

Pedagogical technologies for the formation of healthy lifestyle of students

Tecnologías pedagógicas para la formación de un estilo de vida saludable de los estudiantes

A.A. ZHOLDASBEKOV [1](#); B.A. ZHOLDASBEKOVA [2](#); A.A. ABITIAROVA [3](#); A.T. BALABEKOV [4](#); Z. ALPTEKIN [5](#); T. FOMINA [6](#); J.ZH. SAKENOV [7](#)

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ABSTRACT:

The paper considers psychological-pedagogical issues connected with the formation of healthy lifestyle of students. Health is considered as a complex multivariate socio-cultural phenomenon and, at the same time, as an integrative personality characteristic, reflecting the most meaningful biological, psychological, social and spiritual aspects of the human being's existence in the world. The psychological-pedagogical technologies for the formation of healthy lifestyle involve increasing the dynamic physical load (physical training, active rest, tourism), personal development trainings, health-saving technologies in the academic process structure, motivation and formation of the health attitude as the highest value of the person. The study of the university students' motive to seek the help of a psychologist-consultant, conducted by us, showed that 45% of people from the total amount of respondents have a high need in support of a specialist. Meanwhile, it is important to note that 120 respondents showed the relation between their personal self-appraisal and the life quality appraisal by the offered questionnaire.

RESUMEN:

El documento considera los problemas psicológico-pedagógicos relacionados con la formación de un estilo de vida saludable de los estudiantes. La salud es considerada como un fenómeno sociocultural complejo y multivariado y, al mismo tiempo, como una característica integradora de la personalidad, que refleja los aspectos biológicos, psicológicos, sociales y espirituales más significativos de la existencia del ser humano en el mundo. Las tecnologías psicológico-pedagógicas para la formación de un estilo de vida saludable implican aumentar la carga física dinámica (entrenamiento físico, descanso activo, turismo), entrenamientos de desarrollo personal, tecnologías de ahorro de salud en la estructura del proceso académico, motivación y formación de la actitud de salud como el el más alto valor de la persona. El estudio del motivo de los estudiantes universitarios para buscar la ayuda de un psicólogo-consultor, realizado por nosotros, mostró que el 45% de las personas del total de los encuestados tiene una gran necesidad de apoyo a un especialista. Mientras tanto, es importante señalar que 120 encuestados mostraron la relación entre su autoevaluación

1. Introduction

The matter of preserving and strengthening the young generation's health is as important as the matter of professional training. Future specialists should have both high level of special training, professional qualification and be healthy, strong and mentally stable. Radical changes in the social-economic system in Kazakhstan, reforms of the healthcare, lowering of the younger generation's health level require from the public authorities and administrations of higher education institutions (HEIs) introducing adequate measures for preserving and strengthening students' health, their getting social-hygienic knowledge and mastering the healthy lifestyle skills.

Therefore, the students' healthy lifestyle education, the formation of their striving to be healthy is very important today. The healthy lifestyle of students should be formed during the entire period of their training and should involve generation of value-conceptual and assignment-practical principles for preservation and promotion of health.

Formation of the students' health by pedagogical means depends on the efforts of teachers of all specialties, the entire teaching staff; moreover, the higher the health culture of all subjects of the educational process, the more effective is the health activity (Krutykh and Krutykh 2009). However, today, the main problem is a lack of the healthy lifestyle priority in the society, insufficient understanding of the place of health in the educational space. Currently, not all HEIs in the Republic of Kazakhstan have sport-recreation centers for practical physical education and sport. Quite naturally, this influences the students' attitude towards the "Physical education" discipline. In the conditions of the credit system, the form of teaching remains as it used to be. There is a need to consider the matter of taking the "Physical education" discipline out the schedule, because, according to interviews and observations, most students do not want to attend the "Physical education and sport" classes within the framework of the general schedule, as this is connected with discomfort (sweating, abnormal loads, sanitary conditions and anti-hygiene).

