

HEALTH-TECHNOLOGY IN THE CLASSROOM WITH THE GIRLS PLAYING FOOTBALL OF SECONDARY SCHOOL AGE

Tkachenko S.N.

Sumy State Pedagogical University

Annotation. *Purpose:* carry out a theoretical analysis of the problem of health-use technology on football lessons in secondary schools. *Material:* processed more than 100 literary sources. *Results:* the article presents the main ways of implementation of maintaining health technology on football lessons. The basic attention approaches to the concept of «maintaining health». An author analyses the classifications of maintaining health technology and basic principles of their application of the lessons of football in secondary schools. The author summarized the current views on the problem of implementation the maintaining health technology in the school system, including such as monitoring the causes of injuries on football lessons and ways to prevent them, the creation of healthy environments. *Conclusion:* It is proved that the use of maintaining health technology on football lessons aims not only development of pupil's skills, healthy lifestyles, but also the creation of educational institution necessary conditions for preserving the health of the younger generation.

Key words: maintaining health, technology, football, injury, differentiation.

Introduction

Searching for new ways of positive influence on improvement of pupils' physical condition and formation of their value attitude to own health has becoming rather important in physical culture. In spite of numerous scientific researches, devoted to problem of pupils' health protection with physical exercises, problem of health protecting technologies' application at football trainings of middle school age girls has been elucidated insufficiently. It conditions urgency of the problem, regarded in this work.

Pedagogic technologies of physical health protection are regarded in scientific works in the field of professional physical culture education – S. Garkusha, M. Nosko, L. Suschenko; organization of physical educational-training process in school-type educational establishments were studied by V. Geraschuk, L. Gnitetskiy, N. Goncharova [8], V. Kashuba [8], A. Sitovskiy [11], B. Shyan [13]. Professional knowledge, functions and functioning of physical culture instructor first of all shall be oriented on protection of pupils' health (I. Brizhata [1–2], O. Vaschenko [4], O. Glebova [5] O. Dubogray, O. Yezhova [6], K. Petrenko [10]), especially concerning prophylaxis character of physical culture classes, mass- sport measures, organization of independent sport trainings.

In context of the regarded problem we consider urgent scientific researches on health protection of rising generation (O. Verbzhytska, Ye. Luparenko, O. Omelchenko, Ye. Fedosimov [12] et al.), on health hardening by means of football (A. Vasylichul [3], G. Kolomiyets [9] et al.) as well as works of foreign scientists [14–15]. Alongside with it solution of problem of health protecting technologies' application at football trainings of middle school age girls has not been elucidated to full extent. That is why there exists demand in more perfect analysis of this problem.

Purpose, tasks of the work, material and methods

The purpose: foundation of problem of health-protecting technologies' application and determination of traumatism's reasons and ways of its prevention at football trainings of middle school age girls.

The tasks: foundation of main approaches to conception of “health protection”; analysis of classifications of health protecting technologies and main principles of their application at football trainings in comprehensive educational establishments.

The methods of the research: theoretical analysis and generalization of scientific-methodic literature data on the regarded problem.

Results of the research

In the process of physical education of pupil's personality in system of school education in our opinion application of health protecting technologies is rather important. Having analyzed the latest scientific works on health protection of pupils we determined that health protection is:

- The process of protection and strengthening of health oriented on transformation of intellectual and emotional spheres of personalities, rising of valuable attitude to own health and health of surrounding people on the base of understanding of own personal responsibility (O. Glebova, 2005) [5];
- Component of health protection, which combines medical, psychological, valuelogic and pedagogic knowledge (Ye. Fedosimov, 2004) [12].

In order to understand the sense of concept “health protecting technologies” we supply main approaches to its definition. In modern science this concept in school education's system is determined as the process of teaching and education, which makes no direct or indirect harm to pupils' health, creates safe and comfort conditions of children's being at school, ensures individual educational trajectory of a child, prevents from stresses, overloads, tiredness and, thus, facilitates protection and strengthening of schoolchildren's health (O. Ionova, Yu. Lukyanova, 2009) [7].

