Актуальні проблеми медико-біологічного забезпечення фізичної культури, спорту та фізичної реабілітації

V Міжнародна науково-практична інтернет-конференція
25-26 квітня 2019 р.

Збірник статей

Харків
2019

Редакційна колегія:
Ажиппо О.Ю. – ректор ХДАФК д.пед.н., професор;
Подрігало Л.В. – д.мед.н., професор ХДАФК;
Ровний А.С. – д.фіз.вих., професор ХДАФК;
Шапошникова І.І. – к.пед.н., доцент ХДАФК;
Корсун С.М. – к.б.н., професор ХДАФК;
Рубан Л.А. – к.фіз.вих., доцент ХДАФК;
Окунь Д.О. – к.фіз.вих., старший лаборант.

У збірнику представлені статті з актуальних проблем медико-біологічного забезпечення фізичної культури, спорту та фізичної реабілітації за такими напрямами: «Проблеми медико-біологічного забезпечення фізичної культури та спорту», «Психолого-педагогічні аспекти фізичної культури та спорту», «Сучасні діагностичні комп’ютерні технології в фізичній культурі та спорти, фізичній реабілітації», «Фізична реабілітація при різних захворюваннях і пошкодженнях у тренованих і нетренованих осіб», «Проблеми здорового способу життя». Матеріали збірнику виявляють теоретичний і практичний інтерес для докторантів, аспірантів, магістрів, викладачів, спортивних лікарів, фізичних терапевтів, тренерів, спортсменів, студентів, а так саме для фахівців, які працюють у галузі фізичного виховання, спорту, фізичної терапії, ерготерапії та здоров’я людини.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Сак А.Є., Антіпова Р.В.</td>
<td>ПОВЕДІНКОВА АКТИВНІСТЬ САМЦІВ ЩУРІВ ПІСЛЯ ТРИВАЛОГО ВЖИВАННЯ ПАЛЬМОВОЇ ОЛІЇ</td>
<td>241</td>
</tr>
<tr>
<td>Трофимович И. И., Трофимович И.Г., Кобец Е.А.</td>
<td>ФОРМИРОВАНИЕ ЗДОРОВОГО ОБРАЗА ЖИЗНИ ПРИ ФИЗИЧЕСКОЙ ПОДГОТОВКЕ ЮНЫХ СПОРТСМЕНОВ В СПЕЦИАЛИЗИРОВАННЫХ ПО ЛЁГКОЙ АТЛЕТИКЕ КЛАССАХ</td>
<td>249</td>
</tr>
<tr>
<td>Futornyі Serhii, Maslova Olena, Osadchay Okcana, Shmatova Elena</td>
<td>THE MODERN SOCIAL, PSYCHOLOGICAL, BIOLOGICAL ASPECTS OF FORMING THE CONCEPT OF &quot;HUMAN HEALTH&quot; AMONG THE DIFFERENT GROUPS OF POPULATION</td>
<td>257</td>
</tr>
<tr>
<td>Шапошнікова І. І., Корсун С. М, Танцюра І. М.</td>
<td>ФОРМУВАННЯ ЦІННОСТІ ЗДОРОВ’Я У СТУДЕНТСЬКОЇ МОЛОДІ</td>
<td>265</td>
</tr>
<tr>
<td>Швец Т.Ю., Макаренко Є.Є., Чіж О.Ю.</td>
<td>ЕФЕКТИВНІ МЕТОДИ ТА ПРИЙОМИ ФОРМУВАННЯ ЗДОРОВОГО СПОСОБУ ЖИТТЯ У СТУДЕНТСЬКОЇ МОЛОДІ</td>
<td>270</td>
</tr>
</tbody>
</table>
THE MODERN SOCIAL, PSYCHOLOGICAL, BIOLOGICAL ASPECTS OF FORMING THE CONCEPT OF "HUMAN HEALTH" AMONG THE DIFFERENT GROUPS OF POPULATION