Analysis of scientific literature on the problem, as well as our investigations show that, in the existing practice of professional training of HEI students, the problem of the healthy lifestyle culture formation is not getting adequate attention. This problem is not reflected in the objectives of the higher professional training of specialists. The process of formation of the future specialist's healthy lifestyle is characterized by discreteness and fragmentation. As our study shows, the absence of continuity and integrity in the formation of the future specialist's healthy lifestyle results in the fact that 44% of the students have no motivation to adopt values of the health culture and to further translate them in the forthcoming professional activity. 61% of the students take with a grain of salt the issues of health culture considered within the framework of teaching the special disciplines.

To determine the forms of psychological support, it is necessary to develop a complex of psychological-pedagogical measures to form the students' positive attitude to the active and thus healthy lifestyle. The active stand in life requires a high level of physiological and psycho-emotional resources that, in its turn, results in the effective social adaptation.

2. Theoretical part of the study

The "healthy lifestyle" concept includes rationally organized, physiologically optimal labor, moral-hygienic education, compliance with the rules and requirements of psycho-hygiene, rational nutrition and individual hygiene, active movements and systematic lessons of physical education in the conditions of HEIs, effective cold training, well-thought-out organization of leisure activity, abandoning pernicious habits.

The healthy lifestyle is the only lifestyle able to provide recovery after intensive day, to preserve and improve health during the entire period of training in the system of higher

education (Physical culture and health of HEIs' students, 2008). Therefore, the formation of this lifestyle by the students is the most important social task of the state interest in the Republic of Kazakhstan, which calls on energetic actions.

The "lifestyle" concept is interpreted as life activity conditioned by the features of social-economic relations in the society. The main parameters of the lifestyle are labor (training for the young generation), way of life, social-politic and cultural activity of population, as well as behavioral habits (Zhuravskaya 2009). The healthy lifestyle, focused on preventing disease and providing sound development and realization of opportunities, fosters the formation of active stand in life and is a necessary condition for upbringing the harmonically developed person.

The documents on education pay special attention to the problems of health and healthy lifestyle of students. HEIs are engaged in solving the healthy lifestyle formation problem by the renewal of the corresponding pedagogical forms, methods and means (Zholdasbekov, Zholdasbekova, Sikhynbayeva, Lekerova and Orasov 2014).

Currently, theoretical prerequisites for solving this problem are laid in sociological, medical-biological, psychological, pedagogical studies (Nazarova and Zhilov 2013). Scientists discuss general issues of the student youth' health and their lifestyle (N.A. Agadzhanyan, A.M. Gendin, Zh.K. Onalbek, G.A. Kurayev, V.P. Lavrenko, A.A. Yessaliyev, Zh.Z. Torybayeva, and others); study influence of different factors on the formation of healthy lifestyle of students (E.L. Dissi, B.A. Zholdasbekova, T.A. Ivanova, B.K. Mukhamedzhanov, V.V. Ponomarev, N.A. Russina, and others).

In the papers dedicated to various aspects of the problem, a tendency is observed to rethink the ways of its solution, reflecting a shift of accent from the sphere of medicine to pedagogics. Modern scientists note that the efforts to reanimate sport-recreation and sport-mass activity in HEIs by old organizational forms, as a rule, do not bring the intended effect. A wide use of such forms as consultations, special courses, lectures, further training, additional training, orienting the students toward the healthy lifestyle, is not practically implemented in the educational process. N.P. Abasskalova, G.S. Nikiforov, A.M. Stolyarenko, T.I. Prokopenko and others propose to create such programs and engineering models for the healthy lifestyle formation that would significantly change the problem situation, the students' attitude to their lifestyle. It is possible to correct the existing lifestyle and form the students' healthy lifestyle by a special pedagogical support.

