ORGANIZATION MAINTENANCE OF HEALTH RELATED PHYSICAL CULTURE WORK WITH
STUDENTS IN OUT-OF-SCHOOL ESTABLISHMENTS
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National University of Physical Education and Sport of Ukraine

Abstract. Purpose: to substantiate the ways of organization of health related physical culture work with students in establishments of additional education. Material: in the research 12 experts in physical culture and additional education participated. We carried out expert questioning, which included questions about reasons of negative tendencies in children’s health in educational system. Results: we substantiated the role of additional education establishments, as places of health related physical culture work with students, realization. Potential of additional education establishments is optimization of resources by the following criteria: level of organizational changes (regional); place of innovations’ implementation (educational establishment); place of innovations’ realization (content, forms, methods). Realization of the youth’s educational policy is possible on the base of all educational system’s links involvement in process of strengthening and improvement of every citizen’s health. Increase of youth’s motor functioning will permit to significantly shorten expenditures for health protection system. Conclusions: the ways of health related physical culture work with students’ organization are the following: students’ trainings in sports circles, in youth clubs and additional education establishments of physical culture-sports and health related orientation; organization of creative associations on the base of HEEs; promotion of circles of non-Olympic kinds of sports.

Key words: physical culture, health, student, education, out-of-school.

Introduction
Worsening of modern youth’s health and physical fitness as well as pedagogic orientation on correspondence to European standards require searching effective ways of renewal of content, forms, methods and approaches to organization maintenance of educational process. It also relates to health related physical culture work (HPCW) [6, 29, 30]. Health strengthening and improvement of youth in traditional education process is oriented on quantitative indicators of knowledge acquiring. In education formation of youth’s positive attitude to own health is the most effective. But for this purpose it is necessary to have proper methodic provisioning [1, 3, 5, 6, 12, 40, 44].

Recent years there has been observed negative tendency of modern youth’s health and physical fitness worsening [2, 18, 46, 47, 49, 51, 53, 54]. It is facilitated by absence of the following: social demand in strengthening of youth’s health [13, 19, 43]; innovative approaches, pointed at positive results. All these require searching of the most effective and progressive ways of HPCW organization maintenance among youth.

For solution of the mentioned problems practice and reserves of additional education establishments (AEE) shall be useful. First of all it implies variety of circles (clubs by interests), then – flexibility and ability to realize current tasks on formation of healthy life style. All these will permit to implement innovative approaches to HPCW organization with children and students [37].

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In our previous works we studied innovative approaches in organization maintenance of health related physical culture work in AEE for schoolchildren. This substantiation became possible as a result of many years’ practical experience and theoretical work, conducted in the process of writing dissertation work [24-28]. Relevance of the present research is conditioned by the following drawbacks: deficit of attention to AEE opportunities in strengthening and improvement of students’ health; students’ unsatisfactory physical fitness; insufficient quantity of scientific works on the mentioned problems.

**Hypothesis of the research**

Changes in organization maintenance of HPCW in establishments of additional education will be adequate to society’s demands in improvement of students’ health and possibilities of socialization in social-economic conditions of the country, providing these changes consider modern innovative tendencies of education’s progressing.

**Purpose:** to substantiate the ways of organization of health related physical culture work with students in establishments of additional education.

**Material and methods**

**Participants:** in the research 12 experts in physical culture and additional education participated. Among them there were known in the country scientists, specialists in physical education and sports, heads of additional education establishments, physical culture teachers.

**The procedure:** we carried out expert questioning. The questionnaire included questions about reasons of negative tendencies in children’s health in educational system and determination of additional education establishments, which realize HPCW the most effectively [25].

**For statistical analysis** of the received data we applied the following statistical indicators: mean arithmetic (\( \bar{x} \)); S – standard deviation. Degree of respondents’ answers’ concordance was determined with coefficient of concordance (W). Statistical confidence of concordance coefficient was assessed with the help of \( \chi^2 \) – criterion [23].

**Results**

Scientific researches of recent years witness that worsening of health and modern life style of children and youth are the problems of priority of national importance [1, 12, 21, 47, 52, 56, and 57]. Analysis of literature sources proved that in Ukraine and in the world there are unfavorable tendencies for population’s health in the whole and in separate social-demographic groups, in particular [22, 44, 50, 60, 61] (see fig.1).

