identification of the role of education, health care and authorities are key objectives of the efficient activity to form health saving space at the municipal and regional levels.

4. The high degree of involvement of local executive authorities in the process to create health saving educational space is one of the main conditions for the effectiveness of this activity.

5. The synergistic approach in general is more efficient than the system approach.

However, both approaches yield positive results in the formation of healthy lifestyles of students and teachers.

Therefore, the combination of their elements (an integrated system-synergetic approach) seems to be the best possible way to form health saving educational space.

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