The healthy lifestyle involves such main components as a regular work-rest regime, absence of pernicious habits, sufficient physical activity, personal hygiene, cold training, spirituality, rational nutrition, etc. (Morozov 2014).

The regular work-rest regime is the most important element of the healthy lifestyle. The daily regimen is the basis of life activity of every man; therefore, it should be individual depending on the health condition, performance level, interests and habits. With the regular regime discipline, a clear and necessary rhythm of the life activity of the organism is developed, which creates optimal conditions for the work and rest and therefore fosters health strengthening and improving the working ability (Vilensky 2013; Kobayakov 2014).

Smoking and alcohol overindulgence are the main and the most widespread pernicious habits among the youth (Vassenkov 2008). The most widespread vice is smoking. Scientists proved that smoking results in reduction of the level of the educational material perception (Fazleyeva 2009). Oftentimes, smoking is the cause of the appearance of tumors in mouth cavity, throat, bronchi and lungs. Regular and long smoking results in premature aging. Alcoholism is one of the widespread pernicious habits. In the case of repeated alcohol consumption, the central and peripheral nervous functions, as well as the functions of some internal organs are obstructed.

The next important component of the healthy lifestyle is the healthy food. Rational nutrition is a physiologically complete nutrition of healthy people taking into account their sex, age, job character and climatic living conditions. Shortage of time and the rapid rhythm of life result in nutritional disorders. A meal should consist of mixed products, including proteins, fats, carbohydrates, vitamins and mineral substances. Then, the regular nutrition will

provide regular growth and formation of the organism (Saidov 2009).

The basis of the optimal physical activity is the regular physical exercises and sport. The main features, characterizing the physical development of the person, are strength, quickness, legerity, flexibility and stamina; the improvement of each of the features also favors to the health strengthening.

Cold training is a powerful curative means, allowing avoiding many diseases, lengthening life for many years and preserving high working efficiency. Cold training has a general tonic effect on the organism, enhances neurotony, improves blood circulation and metabolic rebalancing.

The concept on the health-preserving support for the educational process involves preservation of the students' optimal working efficiency, increase in their resistance to intensive loads. Various specialists should perform prevention and correction of functional diseases of the main problematic groups.

3. Studies

The studies showed that, in the students' understanding, the healthy lifestyle is, first of all, abandoning the pernicious habits. Although young people realize that the pernicious habits injure the health, nevertheless, almost one-third of the respondent students use alcohol. Respectively 16% and 15% of them smoke and overeat. A significant component of the youth' healthy lifestyle is to go in for sports. About half of the students are regularly involved in sport activity (Zholdasbekova 2013). Therefore, more attention should be paid to the development of mass sport, involvement of the students in the sport life of HEIs.

The factors have identified that influence the person's desire to smoke. They are the desire to have authority in the eyes of groupmates, be significant and successful. Smoking students have the following characteristics of their personality: they are vauntful, aggressive; more than others they show unfriendliness, obstinacy; rarely make concessions and compromise; most of them have low self-esteem; they are "infantile, adolescents; they are more focused on the opinion of others, look for social recognition" (Zholdasbekov, Yessaliyev and Zholdasbekova 2013).

The destructive impact of smoking and alcohol on the human personality is evident. Therefore, nowadays the problem of the healthy lifestyle formation needs to be solved on the state level.

In the students' free time, their life activity is very diverse. The free time should be devoted to self-education and active physical training, active rest. The way the students use their free time can show their healthy lifestyle.

The students are the youth, an individual social group, differing by peculiar conditions of life, labor and everyday life, social behavior and psychology. They can be referred to as a group of increased risk, because the students' difficult problems, such as high emotional and mental workload, adaptation to new living and training conditions are superimposed with the negative crisis impact of all major spheres of society and state. All that results in the students' disadaptation, the consequences of that are serious medical and social-psychological problems.

The healthy lifestyle formation problem of the student youth is many-sided. The people of young generation, trained in institutes and universities, follow a certain lifestyle, where the ideal is cigarettes, alcohol and drugs.