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**Fig. 1** Expected life span of population, determined from birth, by sex, years [22]:

- **man:**
- **women:**

1 – Byelorussia; 2 – Bulgaria; 3 – Estonia; 4 – Spain; 5 – Italy; 6 – Kazakhstan; 7 – Latvia; 8 – Lithuania; 9 – Germany; 10 – Poland; 11 – Russia; 12 – Slovakia; 13 – Hungary; 14 – Ukraine; 15 – France; 16 – Switzerland; 17 – Sweden.
From the point of state policy more effective and economically purposeful [36] is application of modern approaches to organization of educational sphere and population health protection than expenditures for treatment of unhealthy life style’s after effects.

Generalization and systematizing of scientific-methodic literature data about health problems show that a number of scientists [6, 32] outline specific peculiarities of modern understanding of health and healthy life style:
- Inter-disciplinary status of the problem;
- Need in holistic approach to regarding phenomenon “health”;
- Regarding health as complex social-cultural phenomenon.

Results of our researches prove multi aspect character of concept “healthy life style”. It is known that the basis of human health preservation is specially organized health related physical culture functioning, which is interpreted by scientists in different ways [38, 58]. With it human physical skills are developed, which, in their turn, influence on behavior and formation of individual personal qualities and socialization of a person.

Many scientists [5, 10, 16, 39] stress that determining role in physical education process belongs to formation of physical culture values and healthy life style of children and youth, cultivation in them responsibility for correct choice of way of life. In some works it is noted [8, 25, 59, 62], that value attitude to own health is formed in childhood. Under influence of parents and pedagogues, example of their personal lives, youth inherits means of rational organization of learning, leisure and creative activity. Formation of health culture in children and youth envisages rendering them timely pedagogic assistance, giving required theoretical and practical experience. Such experience can ensure their independence and responsibility when taking decisions about strengthening of own health. In this case it is necessary to consider social cultural environment in society.

Results of expert questioning witness that the reasons of negative tendencies in youth’s health are:
- Drawbacks in HPCW organization in educational establishments (27.4%),
- Health oriented academic programs’ non compliance with children’s individual features (20.5%),
- Social-economic factors (18.7%),
- Unfavorable conditions of class premises (16.7%),
- Excessive learning and physical loads (10.7%),
- Psycho-emotional tension (6%) and other.

The obtained concordance coefficient (W1=0.76) witnesses that experts’ opinions are in sufficient concordance. Questioning results can be used as statistically confident data, illustrating specialists’ opinion on this problem (see table 1).

Table 1. Results of experts’ assessment of significance of systemized reasons of negative tendencies in children’s health

<table>
<thead>
<tr>
<th>Number of expert</th>
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<td>Sum of ranks</td>
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<td>Deviation from mean sum of ranks</td>
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<td>Square of deviation</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: * – 1 – social-economic factors; 2 – unfavorable conditions of class premises; 3 – drawbacks in HPCW organization in educational establishments; 4 – excessive learning and physical loads; 5 – static and psycho-emotional tension; 6 – health oriented academic programs’ non compliance with children’s individual features

Social-economic factors are important indeed: without systemic work of governmental authorities on popularization of healthy life style and with deficit of financial provisioning it is much more difficult to organize effective HPCW. Less significant were the factors of unfavorable conditions of class premises and excessive learning and physical loads. Static and psycho-emotional tension renders the least influence on effective HPCW organization in educational establishments. Drawbacks in organization maintenance of HPCW in educational establishments provoked working out innovative approaches, based on classification of innovations by levels of organizational changes.

**Discussion**

In the course of our researches we proved that as on to day social-pedagogic aspect of HPCW is outlined. It facilitates harmony of students’ psychic and physical health, organization of their leisure, popularization of health culture and healthy life style as well it forms person’s will qualities, which are the basis of human independence.

The priorities of European countries’ activity in formation of healthy life style are determined by documents “Propaganda of healthy life style in 21st century” (1997), “Global strategy on eating, motor functioning and health of WHPO” (2004), “Global recommendations on physical activity” (2010), “European net of health related motor functioning’s promotion” (2013) and other. At national levels, system of physical education is reflected in profile laws. Realization of these laws is envisaged by state programs and strategies. (National strategy on health related motor functioning in Ukraine for the period to 2025, “Motor functioning – healthy life style – healthy nation”). As on to day, in the world there is no single construction of legislation base. That is why we only compare important for state special laws in sphere of physical culture and sports and program-normative documents of executive power. Criteria for comparison can be general norms, structure and content of documents. In the studied laws of Ukraine, Russian Federation, Byelorussia, Kazakhstan and Poland there is definition of physical culture as component of society’s general culture, component of national culture. The study of physical culture and sports development in the mentioned countries permitted to understand traditional approaches to HPCW organization maintenance and outline the prospects of its development in educational establishments of Ukraine (see table 2).

