FORMING OF CHILDREN’S HEALTH BY FACILITIES OF EXTRACURRICULAR WORK

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Abstract: The children’s health can be formed not only during lessons at school but also by facilities of extracurricular work. There can be the one of perspective types of this work - employments in valeological groups. Such groups can exist both at school and in the special establishments of extracurricular work – palaces of child’s and youth creation. The programs of employments of valeological groups were developed by us in the flow of many years and their efficiency was estimated on the base of the Kharkov regional palace of child’s and youth creation. Over the last years these programs were introduced in ordinary schools. In this work influence of employments is analyzed in the groups of the valeological sending to the physical and psychical health of students of 1st and 11th classes of schools of the Kharkov. Positive influence of employments is routined in a groups on the physical health, including functional possibilities of organism. Job performances allow giving further recommendations for the improvement of the programs of employments in valeological groups.

Keywords: extracurricular work, valeological groups, physical health, functional possibilities of organism

Presently there is a process of reformation of education in Ukraine. Maintenance and strengthening of health of participants of educational process must one of priority tasks of reform of the system of education become, forming for them of steady motivation on a requirement in a health and healthy way of life, that education of culture of health.

The valeological system of education, from one side, includes the receipt of the system of knowledge about maintenance and strengthening of health and forming of high culture of health, valeologisation of educational environment by introduction of technologies, which strength of health.

One of methods of re- of organization of education process in establishments of education there is introduction of the special courses of valeological ; lead through of trainings on forming of skills of healthy way of life and warning of deviant conduct.

The health of children can be formed not only during lessons at school but also by facilities of extracurricular work. There can one of perspective types of this work be employments in valeological groups. Such groups can exist both at school and in the special establishments of extracurricular work – houses and palaces of child’s and youth creation.
On the extents of last years by valeologists of the Karazin Kharkov national university the programs of valeological groups were developed and their efficiency was estimated on the base of the Kharkov regional palace of child’s and youth creation. It is showed that attending of valeological groups improves both the state of physical health (blood system, adaptation possibilities) and indexes of cognitive processes (memory, attention).

Last years these programs were in ordinary schools.

The purpose of this work was an analysis of influence of attending of valeological groups to the state of physical and psychical health of pupils from A-ones and 11th classes of schools of the Kharkov region.

The schoolboys of A-ones already began to study the discipline «Basis of health», however these lessons is not enough in the first year of the school teaching, when the process of adaptation to the school environment is negatively reflected on a health first-class pupils.

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The followings methods and methods are used:

- express-estimation of physical health level,
- determination of index of functional possibilities;
- estimation of intensity of stress and coefficient of vegetation of Shiposhi by the method of M. Lusher;

Statistical treatment of results was conducted by the calculation of t-criteria by Student and d-criteria by Somers, through the program «SPSS 17.0».

The pupils of A-ones of Lyubotin’s school №3 and school of settlement Berezovka, and also pupils of 11th classes of gymnasium of the Kharkov national university of building and architecture were inspected.

Schoolboys of set. Berezovka and 11=A class of gymnasium of the Kharkov national university of building and architecture got attending of valeological group, a pupils from Lyubotin and 11-M class of gymnasium of the Kharkov national university of building and architecture served as a control group.


Age of children: 5-7 years. Employments are a group (to 20 persons) and conducted for 2 hours twice in a week.

The program of valeological group in set. Berezovka, included such methods, as art-therapy, tale-therapy, relaxation and dynamic physical exercises for eyes, hands, spine. In the program of valeological group of Berezovka’s school the reception of multicomponent addition was also plugged children – syrup “Valeoton” during a month in February in a dosage, proper age of children (2 tea-spoons twice in a day).

Schoolboys 11-a class of gymnasium got attending in the group of development of personality. The author program of this group was developed in 2003 by Kabatskaya
E.V. Two years the program passed approbation in Kharkov regional Palace of child’s and youth creation.

By the order of Main administration of education and science of Kharkov regional state administration № 607 from 07.10.2005 the program was ratified for introduction in out-of-school work of educational establishments of Kharkov and Kharkov area.

The program is counted on teenagers 16-18 years, employments are a group (to 20 persons) and conducted for 2 hours twice in a week, 144 hours in a year.