To form the healthy lifestyle, it is necessary to clarify the reason for unhealthy life, what can influence the desire to lead the healthy life. To identify the cause, many universities hold prevention work, focused on the healthy lifestyle promotion, as well as an assessment of physical, social and psychological health of the students. Diagnostic analysis of their physical, social and psychological health condition proves that the students have different lifestyles, different state of health and different objectives.

The diagnostic analysis was carried out using the tests of M. Lüscher and L. Bonds, which showed that all students have some deviations in health. All of them are ill to a different

degree, have psychic tension and stress loads. Only few of them lead the healthy lifestyle.

To assist the formation of the healthy lifestyle, HEIs carry out individual and group consultation-trainings to normalize the students' state.

One of the main prerequisites for the healthy lifestyle formation is the students' following the daily regimen, which prescribes for the students a certain order of behavior.

Psychologists recommend the students to set the daily regimen to produce a dynamic stereotype. Its physiological basis is formation in the cortex of cerebral hemisphere a certain sequence of activation and suppression, required for the productive activity.

4. Methods

In his/her activity on the healthy lifestyle formation, the teacher of physical education and sport should use techniques taking into account age and individual features of the student youth. In particular, a special attention should be paid to such age stages, when the intensive growth and transformation of the organism take place.

The vital processes rhythm in the student environment causes the need to follow a regimen, a rational order of the day, optimal interaction and certain sequence of rising the activity and detracting, wakefulness and sleep periods.

In recent years, biorhythmology has been rapidly developing, and the following fundamental fact has been established as a result: almost all presently known processes in the human body have a certain rhythmicity, which is a universal life regularity with the widest range of manifestation: from the activity of separate cells to the complex forms of the human's intellectual activity.

We have identified the following pedagogical conditions for realization of the strategy in the conditions of the technical university: firstly, informing the students about the healthy lifestyle (organization of information support); secondly, actualization of their emotional and value-related attitude to the healthy lifestyle (organization of the healthy lifestyle modeling by them); thirdly, enrichment of their health lifestyle experience (involvement in the health-saving activity). Realization of the identified pedagogical conditions to focus the students on the healthy lifestyle contributes to their obtaining the knowledge on theory and practice of the healthy lifestyle formation, positive attitude to create own healthy lifestyle, creative approach to realization of the healthy life activity.

Realization of the first pedagogical condition, focused on the students' healthy lifestyle in our HEIs is carried out within the framework of physical education. The "Physical education" discipline may foster the informative orientation of the students on the healthy lifestyle due to combination of two informative components – compulsory (basic) and optional (for solution of specific tasks) and active use of its optional component in the theoretical part of the program; enhancement of the educational direction of the physical education with a view to informing the student about the healthy lifestyle; application of various forms and methods, favoring to the student's introduction to the healthy lifestyle; improvement of the teacher's organizational-pedagogical activity. Optimal combination of the basic and optional components of the "physical education" program is linked by us to the realization of the pedagogical condition connected with informing the student about the healthy lifestyle. Understanding, comprehension and acquisition of personal meanings in any sphere of life activity, according to the opinion of teachers and psychologists, significantly change due to the purposeful work with information. This is the content of this condition, which in the practical pedagogical activity is associated with the introduction stage.

Informing the students about the healthy lifestyle is carried out by methods of cooperative (joint) training, focused on the transition from the passive form of information perception to the active one and providing subject-subjective character of the teacher and student interaction: lectures, lectures-conversations, discussions, meetings, valeological conferences and Olympiads (Daniyarov, Berkimbayev, et.al., 2013). Application of these methods allows engaging such basic characteristics of the student personality as the ability to cognition and self-cognition, the needs of higher level and the value relations. Besides, they foster students' reevaluation of their own life activity meaning, realization of needs in achievement,

recognition, implementation of own different abilities, including the change in the lifestyle.