Table 2. Organization of physical culture in educational establishments of different countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Educational establishments in which health related physical culture work is realized</th>
<th>Scope of compulsory physical culture lessons in week</th>
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<tbody>
<tr>
<td>Ukraine</td>
<td>Pre-school educational establishments, secondary comprehensive schools, vocational schools, higher education establishments, out-of-school educational establishments, public organizations of physical culture-sports orientation</td>
<td>Not less than 3 times a week</td>
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<tr>
<td>Russian Federation</td>
<td>Educational establishments of primary, main general, secondary (full), secondary vocational and higher vocational education</td>
<td>Third hour of physical culture is introduced</td>
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<tr>
<td>Country</td>
<td>Educational establishments in which health related physical culture work is realized</td>
<td>Scope of compulsory physical culture lessons in week</td>
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<tr>
<td>Byelorussia</td>
<td>Pre-school educational establishments, secondary comprehensive schools, vocational schools. For additional health related physical culture and mass sports work, sport circles by kinds of sports are organized in educational establishments.</td>
<td>Not less than 3 times a week</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Pre-school educational establishments, secondary comprehensive schools, vocational schools, colleges, lyceums, higher educational establishments, sport clubs and out-of-school physical culture-sports organizations</td>
<td>In pre-school establishments – not less than 8 hours a week; in comprehensive schools – not less than 3 hours a week, in vocational schools, colleges, lyceums and higher educational establishments – not less than 4 hours a week</td>
</tr>
<tr>
<td>Poland</td>
<td>Kindergartens, schools, teaching-educational centers (out-of-school establishments) and higher schools.</td>
<td>For pupils of primary and secondary schools – 4 hours a week; for senior school pupils – 3 hours a week</td>
</tr>
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</table>

On the base of analysis of literature and scientific sources, normative legislative base of physical culture and sports we determined that countries, neighboring with Ukraine (Russian Federation, Byelorussia, Kazakhstan and Poland) have similar start conditions for development of HPCW. Analysis of the received data showed that quantity of motor functioning hours in a week was, in average, 3 hours. In Kazakhstan, in pre-school educational establishments 8 hours a week are compulsory; in higher educational establishments – not less than 4 hours. In Poland primary and secondary schools’ pupils have 4 hours of physical culture a week. Realization and execution of laws is based on State programs, which are adopted for a certain limited period (as a rule for 4 years). In Russian Federation and in Poland these periods are the longest – 10 years. The highest share of citizens, who will systemically practice physical culture, will be; in Russian Federation - 30%. In Ukraine there is the biggest quantity of motor functioning hours, envisaged by program, - 8-12 hours.

We analyzed measures of State programs on physical culture and sports of different countries. These measures were pointed at realization of governmental policy and fulfillment certain tasks by governmental executive authorities. In Kazakhstan, they take measures on usage of educational establishments’ sports facilities in curriculum and extra-curriculum time for sports activities by sport circles, health groups and so on among different population strata. In Poland perfection of sports and entertainment system of out-of-school education is realized; programs of physical functioning’s intensification in different social groups are initiated and supported; sports and physical functioning of disabled are promoted.

Analysis of special literature and normative documents on the studied problem proved need in searching innovative approaches to HPCW organizational maintenance in educational establishments. Such approaches shall ensure proper level of motor functioning and popularization of healthy life style among all participants of educational process (including students).

In some works, scientists [7, 17, 30, and 31] classify innovations in physical education. Innovative potential of physical culture for population health improvement is realized by creation and administrating of regional innovative infra-structures, by formation of image of innovative educational establishment [20]. Scientific researches determined that organization maintenance is an important aspect of innovative activity [35].

Our scientific researches permitted to expand these data [29, 30, 31, and 42] in respect to classification of innovative approaches to HPCW organization. We offer to fulfill HPCW by the following criteria: level of organizational changes; place of innovations’ implementation; place of innovations’ realization in educational process of educational establishments (see fig.2).
As innovative approach to organization maintenance of HPCW, scientists [42, 43] regard integration of main and additional education on the base of comprehensive school. The authors substantiate [14, 15] significance of children’s and youth’s additional education as a factor of regional educational system’s development. In scientific works [43] authors offer directions of solution of health improvement problem as well as increasing of quantity of children, practicing physical culture and sports. It permits to find internal reserves of HPCW effectiveness increase at the account of innovations in educational process. Integration of main and additional education on the base of comprehensive school is called by researchers “systemic innovation in administrating physical culture and sports”. The data of our research permitted to substantiate effectiveness of general and additional education’s interaction on the base of AEE in complex innovative projects. In such projects personnel, material-technical and program provisioning are used. Interaction of higher educational and additional education establishments is a promising direction.

