

Creation of a Healthcare Environment at a Higher Educational Institution

OLENA MOMOT¹, MARYNA DIACHENKO-BOHUN², NATALIYA HRYTSAI³, IGOR GRYGUS⁴, BŁAŻEJ STANKIEWICZ⁵, ALEXANDER SKALIY⁶, MAGDALENA HAGNER-DERENGOWSKA⁷, MAREK NAPIERAŁA⁸, RADOSŁAW MUSZKIETA⁹, MAŁGORZATA OSTROWSKA¹⁰, WALERY ZUKOW¹¹

¹Department of Theoretical and Methodical Foundations of Sporting Disciplines of Poltava V. G. Korolenko National Pedagogical University, Poltava, UKRAINE

²Department of Botany, Ecology and Methods of Teaching Biology of Poltava V. G. Korolenko National Pedagogical University, Poltava, UKRAINE

³Department of Biology, Oncology and Medical Physiology of Rivne State University of Humanities, Rivne, UKRAINE

⁴Institute of Health Sciences, National University of Water and Environmental Engineering, Rivne, UKRAINE

^{5,8}Kazimierz Wielki University, Bydgoszcz, POLAND

⁶University of Economy, Bydgoszcz, POLAND

^{7,9,10,11}Nicolaus Copernicus University, Torun, POLAND

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Abstract

Background. The article reveals the essence of the notion of «healthcare environment of a higher education establishment» as an environment of an individual, in which interconnected healthcare factors and conditions contributing to the social, spiritual, physical and mental development of the personality of the future teacher operate, the components of health as a prerequisite for the creation of a health-preserving environment, should ensure not only the preservation and strengthening of health, but also the formation of the health culture of the future specialist. The objective of this research: to uncover the process of creating a healthcare environment in the institution of higher education and its impact on the healthcare activities of future teachers. **Methods.** During the implementation of this research the complex of general scientific methods has been used: an observation as a systematic purposeful study of the object; a poll as the most common method of obtaining information; a comparative analysis as a comparison of features inherent in two or more objects; a pedagogical experiment, which was used to create a healthcare environment in the institution of higher education and check its impact on the dynamics of the level of a healthcare activity by the future teachers. **Results.** After the conducted study, the following data were obtained: 10,2% of students in the control group and 20,9% of students in the experimental group have a high level of healthcare activity, 29,3% and 53,8% of students possess a sufficient level respectively, 33,8% of students in the control group and 19,1% of students in the experimental group showed an average level, 26,7% of students in the control group and 6,2% of students in the experimental group have a low level of a healthcare activity. **Conclusions.** Thus, the creation of healthcare environment in an institution of higher education is a process that requires a clear awareness by all subjects of the educational process about the importance of a responsible attitude towards their own health. Prospects for further researches lie in further study the theory and practice of future teacher's personality upbringing in the healthcare environment in the institution of higher education.

Keywords: health, healthcare environment, personality of the future teacher, level of physical development, institution of higher education

Introduction

Humanization of education requires the preservation and strengthening of today's youthhealth, the education of their healthcare skills and habits.

Literature Review

The analysis of recent studies and publications shows that the problem of healthcare is multifaceted, especially studies (Bashavets, 2011; Boychuk, 2008; Garkusha, 2015; Grynova, 2017; Dyachenko-Bohun, 2016; Yefimova, 2012; Diachenko-Bohun, et al., 2019; Lukyanenko, 2011; Malykhin, 2010; Manuylov, 2008; Mironyuk, 2017; Momot, 2017; Novopys'menny, 2016; Nosko, 2014; Palichuk, 2011; Serykov, 1999; Slyvka,

2014; Stepanova, 2004; Tsyplyuk, 2017; Zavydivska, 2013), which reveal different aspects of forming a health culture and a healthy lifestyle, are gaining popularity. The scientists in their research works argued in favour of a holistic approach to the formation of human health; they substantiated the principles, the content, forms and methods of healthcare pedagogy; determined the scientific basis for the formation of healthcare and valeological competence; theoretically substantiated the socio-pedagogical peculiarities of personality formation; scientifically generalized the problem of creation and implementation, on the foundation basis of physical culture and health education, pedagogical healthcare and saving technology of future specialists training in higher education institutions; they have also developed the ways to create a healthcare educational environment.