In accordance with that, we have chosen such pedagogical methods, approaches and means, which contribute the formation of the students' healthy lifestyle internal picture. The main components of the picture are cognitive (body of knowledge, imaginations, conclusions about the healthy lifestyle) and emotional ones (aspect of feelings), favoring to understanding, emotional-value perception and modeling of the healthy lifestyle as a guideline for activity. The methodical support for the realization of the second pedagogical condition is carried out by us using discussion methods for organization of educational-cognitive activity of the student (dialogues, polylogues, discussions), favoring to activation of the personality's emotional sphere, as well as modeling of interactive techniques, individual and joint forms of work.

5. Experience

With a view to identifying the students' interests to the used forms of the physical education, the level of theoretical preparedness, periodicity of sick conditions, introduction of new non-standard technologies for organization of lessons within the "Physical education" discipline, we have carried out questioning of the students.

81.3% of the students regularly attend lessons of physical education, 22.9% of the students regularly do physical exercises at home, in addition to the lessons. 60.4% walk in the evenings after lessons, 58.3% go out the city on weekends, 8.3% speak that they do not do anything for their health (Figure 2). They have the physical education lessons twice a week, according to the physical education program. Therefore, the students completely satisfy their need in physical activity on the lessons, the less time is allocated for spontaneous physical activity.

In response to the question: "What prevents you from doing physical exercises?", 70.8% answered – "lack of time", 18.8% – "lack of money", 16.7% – "nothing" (Figure 3). 10.4% of the students are often sick throughout a year, the rest of them are sick 1-2 times during 6-7 days. In response to the question: "Do your parents go in for sport?", 87.5% of the students answered in the affirmative and only 12.5% answered – "no". 100% of the students answered "yes, surely" to the question on the need in the regular physical activity and recommend to go in for swimming, dance, athletics. Therefore, in connection with the students' heavy load, especially during the I-III years of study, compulsory lessons of the "Physical education" discipline, included in the schedule, acquire a great importance.

During the senior years of study, the distribution of compulsory academic hours should be reconsidered with the emphasis on solving the tasks of the theoretical and methodical-practical section, with introduction of exam on physical education as end-of-course assessment. That will allow the students deeper mastering knowledge and skills, included in the requirements of the state compulsory standard.

Modern achievements in physiology, psychophysiology, application of computer, education-diagnostic programs in the investigations will give possibility to introduce into the physical education lessons the health-improving technologies with individual control of functional possibilities and development level of the students' physical qualities. Such approach allows organizing the educational process in the physical education taking into account individual psychophysiological, functional possibilities of the students. That is especially important for those having deviations in their health.

Most completely, the forms and means of the physical education are used during the extracurricular lessons. As experience has shown, such kinds of lessons are very attractive for the students, as they are planned and designed taking into account their interests, and are necessary, as young people acquire skills on organization of their free time with the benefit for health, finding worthy alternative to the amusements in the evenings.

Okolelova V.A. thinks that the students' healthy lifestyle formation during their training, which involves the development of their ability to self-reflection and reflexive selection of the healthy lifestyle, becomes successful under the following pedagogical conditions:

- personal attitude to the healthy lifestyle is expressed in motivation of behavior and actions,

able to cause motives and form them on the basis of perceived value aspects of the healthy lifestyle;

- the students' learning of the healthy lifestyle formation, development of their ability to understand results of their activity and the activity of others: groupmates, students, human beings;

- consciously created in the educational process and spontaneously appearing in the pedagogical practice problem situations, solved by the students on the basis of value of health, healthy lifestyle, become the base to acknowledge the healthy lifestyle (Nazarova and Zhilov 2013, p. 10).

Ivanova S.Yu. specifies that it is necessary to provide the students' need in the healthy lifestyle formation by actualization and realization of all HEIs' teachers joint activity.