Scientists studied innovation technologies of healthy life style formation in students in process of physical education. There were worked out innovative technologies of aqua-fitness of game orientation with basketball elements for integral influence on development of functional and psycho-physiological potentials; increase of students’ physical fitness [4]. The authors offered basic model of information micro-medium creation, which, in its structure, combined modules (normative, diagnostic, educational and teaching). It ensured integration of innovative technologies in higher education establishment’s functioning on formation of students’ healthy life style in physical education process [41].

In other researches approaches to organization of professional-applied physical training of students of different profiles are substantiated: mining specialty [11]; economists [45]; informational-logical specialties [34]. In their works scientists regard only opportunities for realization of the offered technologies in higher educational establishments. In 2015 objective conditions were formed, which required creation of new forms of physical education’s organization in HEEs. For example, according to the law of Ukraine “On higher education”
in order to ensure proper physical education level it is envisaged to implement chancellor’s personal responsibility for provisioning, development and upgrading of students' physical education.

The question about list of motor functioning general competences for applicants of higher education of different degrees is also a relevant one. Organization of physical education classes in HEE implies different models (sport circles, professionally oriented, traditional, individual) or different forms of their combinations. Physical education departments’ workers shall consult on problems of health improvement and physical training; recommend certain kinds of physical functioning (both organized and independent); work out individual programs of physical development (including sports and health related circles, clubs, lectures on health preservation, planning of family).

In the process of our research we determined the ways of organization of health-related physical culture work for students in AEE. Traditionally, in AEE pupils and students of age from 5 to 18 years old are enlisted. Regulation or AEE statute can envisage other age. In such case training and education of students in extracurriculum time is possible under specific conditions. Trainings in circles of health related and physical culture-sports orientation, in youth clubs and associations are possible only if highly qualified teaching personnel and proper material base are present. AEE can organize the work of own circles, groups and other creative associations in premises of HEE, on the base of sports premises and stadiums (in compliance with signed contracts with the mentioned above establishments).

The aim of additional education establishment is development and supports of students’ interests, their talents and self-determination in respect to their future profession. AEE can work together with scientific-research and creative organizations, higher educational establishments. AEE can create laboratories for creative, experimental and research work.

It is also necessary to note promising directions of HPCW’s (with students) perfection. Analysis of information about presence of teaching programs for out-of-school education in Ukraine (according to letter of Institute of innovative technologies and education content of Ministry of education and science of Ukraine №1.4/18-137 dt. 19.01.2011) permitted to make impression about AEE physical culture and health related circle in 24 regions. We analyzed information from 245 educational establishments of central, western, northern, eastern regions. The quantity of circles by all directions of out-of-school education is 4498. From them 48 AEE have no physical-culture-sports and health related circles (about 20% from total quantity of AEE). The quantity of physical culture-sports and health related circles in Ukraine varies from 3.2% to 12.1% from total quantity of circles of different orientations. The highest quantity of physical-culture-sports circles are in Kiev and Rovenskaya region; the least quantity – in Zakarpatskaya region [25, 28].

In 80% of AEE circles of physical culture-sports and health related orientation function. However, in total sum of all circles their quantity is in average 5% and varies, depending on region of location.

It should be noted that in AEE there are many circles of non-Olympic kinds of sports. Such circles organize and conduct competitions on non-Olympic kinds of sports and deal with preparation of sportsmen for the competitions [33]: sport dances, walking, bicycle, water, mountain and ski tourism; sport orientation; technical kinds of sports (aero-modeling, rocket-modeling); carting; auto-crossover modeling; motorcycle sport; sport DF; intellectual kinds of sports (checkers, chess, go); martial arts (karate-do, kyokushinkai karate, shotokan karate, combat gopak, kickboxing); speleology; billiards; rock climbing; cheer-leading. The prospect of their development is extremely relevant because they are demanded by children and youth.

Training programs of many circles are outdated and require adaptation to modern requirements. As on to day an urgent task is children’s and youth’s involvement in sports practicing and in healthy life style. Health strengthening, perfection of motor abilities, training of will, recognition in society – such tasks are solved also be non Olympic direction of sports. It creates conditions for training of physical and moral-will qualities of young generation.