Despite such long-standing interest in this above-mentioned problem, the term «healthcare environment» has no unambiguous interpretation and the organizational and pedagogical conditions for the introduction of its principles into the system of the future teacher's personality training are not defined. Efforts that are being provided by higher educational institutions in the field of healthcare are not effective enough, as evidenced by the decrease in the level of motor activity of young people, the lack of a desire for a healthy lifestyle, the lack of innovative activities in the field of physical education and healthy lifestyle.

Material and methods

During the implementation of this research the complex of general scientific methods has been used: an observation as a systematic purposeful study of the object; a poll as the most common method of obtaining information; a comparative analysis as a comparison of features inherent in two or more objects; a pedagogical experiment, which was used to create a healthcare environment in the institution of higher education and check its impact on the dynamics of the level of a healthcare activity by the future teachers.

The purpose of the study: to uncover the process of creating a healthcare environment in the institution of higher education and its impact on the healthcare activities of future teachers.

The goal presupposes carrying out the following research tasks:

- to find out the essence of the concept «healthcare environment»;
- to determine the measures for creating a healthcare environment in the higher educational institution;
- to determine the level of physical development of future teachers in the higher educational institution;
- to outline the indicators of a healthcare environment creation in the higher educational institution;
- to determine the influence of a healthcare environment on the dynamics of the level of a healthcare activity by the future teachers.

Research methods: an observation as a systematic purposeful study of the object; a poll as the most common method of obtaining information; a comparative analysis as a comparison of features inherent in two or more objects; a pedagogical experiment, which was used to create a healthcare environment in the institution of higher education and check its impact on the dynamics of the level of a healthcare activity by the future teachers.

Results

In his study T. Osadchenko, (2016) confirms that in the modern scientific literature the definition of «healthcare environment» has a wide range of definitions, which is conditioned by psychological and pedagogical aspects of disclosure of its essence and mechanisms of creation within various educational institutions and organizations: «It is a set of educative, educational, relaxing, socializing, developing components, which are aimed at the formation of a viable healthy person» (Miller, 2006); «the health-improving medical measures are not only of great importance, but also hygienic-rational, educational loading which corresponds to the age of pupils; classes in conditions that meet the requirements of sanitary rules are also of great importance» (Stepanova, 2004); «a set of social and hygienic, psychological and pedagogical conditions and physiological factors that contribute to the implementation of adaptive capabilities of the individual, preservation and strengthening of mental and physical health of pupils, students and their harmonious development» (Diachenko-Bohun, et al., 2019); «the learning environment in which, through the formation of the integrity of consciousness, a life-affirming and healthcare image of the person's world, his healthcare competence, a healthy lifestyle is provided, a responsible attitude towards own health and the health of others, to the environment, all components of the health are controlled» (Dudko, 2015); «it is a set of social and pedagogical conditions, physiological components, that promote the implementation of adaptive capabilities of individuals; factors, that influence the preservation and development of their health» (Tushyna, 2005).

The creation of a healthcare environment plays an important role in the process of the harmonious personality educating of the future teacher. If this type of an environment can be created at a higher education institution, a number of topical tasks can be solved, such as: the full preservation and strengthening of the future specialist's health, the educating of healthcare behavior and the health culture, the assimilation of its moral, ethical, spiritual, aesthetic and physical components.

This research work proposes a number of measures to solve the given problem.

Educational activity 1. The healthcare support provision into the educational process of the institution of higher education.

Aim: to acquire knowledge, skills and abilities of future specialists for solving professional problems with the obligatory consideration of safety requirements during physical education classes; to master the general cultural and professional competences in life safety, which are connected with the life and health preservation during the lessons of physical education and a workout.

Progress: To introduce the educational-methodical course «Management of safety during physical education classes» in the educational process of the institution of higher education. The content of the training course consists of seven modules.

Educational activity 2. Creation of a system for future teachers' personalities training which is based on healthcare ideas.

Aim: to enrich future professionals with the healthcare knowledge.

Progress: To introduce the educational and methodical complex «Educating the personality of the future teacher in the healthcare environment of the higher educational institution». The content of the teaching and methodical complex consists of nine methodological advice and recommendations that are presented in the form of theoretical material. To test the acquired knowledge, test tasks are developed that can become the basis of self-education.

Educational activity 3. To rationalize the safe conditions for staying, studying and working in a higher education institution.