In the context of the regarded problem we analyzed classifications of the existing health protecting technologies by O. Vaschenko and S. Sviridenko:

- Health protecting – are technologies, which create safe conditions for being, studying and work at school and those, which facilitate rational organization of educational process (considering age, sex., individual characteristics and hygienic standards), correspondence of educational and physical loads to child's potentials;
- Health related technologies are those, oriented on pupils' physical health, increasing of their health potential (resources): physical training, physio-therapy, aromatic therapy, hardening, gymnastic, massage, phytotherapy, musical therapy;
- Technologies of teaching to be healthy – hygienic education, formation of life habits (emotional control, ability to solve conflicts), prophylaxis of traumatism and using of psycho-active substances, sex education. These technologies are realized owing to introducing of appropriate topics into general educational cycle, organization of otional studying and additional education;
- Cultivation of health culture – education of pupils' personality's features, which would facilitate health protection and strengthening, formation of ideas about health as a value, increasing of motivation for healthy life style, rising of responsibility for own health and health of family [4].

In order to present the sense of regarded health protecting technologies and possibility of their application it is necessary to characterize them by every kind mentioned in classification:

- Health protecting technologies are clear and rational organization of lessons, distribution of physical loads in compliance with age potentials of girls;
- Health related measures – render positive influence on pupils' organism by means of football;
- Technologies of teaching to health mean observation of sanitary-hygienic requirements and safety regulations in football trainings;
- Educational mean cultivation of schoolgirls' understanding of healthy life style and practicing of it with the help of football.

For ensuring of effectiveness of the listed health protecting technologies at football trainings and timely avoid possible traumatic after effects, specialists [1–2; 10] determined the reasons of traumas:

- Disorders in organization of trainings. They are if there are too much children per one instructor or if in one class room several groups are trained; if rules of children's shifting from one kind of training to other are violated; if classes are started or finished not in proper time;
- Violations of methodic of teaching. These violations are manifested in violation of didactic principles. Often the reason of damage or trauma is inattentive attitude to introduction to lesson, warming up; incorrect training of physical exercises' techniques, absence of necessary self-support, incorrect application of it, often usage of maximal or forced loads; порушення в методиці навчання. Ці порушення проявляються в недотриманні принципів дидактики.
- Absence of pupils' discipline. This factor can manifest itself as emotional breakdowns, caused by difficulties of exercises, by violation of teaching methodic, tiredness, absence of individual approach from the side of instructor, violation of behavior rules at trainings, insufficient civility of pupils;
- Unsatisfactory condition of training sites, equipment, inventory: incompliance of them with requirements to physical culture trainings, small dimensions of gym, unevenness of floor. Damage of sport apparatuses, mats, tracks, their wrong exploration;
- Incompliance of cloth and shoes is manifested in the fact that pupils, sometimes, attend trainings in uncomfortable cloth, in shoes, which are not in size, with slippery or too ruff sole and heels;
- Violation of sanitary-hygienic requirements: incompliance of temperature in gym with standards, insufficient natural or artificial illumination, insufficient ventilation, increased humidity of air or its excess dryness, absence of order in gym, non observance of personal hygiene rules;
- Drawbacks of medical control over pupils physical condition: untimely and insufficiently careful medical examination; non observance of doctor's recommendations; wrong rehabilitation after traumas or diseases;
- Underestimation and wrong usage of safety rules, negative attitude to safety rules and to help during fulfillment of complex and insufficiently mastered exercises; absence of necessary experience and weak safety skills; absence of skill in self safety support;
- Violation of safety rules: wrong location of gymnastic apparatuses, wrong location of children in gym or near apparatus; wrong condition of apparatuses or auxiliary equipment; careless attitude to installation of gymnastic apparatuses, laying mats in places of landing [10].

Taking all these in consideration, we shall admit that important direction of pupils health protection at physical culture trainings is problem of prophylaxis that facilitates creation of health protecting atmosphere in educational establishments and conditions for strengthening of health and harmonious development of schoolchildren; formation of healthy life style and improvement of pupils' physical condition.

In this context we consider conclusions of I. Brizhata to be rather valuable, who sais that in prophylaxis of traumatism during physical trainings significant role is played by didactic components: prophylaxis problems, instructions, observation of safety rules, rendering assistance during exercises' fulfillment [2].