Futorny Serhii, Maslova Olena, Osadchay Okcana, Shmatova Elena
Department of Sports Medicine of National University of Ukraine of Physical Education and Sport, UKRAINE

Annotation. Health is the most important category of human existence. According to literary sources, this indicates that there are currently more than 300 definitions of the meaning “health”. Despite this, it is necessary to combine various approaches from related disciplines into a single set of scientific knowledge in order to achieve an understanding of the nature of health. The proper creation of the meaning of “health” belongs to physical culture and recreational activities, whose role in the conditions of modernization, globalization and technological development of modern society does not decrease, but increases.

Keywords: human health, aspects, physical culture.

Introduction. The health was considered as the most important categories of existence from the early periods of the human appearance. Summarizing the views of many specialists, we can state that for achieve an understanding of the nature of the health, it is necessary to integrate various approaches from related disciplines into a single set of scientific knowledge. At the same time, the presence of a large number of studies and publications, this entails certain difficulties, since the scientific disciplines that study health problems are usually based on various theoretical and methodological approaches. At the same time, in the presence of a large number of studies and publications, this entails certain difficulties, since the scientific disciplines that study health problems are usually based on various theoretical and methodological approaches in medical, philosophy, medical-biological, psychological-pedagogical and other studies with the release party, signs, components of these phenomena for the formation of his correct perception and understanding of the different population groups (Cieza et al., 2008).

The results of the literature obtained in the previous study indicate that there are currently more than 300 definitions of the meaning of "health", based on various methodological approaches and criteria (Ross et al. 1995).

According to the statutes of the World Health Organization, health is a state of complete physical, mental and social well-being, but not only the absence of the disease or physical defects (Constitution of the World Health Organization, 2005). In this interpretation, health is understood as a "state of well-being," that is, as a state that is certified by the experiencing subject and fully satisfies it as a state the maximum possible completeness of its own existence (Apanasenko, 2004).
After the publication of this definition of health, many researchers have addressed to it, noting its uncertainty and unfitness with respect to the solution of many practical problems.

According to opinion of some scientists, this definition is too general and does not contain any information on which one could rely on the practical activities of creating its understanding for different groups of the population (Cieza, et al., 2008). Others believe that this definition, although expressed in "noble words," is beyond the understanding of statisticians and confounds even philosophers.

Representatives of the medical sphere view health as a process of transition of a condition of a pre-illness or illness or disease to convalescence. According to these ideas, the concepts of "health" and "disease" are considered as alternative (Ushakov et al., 2004). With this approach, it is very difficult to resolve issues related to the justification of preventive programs (Vartbaronov et al., 2005).

So, in the practice of sports medicine, all known diseases or developmental defects are identified in the process of clinical examination and, depending of the results, a person is referred to a group of healthy or sick people.

At the same time, as practice shows, not all practically healthy people have high physical performance, resistance to infections, and the presence of a disease does not limit the person's physical capabilities, his temper, social activity and physical fitness level (Vartbaronov et al., 2005, Onyebuchi, 2009).

According to the foregoing, we have formulated the following research objectives:

- to carry out an analysis of the data of scientific and methodical literature on the expansion of the problem of the formation of the concept of "health"
- to generalize domestic and world experience on the actualization of the concept of health and the possibility of its qualitative perception among representatives of different groups of the population.

**Materials and Methods.** To achieve the objectives of the study, we have used the following methods: data analysis and synthesis of special scientific literature, monitoring of information resources on the Internet, content analysis of theoretical and methodical works (monographs, textbooks, teaching materials), system approach.

Our research was performed in accordance with the "Consolidated Plan of Research and Development in the Field of Physical Culture and Sports for 2016-2020" of the Ministry of Ukraine for Family, Youth and Sports, developed and approved by the National University of Physical Education and Sports of Ukraine.