Aim: the future teachers have to respect the healthcare guidelines, advice and recommendations and conduct responsible, healthcare behavior in all spheres of life.

Progress: to introduce in the educational process of the higher educational institution the technologies of upbringing the personality of the future teacher, which can provide: the health culture education of future teacher's personality; the introduction of healthcare activity in the educational process of the institution of higher education; the formation of the principles of rational and balanced nutrition of future teacher's personality.

To diagnose and characterize the healthcare of future teachers' personalities, we determine the following indicators:

- physical development and physical capacity;
- psychological adequacy and equilibrium;
- intellectual development;
- a set of social and spiritual values that provide politeness, disciplined manner and cultural patterns.

The mentioned indicators of health qualitative characteristics are tested and measured by tested methods (tests, surveys, questionnaires, self-monitoring, pedagogical observation).

In order to verify the physical development of future teachers' personalities in higher educational institution, we were guided by the tests and norms for conducting an annual assessment of the physical preparedness of the population in Ukraine, which were approved by the order of the Ministry of Ukraine for Family, Youth and Sports № 4665 «On the approval of tests and standards for conducting an annual assessment of the physical preparedness of the population in Ukraine»: as at 15.12.2016 (for applicants of higher education (18–20 years) (Nakaz Ministerstva molodi ta sportu Ukrainy № 4665 «Pro zatverdzhennya testiv i normatyv dlya provedennya shchorichnoho otsynuvannya fizychnoyi pidhotovlenosti naseleння Ukrainy»). [Order of the Ministry of Youth and Sports of Ukraine. №4665 «On Approval of Tests and Standards for the Annual Evaluation of the Physical Preparation of the Ukrainians»]. Kyiv: Ministerstvo molodi ta sportu Ukrainy; 2016 URL: <http://zakon5.rada.gov.ua/laws/show/z0195-17/page.Ukrainian>).

In total, 450 students participated in the pedagogical experiment. There was a problem of the experimental data quality in the process of the study, because there were tests unequal in size, it was difficult to compare the distribution of features in different categories (boys and girls) of the participants in the experiment. Therefore, according to the rule of a single agreement, to simplify the grouping procedure, some tests were recognized by us as equivalent. To correlate the data of the molding experiment, we used simultaneously the distribution of experimental indicators at the logical levels of their formation: 1 – high, 2 – sufficient, 3 – average and 4 – low. An additional check of the data of individual tests according to the rule of the only one difference revealed slight differences in the estimations (from 1 to 1,6%), which is permissible in this type studies. A selective method was used in selecting and completing experimental and control groups.

The process of staffing the experimental and control groups was conducted among future teachers' personalities of higher educational institutions: girls and boys from 18 to 20 years old. All participants in the experiment had equal conditions and opportunities. The total number of participants covered in the experiment was differentiated into three experimental subgroups: E1, E2, E3. Future teachers' personalities who were engaged in regular schedules (control group) were also divided into three subgroups: K1, K2, K3 (for calculating convenience). Therefore, the terms of the experiment are considered as equal, identical for both - the experimental and the control group. So, there are 75 people under investigation in each subgroup.

The results of testing the control and the experimental groups for determining the level of physical development of future teachers' personalities by the standard: the jump in length from the place, are presented in

Table 1.

Table 1. Testing results of the control and the experimental groups by the standard: the jump in length from place

The jump in length from place						
Estimation	Group K1	Group K2	Group K3	Group E1	Group E2	Group E3
	Number of participants					
2	7	5	6	8	5	11
3	46	44	48	45	44	40
4	14	14	13	16	14	15
5	8	12	8	6	12	9

Table 1 shows that in the group K 1 – 9,3% of the participants have a low level, 61,3% – a sufficient level, 18,7% – an average level and 10,7% – a high level. In the group K 2 – 6,7% of the participants have a low level, 58,7% – a sufficient level, 18,7% – an average level and 16% – a high level. In group K 3 – 8% of the participants have a low level, 64% – a sufficient level, 17,3% – an average level and 10,7% – a high level. In the group E1 – 10,7% of the participants have a low level, 60% – a sufficient level, 21,3% – an average level and 8% – a high level. In the group E2 – 6,7% of the participants have a low level, 58,7% have a sufficient level, 18,7% have an average level and 16% have a high level. In group E 3 – 14,7% of the participants have a low level, 55,3% – a sufficient level, 20% – an average level and 12% – a high level.