Educational program on physical culture for 5-9 forms' pupils of comprehensive educational establishments

stresses that main sense of module “Football” corresponds to main tasks of program, forming steady schoolchildren’s interest to physical culture in particular and to healthy life style in general.

Analyzing contemporary works, devoted to pupils’ health protection problems and methodic of football training at schools, we grouped methodic recommendations concerning organization of instructor’s work in the aspect of pupils’ health protection at football trainings in comprehensive educational establishments:

1. Main program of training shall be started only after 10-15 minutes of warming up and after finishing of training fulfill recreational exercises for relaxation and restoration of breathing during 3-5 minutes.
2. Systemically control heart beats rate before, during and after training.
3. Provide rational load, considering age peculiarities and sex of children’s organism [3].
4. Practicing of football trainings in the open air all year around at comprehensive schools [9].

Basing on own experience and in compliance with methodic recommendations and regulations on safety measures during physical culture lessons we determined that in the process of football trainings schoolchildren’s health protection will be facilitated by the following factors:

- Strict observation of rules of behavior and sequence of exercises by pupils. Under control of instructor pupils shall take loads gradually in order to avoid traumatism;
- Careful mastering of techniques before starting of match: kicks and passes, correct stance for pass of ball, personal defense. It should be stressed that with it, it is necessary to observe the following sequence: familiarization with technique; mastering of technique in simplified conditions; perfection of technique in conditions, close to match; fixing of technique in game;
- Correctly chosen cloth shall be light and does not hinder movements; football players shall have appropriate shoes. There shall not be any foreign things with pupils in order not to injure other pupils in the process of game;
- It is compulsory to have individual protective elements: knee and shin shields; for goalkeepers – gloves;
- Ball for football trainings shall be of 0.68 – 0.71 meters’ length and of weight 396–453 g;
- It is compulsory to have special equipment for football trainings. It should be stressed that observation of this requirement facilitates not only correct mastering of material but also correct organization of training that, in its turn, facilitates schoolchildren’s health protection. In compliance with academic program on physical culture for 5-9 forms’ pupils of comprehensive schools the following equipment shall be provided for football training with good quality per one class: football balls – 40 pcs., chips – 20 pcs., football vests – 2 x20, football goals – 2 pcs. (instead of them football chips can be used), nets for football goals – 2 pcs., pump for pumping of balls- 1 pc., nipple needles – 5 pcs., measuring tape – 1 pc., timer – 1 pc., whistle – 1 pc., computer – 1 pc., projector – 1 pc., screen- 1 pc., model of football ball – 1 pc.

An important factor of pupils health protection at football trainings is consideration of schoolchildren’s body constitution, physiological processes. Важливим напрямом збереження здоров’я учнів на уроках футболу в школі є необхідність урахування особливостей будови організму школярів, фізіологічні процеси, які у них відбуваються. Considering it, according to academic program of physical culture for comprehensive educational establishments (5-9 forms) it is purposeful to conduct lessons in differentiated way and matches shall be separate for girls and for boys.

Also care attention shall be paid to equipping of sport sites in order to protect pupils’ health at football trainings. According to state building standards of Ukraine for sport and health related physical culture facilities these requirements shall be as follows:

1. Open sport sites shall be located in sport zone at distance not less than 25 meters from educational and auxiliary premises.
2. The sites can not be surrounded by any trenches, wooden or brick edges. Trees, columns, fences or other objects shall be, if any, at distance not less than 2 meters from the site.

As far as football trainings can be practiced in closed premises for example in gyms, there also it is necessary to follow safety rules, considering kind of sports:

1. Painting shall be resistant to strikes of ball, shall not crumble or become dirty after contact with ball.
2. Ceiling shall be painted with not crumbling paint, resistant to strikes of ball.
3. Windows and lighters shall have steel protection against strikes of ball; windows shall have transoms, which it would be possible to open, standing on floor.

Thus, application of health protecting technologies at football trainings in school is oriented not only on formation of sills of healthy life style, but also on creation of proper conditions for health protection of rising generation in educational establishment and cultivation of pupils’ personal responsibility, considering the kind of sports, trained by them.