Scientific-practical conferences on the issues of preserving and strengthening health, formation of the healthy lifestyle, seminars for teachers to use health-saving technologies will contribute to that.

6. The study results

The studies showed that such physiological functions as body temperature, arterial tension, pulse rate and other parameters significantly differ in their circadian dynamics for the persons with different biorhythmological types. Beginning from the early morning, "larks" have a high level of the main functions, they are ready to work, while "nighthawks" have a low level of these indicators, which is manifested in lethargy, bad mood, reduced working capacity.

In this connection, rational organization of the students' daily regimen taking into account these characteristics should be on the foreground. As an example, consider the matter of interdependence of dietary pattern and circadian biorhythm. It is known that the need for food has a rhythmic character and depends on many factors. Moreover, cyclic changes in the needs for nutrients should be considered in the dietary pattern. The important thing is what, how and when people eat. What is the rational organization of nutrition taking into account individual features of biorhythmicity? If the popular aphorism "Breakfast like a king, lunch like a queen and dine like a pauper" befits for "larks", it cannot be applied to arrhythmical persons and especially for "nighthawks". The latter do not need square breakfasts, but they need heavy suppers, because at this particular time they consume more energy.

Daily fluctuations in the working capacity are of great importance for the rational organization of the daily regimen. It is clear that in the educational activity of the students, for "larks" it is better to make educational activity more intense in the first half of the day, while for "nighthawks", in the second half of the day. Also, this idea equally refers to the organization of the educational load regime for the students.

7. Conclusions

As the investigations have shown, the students involved in the organized pedagogical process in the conditions of the educational-health center, besides improvement of physical skills and habits, development of functional capabilities of the organism, have a possibility to form the motivation-value aspect of the physical culture of personality. Active participation of the students as fans, organizers, referees, participants of sport and recreation events in summer camps fosters the formation of need in regular physical exercises, creation of their behavioral guidelines toward physical self-improvement and self-education, healthy lifestyle (Physical culture and health of HEIs' students, 2008).

- We have established that the context training favors to the students' healthy lifestyle formation. During such training, with the help of the entire system of didactic forms, methods and means, motivation of the students to the healthy life-style is modelled, objective and social content of the value-focused activity of the student in the aspect of his/her acquisition and realization of the healthy life-style value is formed, his/her mastering abstract knowledge as sign systems is connected with activity on the health education.

- We have identified that the students' healthy lifestyle formation, their understanding of its role in the preservation of the human being as a biosocial structure, require developing their ability of reflection. Such ability is developed during training in different organizational forms (lectures, seminars, practical lessons, etc.), in the created problem situations, solving which future teacher overcomes difficulties.
- We have established that the students who passed experimental training have a smaller gap (difference) between values by their attractiveness and availability, than students, who did not study in the experimental program.

Thus, the healthy lifestyle explains everything that facilitates the performance of various social and everyday functions in the most optimal conditions for the systems of developing organism. It is established at the present time that observance of the healthy lifestyle principles allows increasing the life expectancy by 10 years and more. The healthy lifestyle is the only means of protection against all diseases at once. It is not focused on specific prevention of each disease, but focused on prevention of all diseases at once. Therefore, it is especially rational, economic and desirable.

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1. M. Auezov South Kazakhstan State University, 160012, Kazakhstan, Shymkent, Tauke Khan Street, 5
2. M. Auezov South Kazakhstan State University, 160012, Kazakhstan, Shymkent, Tauke Khan Street, 5
3. M. Auezov South Kazakhstan State University, 160012, Kazakhstan, Shymkent, Tauke Khan Street, 5
4. M. Auezov South Kazakhstan State University, 160012, Kazakhstan, Shymkent, Tauke Khan Street, 5
5. M. Auezov South Kazakhstan State University, 160012, Kazakhstan, Shymkent, Tauke Khan Street, 5
6. Innovative University of Eurasia, 140003, Kazakhstan, Pavlodar, Lomova str., 45

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