The results of testing the control and the experimental groups for determining the level of physical development of the future teachers' personalities by the standard: the torso tilt forward from the sitting position, are presented in Table 2.

Table 2. Test results of the control and the experimental groups by the standard: the torso tilt forward from the sitting position

The torso tilt forward from the sitting position						
Estimation	Group K1	Group K2	Group K3	Group E1	Group E2	Group E3
	Number of participants					
2	13	16	15	11	17	16
3	38	34	38	42	39	33
4	13	16	13	16	10	15
5	11	9	9	6	9	11

Table 2 shows that in the group K 1 – 17,3% of the participants have a low level, 50,7% – a sufficient level, 17,3% – an average level and 14,7% – a high level. In the group K2 – 21,3% of the participants have a low level, 45,3% – a sufficient level, 21,3% – an average level and 12% – a high level. In group K3 – 20% of the participants have a low level, 50,7% – a sufficient level, 17,3% – an average level and 12% – a high level. In the group E1 – 14,7% of the participants have a low level, 56% – a sufficient level, 21,3% – an average level and 8% – a high level. In the group E2 – 22,7% of the participants have a low level, 52% – a sufficient level, 13,3% – an average level and 12% – a high level. In group E3 – 21,3% of the participants have a low level, 44% – a sufficient level, 20% – an average level and 14,7% – a high level.

The results of testing the control and the experimental groups for determining the level of physical preparedness of the future teachers' personalities on the initial stage of the study by the standard: shuttle run 4x9 m, are presented in Table 3.

Table 3. Test results of the control and the experimental groups by the standard: shuttle run 4x9 m

Shuttle run 4x9 m						
Estimation	Group K1	Group K2	Group K3	Group E1	Group E2	Group E3
	Number of participants					
2	17	10	13	11	15	15
3	35	36	40	36	32	36
4	12	18	16	17	16	16
5	11	11	6	11	12	8

Table 3 shows that in the group K1 – 22,7% of the participants have a low level, 46,7% – a sufficient level, 16% – an average level and 14,7% – a high level. In the group K2 – 13,3% of the participants have a low level, 48% – a sufficient level, 24% – an average level and 14,7% – a high level. In group K3 – 17,3% of the participants have a low level, 53,3% – a sufficient level, 21,3% – an average level and 8% – a high level. In the group E1 – 14,7% of the participants have a low level, 48% – a sufficient level, 22,7% – an average level and 14,7% – a high level. In group E2 – 20% of the participants have a low level, 42,7% – a sufficient level, 21,3% – an average level and 16% – a high level. In group E3 – 20% of the participants have a low level, 48% – a sufficient level, 21,3% – an average level and 10,7% – a high level.

The results of testing the control and the experimental groups for determining the level of physical preparedness of the future teachers' personalities by the standard: running at 100 m, are presented in Table 4.

Table 4. Test results of the control and the experimental groups by the standard: running at 100 m

Running at 100 m						
Estimation	Group K1	Group K2	Group K3	Group E1	Group E2	Group E3
Number of participants						
2	18	15	20	21	17	16
3	41	46	36	43	46	40
4	10	9	16	6	9	15
5	6	5	3	5	3	4

Table 4 shows that in the group K1 – 24% of the participants have a low level, 54,7% – a sufficient level, 13,3% – an average level and 8% – a high level. In the group K2 – 20% of the participants have a low level, 61,3% – a sufficient level, 12% – an average level and 6,7% – a high level. In group K3 – 26,7% have a low level, 48% – a sufficient level, 21,3% – an average level and 4% – a high level. In the group E1 – 28% of the participants have a low level, 57,3% – a sufficient level, 8% – an average level and 6,7% – a high level. In group E2 – 22,7% of the participants have a low level, 61,3% – a sufficient level, 12% – an average level and 4% – a high level. In the group E3 – 21,3% have a low level, 53,3% – a sufficient level, 20% – an average level and 5,3% – a high level. The conducted research which concerns the determination of the physical preparedness level of the future teachers' personalities made it possible to understand, that the majority of people under consideration are below the average level of physical preparation – 68, 3% out of 450 (100%).