Program purpose: comprehensive harmonious development of teenager (unity physical, psychical, spiritual and social; education of personality).

Tasks of the program: forming: knowledge about the culture of health, motivations on a health, skills of healthy way of life, relaxation for the removal of fatigue; increase of level of knowledge about the psycho-physiological features of organism of teenager, about the different types of interpersonal relations, about the methods of exit from conflict situations; education of aesthetic taste; capture skills of modern business intercourse and etiquette; development of position sure socially to active personality.

Forms and teaching methods: valeo-pedagogical and psychological trainings, business and role games, briefings, discussions, art-therapy, testing, questionnaire. The program is foresee a lead through on every employment of the valeological unloading under weakening music: exercises – relaxation (for the removal of fatigue from the muscles of body), respiratory, for eyes and spine; selfmassage, joint gymnastics, anti-stress complex.

The program is foreseeing employments on fresh air, and also lead through of evenings of rest, holidays, actions of healthy way of life, days of health.

Upon termination of teaching teenagers must get knowledge: about a physical, psychical, spiritual and social health (to the culture of health); about a correct feed, about the psychophysiological features of organism of teenager, about the different types of interpersonality relations, about the methods of exit from conflict situations, tolerance, about harmonious development of personality.

To capture abilities: making healthy of the organism (complexes of different exercises, massage, selfmassage), tolerant conduct.

To get skills: healthy way of life, correct breathing, weakening, development of attention, memory, intellect, creative thought, business etiquette, selfmanagement/

Curriculum of the author program of valeological group of development of personality

<table>
<thead>
<tr>
<th>№</th>
<th>Sections</th>
<th>Types of employments (in a clock)</th>
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<tr>
<td></td>
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<td>In all</td>
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<tr>
<td>1.</td>
<td>Valeology as science.</td>
<td>8</td>
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<tr>
<td>2.</td>
<td>Nature in life of man</td>
<td>8</td>
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<td>3.</td>
<td>Physical health</td>
<td>54</td>
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<tr>
<td>4.</td>
<td>Psychical health</td>
<td>24</td>
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<tr>
<td>5.</td>
<td>Social health</td>
<td>28</td>
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<tr>
<td>6.</td>
<td>Spiritual health</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>In all</td>
<td>144</td>
</tr>
</tbody>
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235
The schoolboys of experimental groups inspected before and after the lead through of all program of employments of the proper groups. Pupils of control groups inspected in those terms.

As a result of testing of indexes of physical health of first-class boys the followings results were (fig. 1):

On the indexes of index express-estimation a positive dynamics is exposed for the children of A-ones of Berezovka, getting busy in a valeological group. The first inspection (at the beginning of school year) exposed in a class 12,5 % children with the low level of physical health, 25 % with a level below the average, 25 % with middle and only 31 % with a level above average and 6 % - with a high physical health level. An inspection, conducted at year's end, exposed the considerable improvement of physical health of children. An amount of children with a health level above average was 87,5 %, 12,5 % had a middle level. At the same time indexes of physical health level student control group from Lyubotin's school №3 on the end of year (8 % children with the low level of physical health, 4 % with a level below the average, 44 % with middle, 32 % with a level higher from middle and 12 % with high) were worse than indexes of schoolboys of Berezovka on the end of year. Information is statistically reliable (p<0,05).

![Fig. 1. Physical health level of children of A-ones at the beginning and at the end of school year, %](image)

Determination of index of functional possibilities (IFP) of schoolboys s of A-one of school of settlement Berezovka demonstrated the dynamics of improvement of indexes of adaptation by the end of school year as compared to his beginning. If at the beginning 31 % schoolboys had a satisfactory level of adaptation only, then after the stake of such schoolboys was increased to 44 %. At the same time, as in the case of physical health level, indexes of adaptation possibilities of schoolboys of A-ones of Lyubotin's school at the end of school year were on 8 % below than indexes of schoolboys of Berezovka (fig. 2.). Information is statistically reliable (p<0,05).
The noted distinctions of indexes of health of first-class boys can be explained through the features of the program of valeological group of Berezovska, namely by the lead thorough complex valeological strengthening of health inspections passed pupils of 11 classes. Monitoring of physical health level through an index express-estimation exposed the dynamics of improvement of these indexes for schoolboys from 11 A class of gymnasium of the Kharkov national university of building and architecture, getting busy in a valeological group. First exposed inspections (to beginning of employments in a group) in a class a 6% pupils with the low level of physical health, 24% with a level below the average, 41% with middle and 29% – with a level above average. An inspection, conducted at year’s end, exposed the improvement of physical health of schoolboys. At year’s end there were not pupils with the low level of health, and also the percent of children was increased with a health level above average – from 29 to 41% (fig. 3.). Information is statistically reliable (p<0,05).