Expression of the main research material with the analysis of the obtained scientific results. Over 2500 years of historical development of medical knowledge, doctors have limited the diagnosis of diseases, not even thinking about the very ability to diagnose health. This is understandable - since only from the middle of the twentieth century there is an opinion that health is something definite, but not the absence of diseases (Cieza et al., 2008).

**Results and Discussion.** Health is not the absence of illnesses, but the physical, social, psychological harmony of a person, friendly and calm relationships with people, with nature and with oneself - writes I.I. Brechman (Brechman 1990):
and thus agrees with the opinion of the World Health Organization, which defines health as a state of complete physical, mental and social well-being. B.I. Butenko has opposite opinion, notes that health is a dynamic state, and defines it as "the state of the human body, its anatomical, physiological and psychological characteristics". Based on this, the author concludes that the characteristic of health is the continuity of the process of development of functions, and the disease is a discreteness of development. B.S. Butenko considers the attempt by some authors and the World Health Organization to include in the definition of "health" the social factors that are incorrect due to the mixing of cause and effect.

N.A. Rybachuk believes that development is a vectorial progressive movement, but if the development of functions in childhood is undeniable, then the legitimacy of the use of this term in older and elderly persons is questionable (Rybachuk 2002). The author also notes that it is impossible to agree with the statement of B.I. Butenko, that "a person becomes sick when he discontinues all kinds of physical activity." The author also notes that it is impossible to agree with the statement of B.I. Butenko, that "a person becomes sick when he stops all kinds of physical activity." Here, firstly, the effects of physical exercises (motor: an action directed at solving physical education problems) may well be replaced by labor and everyday movements; secondly, the termination of physical exercise or work activity, as a rule, is not a cause but a consequence of a disease. Moreover, in the development of a pathology, a person loses movements in a sequence reversed to their development in ontogenesis, and the degree of loss of movement may be the determinant of the severity of the disease.

According to A.A. Vira (Vira, 1981), the understanding of health as a condition characterized by the absence of a disease is far from complete. He believes that: "... human health is the process of preserving and developing mental and physiological functions; optimal capacity for work and social activity with maximum life expectancy ". Such an understanding of health implies a close relationship between health, resistance to the body and the duration of social and active life and is easily perceived by each of the age groups.

Health, according to V.P. Petlenko (Petlenko, 1998) and D.N. Davidenko (Davidenko et al., 2005) is: the state of the organism, in which the conformance of the structure and function of organs of the systems of organs of the human body, and also the ability of regulatory systems to support homeostasis; the process of preserving and developing mental, physical and biological abilities of a person, his optimal ability to work, social activity with maximum life expectancy; the ability of an organism to maintain an age-appropriate stability in the conditions of sharp changes in quantitative and qualitative parameters of the triple flow of sensory, verbal and structural information; the state of the organism, defining its adaptive capacities and constituting the need-motivational and informational basis of the organism's life; such state of the organism when the functions of all systems are balanced with the external environment and there are no painful changes; existence, which allows the most full participation in various types of social and other activities; the psychophysical condition of a person characterized by a lack of pathological changes and a functional reserve sufficient for a full-fledged biosocial adaptation and preservation of physical
and mental capacity for work in conditions of habitat; the normal psychosomatic state of a person capable of realizing his body potential and spiritual forces and optimally satisfying the system of material, spiritual and social needs.

Health, notes V.O. Bushueva, is an intrasystem order that allows a person to achieve the goal of his life. This order is supported by mechanisms of health, which in essence are mechanisms for self-regulation of the system, its non-entropic tendencies. The degree of order can be different, and this is expressed in the corresponding levels of health. According to the author's conviction, the main task for educators is to form and maintain the health of students at a "safe level", where due to the active work of the mechanisms of health, the illness either does not arise, or, flaring up, quickly disappear.