Conclusions:

In this article we regarded approaches to definition of concepts “health protection” in physical culture, prived purposefulness of health protecting technologies’ application in process of football training of middle school age girls. In particular, we stressed that it is necessary to determine reasons of traumatism and ways of its prevention at football trainings.

The prospects of further researches imply analysis of differentiated approach in physical education of girls of middle school age.

References

1. Brizhata I. A. *Visnik Chernigivs'kogo derzhavnogo pedagogichnogo universitetu* [Bulletin of the Chernihiv State Pedagogical University], 2009, vol.64, pp. 36–39.
2. Brizhata I. A. *Moloda sportivna nauka Ukrayini* [Young sport science of Ukraine], 2003, vol.2(2), pp. 155–157.
3. Vasil'chuk A. G. *Teoriia i metodika fizichnogo vikhovannia i sportu* [Theory and methods of physical education and sport], 2003, vol.2, pp. 21–26.
4. Vashchenko O., Sviridenko S. *Zdorov'ia ta fizichna kul'tura* [Health and Physical Education], 2006, vol.8, pp. 1–6.
5. Glebova E. I. *Zdorov'esberezhenie kak sredstvo povysheniia effektivnosti obuchenii studentov vuza* [Health savings as a means of increasing the effectiveness of the training of university students], Cand. Diss., Yekaterinburg, 2005, 24 p.
6. Iezhova O. O. *Pedagogichni nauki : teoriia, istoriia, innovacijni tekhnologiyi* [Teaching science: theory, history, technology innovation], 2011, vol.3, pp. 65–74.
7. Ionova O. M., Luk'ianova Iu. S. *Pedagogika, psihologia ta mediko-biologicni problemi fizichnogo vihovanna i sportu* [Pedagogics, psychology, medical-biological problems of physical training and sports], 2009, vol.1, pp. 69–72.
8. Kashuba V. O., Goncharova N. M. *Pedagogika, psihologia ta mediko-biologicni problemi fizichnogo vihovanna i sportu* [Pedagogics, psychology, medical-biological problems of physical training and sports], 2010, vol.1, pp.71–73.
9. Kolomiiec' G. *Teoriia ta metodika fizichnogo vikhovannia* [Theory and methods of physical education], 2007, vol.11, pp. 30–32.
10. Petrenko K. *Fizichna aktivnist', zdorov'ia i sport* [Physical activity, health and sport], 2011, vol.2, pp. 20–27.
11. Sitovs'kij A. M. *Diferencijovaniy pidkhid u fizichnomu vikhovanni pidlitkiv z rizmami tempami biologichnogo rozvitku* [Differentiated approach to physical education of adolescents with different rates of biological development], Cand. Diss., Lviv, 2008, 20 p.
12. Fedosimov E. G. *Formirovanie gotovnosti starsheklassnikov k zdorov'esberezheniiu* [Formation of readiness of high school students to health savings], Cand. Diss., Orenburg, 2004, 192 p.
13. Шиян Б. М. *Теорія і методика фізичного виховання школярів* [Theory and methods of physical education in schools], Ternopil Educational book - Bogdan, 2002, 248 p.
14. Martens R. *Coaches guide to sport psychology*. Vilnius: LISC. 1999, 172 p.
15. Tranter P., Lowes M. The place of motorsport in public health: an Australian perspective. *Health & Place*. 2005, vol.11 (4), pp. 379-391. Doi:10.1016/j.healthplace.2004.07.004/

Information about the author:

Tkachenko S. N.: ORCID: 0000-0001-6400-0075; serzh_tkachenko_1977@mail.ru; Sumy State Pedagogical University; Sudzhanskiy Str. 20, Sumy, 40000, Ukraine.

Cite this article as: Tkachenko S.N. Health-technology in the classroom with the girls playing football of secondary school age. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2014, vol.11, pp. 61-65. doi:10.15561/18189172.2014.1111

The electronic version of this article is the complete one and can be found online at: <http://www.sportpedagogy.org.ua/html/arhive-e.html>

This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (<http://creativecommons.org/licenses/by/3.0/deed.en>).

Received: 25.05.2014
Published: 05.06.2014