Discussion

Indicators of the results of creating a healthcare environment in a higher educational institution can be characterized by the following parameters:

- the formation of the healthcare orientation of future teacher's personality, which is primarily manifested in the signs of collectivism and activity;
- education of future teacher's personality on healthcare (fullness and strength of knowledge, the system of knowledge and the degree of their generalization, the ability to transfer knowledge to a new situation, the availability of appropriate skills);
- the politeness of future teachers' personalities (improvement of their personal qualities and indicators of general development). Bearing in mind the educational process in a broader sense, it is necessary to add such indicators as the of the future teachers' personalities formation of socially significant value orientations in the health care activities, social motives of communication and healthcare behavior, active life position, the need for self-education, self-improvement;
- experience, that is the desire and availability of the necessary health care skills in various activities, practical skills (their quantity, quality, speed), ability to analyze the process and the result of concrete labor, self-control, self-examination.

The conducted research recommends the proposed measures aiming at future teachers' organization and their involving in healthcare activities.

The influence of the healthcare environment on the dynamics of a health-saving activity level of future specialists in the institution of higher education in the control and experimental groups is presented in the diagrams (Fig. 1).

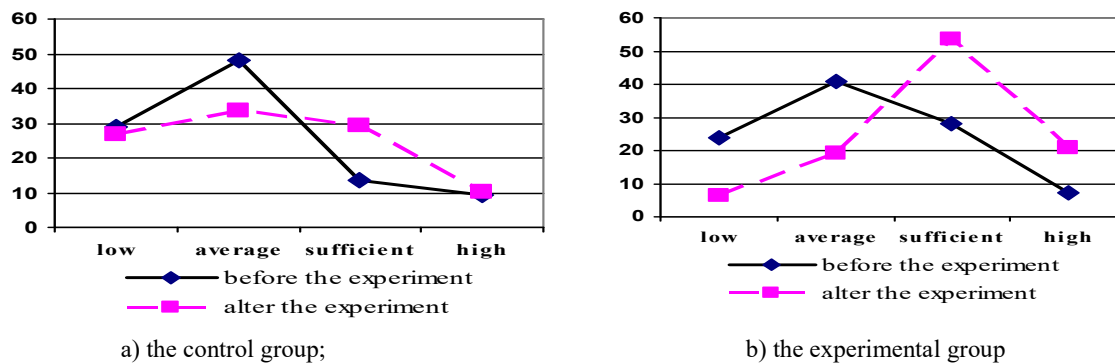


Fig. 1. The influence of the healthcare environment on the dynamics of a health-saving activity level of future specialists in the institution of higher education:

Before the forming experiment, it was revealed that 24% of students in the experimental group and 28,9% of students in the control group showed a low level of healthcare activity. An average level was recorded by 40,88% of students in the experimental group and 48% of students in the control group. 28% of students in the experimental group and 13,8% of students in the control group were identified with a sufficient level of

healthcare, 7,2% of students in the experimental group and 9,3% of students in the control group showed a high level of healthcare activity. After the conducted study, the following data were obtained: 10,2% of students in the control group and 20,9% of students in the experimental group have a high level of healthcare activity, 29,3% and 53,8% of students possess a sufficient level respectively, 33,8% of students in the control group and 19,1% of students in the experimental group showed an average level, 26,7% of students in the control group and 6,2% of students in the experimental group have a low level of a healthcare activity.

Conclusions

Thus, the creation of healthcare environment in an institution of higher education is a process that requires a clear awareness by all subjects of the educational process about the importance of a responsible attitude towards their own health. Healthcare environment contributes to the formation of healthcare orientation of future teacher's personality, the education of future teacher's personality on healthcare, the formation of socially significant value orientations in the healthcare activity, social motives of communication and healthcare behavior, active life position, the need for self-education, self-improvement, aspiration and availability of necessary healthcare skills in different types of activities. Healthcare environment creates conditions for improving the healthcare level of future teachers, the formation of their healthcare competence. Prospects for further researches lie in further study the theory and practice of future teacher's personality upbringing in the healthcare environment in the institution of higher education.

Declarations

Ethics approval and consent to participate

The research related to human use complied with all the relevant national regulations, institutional policies, and was in accordance with the tenets of the Helsinki Declaration. The study protocol was approved by the Ethical Committee of National University of Water and Environmental Engineering, Rivne, Ukraine.

During realization of tests, all participants provided informed consent and used all measures for maintaining anonymity of participants.

Competing interests

The authors declare that they have no competing interests.