Conclusions
1. Realization of educational practice in respect to formation of pupils and students’ health culture is possible on the base of inter-sectional complex approach, involvement of all links of Ukrainian educational system in process of every citizen’s health preservation and strengthening, independent on his/her age and state of health.
Increase of motor functioning will be useful for society and its every member. It will permit to significantly shorten expenditures for health protection system.

2. Content of all analyzed special laws determine legal norms and prospects of development of sport branch in different countries. HPCW organization in educational establishments of Ukraine, Russian Federation, Byelorussia, Kazakhstan and Poland has much in common. In the mentioned countries HPCW takes place in all links of continuous education (from pre-school establishments to higher educational establishments). State programs are pointed at increase of quantity of citizens, who will practice physical culture. Ukrainian legislation regulates increase of motor functioning volumes up to 8-12 hours in educational establishments of all types. Besides, it requires formation of healthy person with parents’ involvement in this process.

3. Analysis of traditional and innovative approaches to organization maintenance of physical culture – health related work permitted to determine potential of AEE. This potential implies searching new forms of interaction of main and additional educations’ establishments. In its basis there is implementation of innovations in educational process. It is possible at the account of optimization of already available resources by the following criteria: level of organizational changes (regional); place of innovations’ implementation (educational establishment), place of innovations’ realization (content, forms, methods and so on).

4. AEE have potential to realize the tasks on formation of healthy life style, to organize HPCW, to expand the net of circles and clubs. In such case it is necessary to use the existing personnel, financial and material-technical provisioning. With it, potentials of pedagogic practice is considered insufficiently. AEE have the required material-technical base, qualified personnel, wide covering of pupils and students’ contingent; variable choice of conceptions of development and training programs. The ways of HPCW organization for students are as follows: students’ trainings in circles, youth clubs and associations of physical culture and health related orientation as additional education; organization of creative associations’ work on the base of HEEs; development of non-Olympic kinds of sports circles.

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Conflict of interests

The authors declare that there is no conflict of interests.

References

3. Aref’iev VG. Osnovi teorii ta metodiki fizichnogo vikhovannia [Principles of theory and methodic of physical education], Kamenetz-Podolsky: PP Buynytskyy OA; 2014. (in Ukrainian)
5. Bekh ID. Osobistist’ u prostori dukhovnogo rozvitku [Personality in the space of spiritual development], Kiev: Academy publishing; 2012. (in Ukrainian)

8. Vas'kov IuV. Teoriia i metodologii didaktichnikh osnov fizichnogo vikhovannia v zagaloosvitnih navchal'nih zakladakh [Theory and methodology of physical education didactic principles in comprehensive educational establishments], Kharkov: 2011. (in Ukrainian)


18. Krucевич Tlu, Pangelova NE. Sovremennye podkhody k organizatsii rekreationnoi deiatel'nosti studencheskoy molodezhi v strukturo svobodnogo vremeni [Modern approaches to organization of students’ recreational functioning in structure of free time]. Pereyaslav-Khmelnitsky Pedagogical University Publ., 2015. 11-17. (in Russian)


20. Matvieiev SF, Borisova OV, Kogut IO. Magistr [Magister], Lviv: SPOLOM; 2015. (in Ukrainian)


33. Imas IeV, Matvieiev SF, Borisova OV. Neolimpijs'kij sport [Non-Olympic sports], Kiev: Olympic Literature; 2015. (in Ukrainian)


41. Futornyj SM. Zdorov'eperebega i tehnologii v processe fizicheskogo vospitanii studencheskoj molodezhi [Health related technologies in process of students' physical education], Kiev: Summit-book; 2014. (in Russian)
43. Khromin EV, Kolychev AV, Radostev NG. Integracija osnovnogo i dopolnitel'nogo fizkul'turnogo obrazovaniia kak osnova razvitiiia massovoy fizicheskoy kultury i detsko-inoresheskogo sporta na municipal'noi osnove [Integration of main education and additional physical culture education as the base of development of mass physical culture and junior-youth’s sports on municipal basis]. Teoriia i praktika fizicheskoy kultury, 2013;12:3–8. (in Russian)
44. Shian OI. Derzhava osvitnia politika z pitan' zabezpechennia zdorovogo sposobu zhittia molodi [State educational policy in ensuring of youth’s healthy life style], Lviv; 2010. (in Ukrainian)
50. Myers Samuel S. Global Environmental Change. The Threat to Human Health; 2009.