According to P.P. Gorbenko (Gorbenko, 2004) determine the health is possible by the level, potential and reserves of self-organization:
- The level of health - the degree of self-organization of the organism to household loads.
- The potential of health - the body's ability to mobilize reserves.
- Reserves of health - the ability of the body to support vital activity under extreme permissible effects for life.

As N. N. Vizitei notes (Vizitei, 2005), health is the transcendental well-being of a person. According to N.N. Vizitei the word "social" should be replaced by the word "transcendental". "Transcendental well-being", along with well-being of the physical and mental (one, undoubtedly, assumes another) - this is the phenomenon of human health and, obviously, it is also a phenomenon physical culture (Vizitei, 2009).

Our analysis of the definitions of health existing today shows that they all boil down to the characteristics that are fundamental in characterizing it and the possibility of forming it for different population groups (Figure 1)

| Absence of disease and physical defects |
| Subjective feeling of well-being and psychological comfort |
| Ability to successfully adaptation to the natural-ecological and socio-psychological conditions of the environment |
| Maximum duration of a full life |
| Ability to reproduce healthy progenies |

Fig. 1. The features that characterize human health

In a numerous literature, health is recommended to be assessed on the basis of positive and negative indicators. Health suggests that there is a certain "norm". In physiology, the concept of "health" is associated with the concept of "norm" - a specific state in the "absence of significant deviations from the norm of basic vital indicators" (Cieza et.al. 2008).
Optimum flow in the body of vital processes indicates a normal human condition. A healthy organism ensures optimal functioning of its systems when environmental conditions change.

Thus, the normal state should be understood not so much the finding of certain indicators in given ranges of average statistical values, but rather the preservation of the ability to adjust parameters so as to ensure their equilibrium with the environment in a variety of situations.

Depending on the state of health, specialists (Afanasyev et.al., 2003, Kaznacheev et.al., 1980) identify the following levels (Figure 2):

- **norm** - a state of health with sufficient functional (adaptive) capabilities of the body;
- **donosological** - a state of health in which the optimal adaptive capacity is provided by a higher than normal regulation system voltage, which leads to an increased consumption of the body's functional reserves;
- **premorbid** - a state of health that is characterized by a decrease in the functional capacity of the organism and manifests itself in the form of two stages:
  a) with the predominance of nonspecific changes while maintaining the homeostasis of the vital systems of the body, including cardiovascular;
  b) with the predominance of specific changes on the part of certain organs and systems whose homeostasis is disturbed, but thanks to the mechanisms of compensation, the manifestation of the disease can be expressed weakly or in an initial stage and have a compensatory character;
- **disruption of adaptation** with a sharp decrease in the functionality of the body due to violation of compensation mechanisms; In this state, as a rule, various diseases are observed in the stage of subcompensation or decompensation.

Fig.2. Levels of human health
In valeological anthropology are distinguished three categories of health on the basis of the biosocial approach, which we have combined and represented in groups (Figure 3).

Fig. 3. Categories of human health

In the process of forming the concept of "health" among different population groups, it is necessary to act not only in the aspect of the individual, but also as:

- in the direction of society as a whole - to consider the notion of "health" as a state of dynamic equilibrium between the population and the environment, providing the possibility of existence and development, through the creation of the necessary biological personality traits, as well as favorable changes in the environment;
- in the direction of the environment - to consider the concept of "health" as an environment for human habitation, including the implementation of certain actions aimed at improving the quality of this environment in terms of the state of health of the population.

According to V.P. Kaznacheeva, public health is a process that guarantees not an involution, but a progressive change and evolution in new environmental conditions. Health is a category not only biological, but also deeply social and psychological, regulated and managed by both social institutions and the individual (Kaznacheev (2007-2012)).

According to the scientific data of a number of scientists, the process of shaping the notion of "health", the search for resources to strengthen it and preserve it regardless of its belonging to a certain group of people, is directly dependent on the level of culture that reflects the measure of awareness and attitude of a person to himself. It is manifested in the culture that an active way of mastering a person's outer and inner world of his formation and development. Culture implies not only a
certain system of knowledge about health, but also appropriate behavior for its preservation and strengthening, based on moral principles.