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References

- Bashavets N. A. (2011). Teoretychni osnovy formuvannya kul'tury zdorov'yazberezheniya yak svitohlyadnoyi oriyentatsiyi maybutnikh fakhivtsiv-ekonomistiv: monohrafiya. [Theoretical basis of the healthcare culture formation as a world-view orientation of future economists-specialists]. Odesa: Feniks. 417 p. Ukrainian.
- Boychuk Y. D. (2008). Ekoloho-valeolohichna kul'tura maybutn'ohovchytelya: teoretyko-metodychniaspekty: monohrafiya. [Ecological-valeological culture of the future teacher: theoretical and methodical aspects]. Sumy: Universytets'ka knyha. 357 p. Ukrainian.
- Garkusha S. V. (2015). Teoretychni ta metodychni zasady formuvannya hotovnosti maybutnikh fakhivtsiv fizychnoho vykhovannya do vykorystannya zdorov'yazberezhuval'nykh tekhnolohiy. [Theoretical and methodical principles of forming the readiness of future specialists in physical education for the healthcare technologies usage]. Chernihiv. 40 p. Ukrainian.
- Grynova M. V. (2017). Osnovy funktsyonyrovannya spetsyalyzatsyy «Zdorov'e cheloveka» v Poltavskom natsyonal'nom pedahohycheskom unyversytete ymeny V.H. Korolenka. [Functioning Foundations of the specialization «Human Health» at Poltava National Pedagogical University named after V.G. Korolenko]. *Norwegia Journal of development of the international science*. No 7. Vol.3: 19-22. Russian.
- Dudko S. G. (2015). Dydaktychni zasady formuvannya zdorovyazberezhuval'noho navchal'noho seredovyscha pochatkovoyi shkoly. [Didactic principles of healthcare educational environment formation in primary school]. Kyiv. 258 s. Ukrainian.
- Dyachenko-Bohun M. M. (2016). Teoretychni i metodychni zasady realizatsiyi zdorov'yazberezhuval'nykh tekhnolohiy u protsesi diyal'nosti maybutnikh uchyteliv biolohiyi. [Theoretical and methodical principles of health-saving technologies realization in the course of the activity of future biology teachers]: avtoreferat. Uman'. 40 p. Ukrainian.
- Diachenko-Bohun, M., Hrytsai, N., Grynova, M., Grygus, I., & Zukow, W. (2019). The readiness of future biology teachers for healthcare-safety technologies implementation in professional activity. *Education and Information Technologies*, Vol. 24, Issue 1, pp. 679–691. DOI: 10.1007/s10639-018-9799-y. Ukrainian.
- Kazyn E. M. (2016). Teoretycheskaya y orhanyzatsyonnaya osnova formyrovannya zdorov'esberehayushchey obrazovatel'noy sredy v rehyone (na prymere Kuzbassa). [Theoretical and organizational basis for the