![Graph showing dynamics of IFP indexes change of pupils of A-ones at the beginning and at the end of school year, %](image)

Fig. 2. Dynamics of IFP indexes change of pupils of A-ones at the beginning and at the end of school year, %

Determination of functional possibilities of pupils of the eleventh classes demonstrated only an insignificant positive dynamics in an experimental group as compared to control. The indexes of control group from beginning to the end of scientific year did not change, while in experimental the increase of amount of students happened with the satisfactory indexes of adaptation from 35 at the beginning of scientific year to 41% in the end. There is a tendency to the change, but information was not statistically reliable (p>0,05).
Such difference as compared to analogical indexes for first-class boys can be explained that the program of group junior schoolboys got in which busy included making healthy syrup of «Valeoton», which amber acid, vitamins, antioxidants and other bioactive matters, positively influencing on functioning blood, nervous systems and adaptation possibilities of organism on the whole.

For research of psychosomatic compound of health the color test of M Lyusher was used.

At determination of intensity of stress on the test of Lusher looked after the increase of children with normal intensity of stress among pupil of school of sat. Berezovka. (Fig. 4.) Taking to account that repeatedly the test of M. Lusher was conducted at the end of school year, during the increase of teaching intensity at school, the dynamics of results can be considered positive, some increase of children with the high level of stress.

On this index a complex valeological correction in a groups appeared more effective, than there is the school program in Lyubotin.
It is possible also to the general positive dynamics of of stress’ level in the experimental group (11-A class) of gymnasium of the Kharkov university of building and architecture as compared to a control group (fig. 5.). Information was statistically reliable (p<0.05).

Determination of features of functioning of the vegetative nervous system was conducted on the index of coefficient of vegetation of K. Shiposhi (which settles accounts from information of Lusher test). For pupils of Berezovka’s school this index after the course of studies in valeological groups aspires to the norm, or the vegetative balance, that subjectively testifies to absence of the expressed excitation of the sympatic or parasympatic nervous system (fig 6).

![Fig. 5. Indicators of stress level of pupils of the eleventh classes of the Kharkov lyceum of architecture and building, %](image1)

![Fig. 6. Type of the vegetative adjusting of children of A-ones at the beginning and at the end of school year according to the coefficient of vegetation, %](image2)
For pupils of 11 classes the increase of amount of sympatotonics happened both in control and in experimental groups (fig. 7).

That subjective excitation of the sympatic nervous system happened for senior pupils. Objectively for these pupils a health level gets better, but subjectively children are in a state of tension, that can be caused the effect of «senior class» and requires bringing of additional changes in the program of valeological group

![Fig. 7. Type of the vegetative adjusting of pupils of 11A and 11M classes according to the coefficient of vegetation, %](image)

**Conclusions**

1. Monitoring of physical health level by system of indexes exposed the positive dynamics of the state of physical health and functional possibilities of pupils of A-one of Berezovka's school and pupils of 11 class of gymnasium of the Kharkov university building and architectures which got busy in valeological groups.
2. Intensity of stress and coefficient of vegetation for schoolboys, attending studies in valeological groups, by the end of school year nearer to the norm, what at a pupils from control groups
3. On the whole general positive influence is on consisting of health of children of attending of valeological groups.
4. The most considerable positive influence of attending of valeological groups on the state of health is in that group, where the program of group includes complex valeological procedure with the use of phytosyrup (Berezovka's school).
5. Valeological groups are a perspective method of extracurricular work, recommended for the use for all schools taking into account age of pupils.

Klíčová slova: mimoškolní práce, valeologické skupiny, fyzické zdraví, funkční možnosti organismu