We have studied and systematized the main three levels of the value of health (Figure 4).

As the researchers point out, the value of health does not cease to be such, even if it is not realized by man; it can also be latent (latent). Practice shows that most people realize the value of health only when it is under serious threat or almost lost. Health occupies leading positions in the hierarchy of human needs (Petlenko, 1999).

The study of the problem of the attitude of a person to one's health showed that the compulsory factor is the formation of an internal picture of health. The internal picture of health is a special attitude towards health, expressed in the realization of its value, and an actively positive desire to improve it.

Specialists formulate the assertion that the internal picture of health (IPH) is self-awareness and self-knowledge of the person himself in conditions of health and his deviations (Squires et.al., 2011). This is a basic concept in both valeology and in the psychology of health. It is not only knowledge of its capabilities, but also the ability to use true reserves and undiscovered potentialities in oneself. The formation of the IPH for a healthy person is a more difficult task compared to a patient who is able to give a subjective assessment of the changes taking place with him, creating an internal picture of the diseases.

Formation of the IPH assumes:

- awareness and identification of one's own internal dynamic state of homeostasis, identification of oneself with the image of a healthy psychosomatic whole;
• awareness of the emerging signs of any persistent disturbance of homeostasis, that is, the identification of the indicators of pre-illness, the precursors of the deviating state in the dynamic process of health.

When constructing a person's own model of the IPH, the system of "body schema" is of great importance. A healthy model of "body scheme" indicates the absence of body discomfort in any part of the body. If there is a "geographical map" of deviating sensations, then it is necessary to investigate and realize the connection of physical clamps with psychological phenomena (emotional experiences, behavioral reactions) (Aarons et.al., 2004).

World Health Organization singled out "risk factors" that cause the development of various diseases, studying the state of health of the population in a number of industrially developed countries of the world. Among them are high rates of life, nervous overexertion and stress, excessive pollution of soils, air and water environments, alcoholism, smoking, drug addiction, the emergence of new pathogens - radiation, industrial and transport waste, food contamination, unbalanced diet and associated obesity, a significant decrease in the motor activity of a person.

Factors affecting on the level of human health can be combined into four groups (9):

I group - a way of life (level, quality, style, way of life) - 53.50% in the total share of influence;
II group - genetic features (conception, childbirth, heredity) - 16.40%;
III group - environment (ecological, climatic and natural conditions) - 21.80%;
IV group - medical provision (health care system, psychological correction and prevention of psychosomatic disorders) - 8.30%.

However, despite the groups presented above, there is the most important and effective factor in the formation of healthy lifestyle and prevention of various diseases - motor activity.

Conclusions. Our studies have shown that the health of people in modern society at the moment is not already a purely medical problem; it has acquired social, cultural and even political significance.

The sharp deterioration in the state of health of the population of our state is so serious that it requires cardinal measures to solve this problem by activating a whole system of social preventive measures.

The systematic approach to the study of the formation of the concept of "health" allowed us to conclude that its application should synthesize and generalize in itself, to date, social, legal, cultural, spiritual, moral and other factors of human life, among which one of the central places in perception this concept and the creation of its correct representation belongs precisely to the physical culture and health-improving activity, whose role in the conditions of modernization, globalization and technological development of modern society is not decreasing but increases.

Our subsequent research will be aimed at finding and presenting modern, relevant and innovative ways of introducing the concept of "health" as a key category in the process of physical education of various groups of the population in order to
create a qualitatively correct and rationally directed perception, and subsequently, a relationship to one's own health.

References:
6. Pidborsky Yu.G. Problem of Forming a Healthy Way of Life in Modern State Schools / Molodiy Vchenyi • No. 9.1 (36.1) • September, 2016 p.134-137