- formation of a healthcare educational environment in the region (for example, Kuzbass)]. Kemerovo: Yzd-vo KRYPKRO. 106 p. Russian.
- Lukyanchenko M. I. (2011) Ivan Stavrovs'kyi pro formuvannya zdorovoho sposobu zhyttya pidrostayuchoho pokolinnya. [Ivan Stavrovsky about the formation of a healthy lifestyle of the younger generation]. Visnyk Luhans'koho natsional'noho universytetu im. T. Shevchenka. 10(221): 114–121. Ukrainian.
- Malykhin O. V. (2010). Informatsiyno-navchal'ne seredovyshe yak zasib efektyvnoi orhanizatsiyi samostiynoi navchal'noyi diyal'nosti studentiv vyshchyykh pedahohichnykh navchal'nykh zakladiv. [Information and educational environment as a means of students' effective organization of independent educational activity of higher pedagogical educational institutions]. Naukovi zapysky. 3:33–38. Ukrainian.
- Manuylov Y. S. (2008). Kontseptual'nye osnovy sredovoho podkhoda v vospytany. [Conceptual foundations of the environmental approach in education]. Vestnyk Kostromskoho hosudarstvennoho unyversyteta ym. N. A. Nekrasova. T.14; № 1: 56–59. Ukrainian.
- Miller N. D. (2006). Zdorov'esberehayushche obuchenye detey sanatornykh klassov obshcheobrazovatel'noy shkoly. [Healthcare education for children of sanatorium classes in a comprehensive school]: avtoreferat. Novokuznetsk. 18 p. Ukrainian.
- Mironyuk T. M. (2017). [The healthcare competence formation of future teachers of biology by means of innovative technologies in the educational environment of a higher educational establishment]. Uman'. 324 p. Ukrainian.
- Momot O. O. (2017). Vychovannya osobystosti maybutn'oho vchytelya v zdorov'yazberezhual'nomu seredovyskhi vyshchoho navchal'noho zakladu. [Education of future teacher's personality in the healthcare environment of a higher educational establishment]: monohrafiya. Poltava: Vydavnytstvo PNP. 339 p. Ukrainian.
- Nakaz Ministerstva molodi ta sportu Ukrayiny № 4665 «Pro zatverdzhennya testiv i normatyviv dlya provedennya shchorichnoho otsinyuvannya fizychnoyi pidhotovlenosti naseleння Ukrayiny». [Order of the Ministry of Youth and Sports of Ukraine. №4665 «On Approval of Tests and Standards for the Annual Evaluation of the Physical Preparation of the Ukrainians»]. Kyiv: Ministerstvo molodi ta sportu Ukrayiny; 2016 URL: <http://zakon5.rada.gov.ua/laws/show/z0195-17/page>. Ukrainian.
- Novopys'menny S. A. (2016). Formuvannya bazovykh kompetentnostey maybutnikh uchyteliv z osnov zdorov'ya u protsesiv vyvchennya profesiyno oriyentovanykh dystsyplin. [Formation of basic competences of future teachers of health basis in the processes of studying professional lyor iented disciplines]. Poltava. 306 p. Ukrainian.
- Nosko M. O. (2014). Zdorov'yazberezhual'ni tekhnolohiyi u fizychnomu vykhovanni. [Healthcare technologies in physical education]: monohraf. Kyiv: Chalchyns'ka N. V. 300 p. Ukrainian.
- Osadchenko T. (2016). [Creating a healthcare environment in primary school]. Uman': VPTS «Vizavi». 234 p. Ukrainian.
- Palichuk Y. I. (2011). [Pedagogical healthcare technologies in the training system of specialists in economic profile]. Ternopil'. 215 p. Ukrainian.
- Serykov H. N. (1999). Zdorov'ezberezhene v humannom obrazovanny [Healthcare in humane education]: monohraf. Yekaterynburh-Chelyabynsk. 242 p. Russian.
- Slyvka L. (2014). Orhanizatsiya zdorov'yazberihayuchoho seredovyscha molodshoho shkolyara: teoretychni y praktychni aspekty. [An organization of healthcare environment of junior schoolboy: theoretical and practical aspects] Hirs'ka shkola ukrayins'kykh Karpat. 11: 44–47. Ukrainian.
- Stepanova M. I. (2004). Zdorov'esberehayushchyy potentsyal novoho kalendarya shkol'nykh kanykul. [Healthcare potential of the new calendar of school holidays]. *Narodnoe obrazovanye*. 9: 179–182. Ukrainian.
- Tushyna G. I. (2005). Pedahohycheskye uslovyya formyrovannya zdorov'esberehayushchey sredey obshcheobrazovatel'noy shkoly. [Pedagogical conditions of healthcare environment formation in secondary school]. Kemerovo. 266 p. Ukrainian.
- Tsyplyuk A. M. (2017). Pidhotovka maybutnikh vykhovateliv do stvorennya zdorov'yazberezhual'noho seredovyscha u doshkil'nomu navchal'nomu zakladi. [Preparation of future educators for creation of a healthcare environment in a preschool educational institution]. Luts'k. 269 p. Ukrainian.
- Yefimova V. M. (2012). Teoretyko-metodychni zasady pidhotovky maybutnikh uchyteliv pryrodnychyykh dystsyplin do vykorystannya zdorov'yazberezhual'nykh tekhnolohiy u profesiyniy diyal'nosti. [Theoretical and methodical principles of future teachers of natural sciences training for the usage of healthcare technologies in professional activity]: avtoreferat. Kyiv. 43 p. Ukrainian.
- Zavydivska N. N. (2013). Teoretyko-metodychni zasady fundamentalizatsiyi fizkul'turno-ozdorovchoyi osvity studentiv u protsesi zdorov'yazberezhual'noho navchannya [Theoretical and methodical principles of fundamental basis in physical culture and health education of students in the process of healthcare learning]: avtoreferat. Kyiv. 40 p. Ukrainian.