
THE PREVENTIVE DIRECTION OF MODERN THEORIES OF HEALTH AND HEALTH-SAVING IN PUBLIC HEALTH AND EDUCATION

Shevchenko A.S.¹, Shevchenko V.V.², Brown G.W.³

¹Kharkiv Regional Institute of Public Health Services, Kharkiv, Ukraine

²National Technical University "Kharkiv Polytechnic Institute", Kharkiv, Ukraine

³International Public Health Institute, Berlin, Germany

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ABSTRACT

Background. The modern understanding of health is related to the need to prevent diseases caused by infections, lifestyle, environmental and genetic factors. Ukrainian legislation guarantees health care, but the practice of implementing laws is imperfect. The teaching of valeological disciplines in educational institutions is of great importance for the prevention of diseases. But the content of these disciplines requires constant revision from the point of view of evidence-based medicine, and the creation of new preventive programs requires theoretical justification.

Aim. To determine the content and practical significance of the modern understanding of health care in public health care and education.

Materials and Methods. Methods of bibliosemantic and system analysis were used.

Results. The theory of health and health-saving is considered using cross-cultural, discursive, norm-centric, phenomenological, holistic, axiological and integral approaches, from the perspective of evidence-based and "4P" medicine. Health-saving is shown as derived from a healthy lifestyle and valeological competence formed in the population. The best environment for the formation of a healthy lifestyle is shown to be an educational environment, the tools of formation are valeological disciplines and education of medical and social non-government organizations. The need for joint efforts of the population and medical workers to achieve better results in the prevention of socially significant diseases is determined.

Conclusions. Improvement of the preventive direction of valeological education is closely related to the competence approach, in particular, with the formation of valeological competence. The public health system should use the potential of educational valeological programs to form a healthy lifestyle in new generations during their studies at higher education institutions. For the formation of high-quality valeological programs, a permanent partnership of educators and medical professionals is necessary.

Keywords: *valeological competence, evidence-based medicine, 4P medicine, Health Pedagogy.*

Introduction

The need for health-saving is generally recognized by Ukrainian society and the state. Health care is guaranteed by the Constitution, regulated by the law of Ukraine "Fundamentals of the Legislation of Ukraine on Health Care" [1], provided by targeted national and regional programs in health care and social protection fields. The state guarantees regarding health care relate primarily

to sanitary and epidemiological well-being, organization of conditions for diagnosis, treatment and prevention of diseases based on modern scientific methods [2, Art. 3, 27, 49, 50], however, the preventive direction of health-saving in Ukraine is implemented to a large extent due to the teaching of valeological disciplines in educational institutions and medical (sanitary) training.

Health is a personal and social value [3]. Its preservation and restoration depend on 50% of a person's lifestyle, 20% on the influence of environmental factors, 20% on heredity, and another 10% on the state of the health care system [4]. Thus, prevention of diseases has a greater impact on health care than their treatment.

Corresponding Author:

Shevchenko Alexander S. – MD, MM,E&P, Director of the Kharkiv Regional Institute of Public Health Services, 8, Rymarska str., Kharkiv, 61057, Ukraine.
E-mail: al.shevchenko1976@gmail.com

An important component of health is well-being, which the WHO appeals to in its definition of health [5]. To some extent, this well-being is characterized by satisfaction with one's own life, social adaptability and resistance to psychosocial stress, which is the basis for a wide professional discussion about mental adaptation and maladaptation. Psychological and sociocultural ideas about health are actually reduced to three models: ancient (which is based on internal consistency), adaptation (in which the individual is adapted to the natural and social environment), and anthropocentric (in which all-round self-realization and the disclosure of the creative potential of the individual are important) [6]. All of them describe numerous mechanisms of health preservation (for example, options for social and psychological adaptation to excessive stress), but do not take into account modern medical approaches (for example, evidence-based medicine [7]). But the preventive direction of medicine needs further theoretical investigation and scientific substantiation in order to improve its practical implementation.

The aim of the study is to determine the content and practical significance of the modern understanding of health-saving in public health and education.

Materials and Methods

The bibliosemantic method (using PubMed and Google Scholar materials) and the system analysis method (using the methodology of Golubkov E.P. [8]) were used for the investigation. The system analysis method involves a sequence in the research: setting the problem, conducting the research, analyzing the results, preliminary judgment, confirmation or refutation, final judgment, implementation of the decision. The feedback to determine success in achieving the aim, with opportunities to adjust conclusions and additional research also used.

Results and Discussion

In academic psychology, cross-cultural, discursive, norm-centric, phenomenological, holistic, axiological, and integral approaches are used to study health [9–11]. A cross-cultural approach allows us to identify national influences on perceptions of normal health. The discursive approach illuminates the logic of constructing ideas about health, considers different health systems and individual health practices. Within the holistic approach, natural and scientific principles of analysis are complemented by humanitarian ones. The axiological approach consists in treating health as a universal human value. In the practice of valeo-

logical education, a competency-based approach is used, the driving force of which is the transformation of knowledge into skills, and skills into active, motivated actions. The latter are the key to health. Among such actions, key positions are occupied by giving up bad habits, rational nutrition, sufficient physical activity, rational regime of work and rest, avoidance of injuries, environmental, radiological and toxicological risks, cooperation with the medical system (vaccination of infectious diseases, timely treatment of detected diseases, participation in screening examinations, for example, annual fluorography, etc.), psychohygiene (maintaining emotional balance), safe sex [12–16]. The population's understanding of these issues depends on the quality of valeological education, which takes into account the current trends in the development of health theory and focuses on its paradigms.

The transformation paradigm of modern medicine consists in the transition from a reactive model of health care work to a preventive one. This is the so-called "4P medicine" model (Predictive, Personalized, Preventive and Participatory medicine). "Participatory" means "involved in achieving a common result." Its practical implementation requires the participation of the patient himself [17]. The participation of the patient implies responsibility for maintaining one's own physical and mental health, and medicine performs only a service function [18]. Within the framework of the "4P medicine" model, effective prevention of diseases requires partnership between doctors and the population, commitment of citizens to a healthy lifestyle, readiness for valeological education and self-education. The formation of readiness for a healthy lifestyle should begin in childhood, but the conviction to practice only safe behavior patterns and to minimize all possible disease risk factors is finally formed at the age of 16–20 years [19–21], that is, at the age of the majority of higher education graduates in Ukraine.

Disease prevention in Ukraine is carried out at the international, national, regional, population, group and individual levels [22]. At the international level, events are held within the framework of world days of support for patients with various diseases, days of remembrance of those who died from various diseases, etc. At the national and regional levels, programs are being implemented to overcome various diseases (respectively), their consequences, promotion and organization of mass physical culture and sports, rational nutri-

tion, giving up chemical addictions, eliminating the consequences of environmental disasters, man-made disasters, etc. Mass media, medical workers, politicians, public figures, professional medical and social public organizations and doctors systematically engaged in sanitary education (for example, Dr. Komarovskiy E.O. [23]) participate in prevention. We specify some mechanisms of preventive work.

According to a number of researchers [24–26], medical and social non-government organizations, unfortunately, cannot cover all students with preventive work, but with systematic work with individual student groups, they are able to form valeological competence at a high level. Educators are trying to transfer the content of their educational work to the educational programs of valeological disciplines ("Valeology", "Fundamentals of Life Safety", "Health Pedagogy", "Fundamentals of Medical Knowledge and Health-Saving", etc.) [27]. It is advisable to train students of higher non-medical education in these disciplines after studying the supporting disciplines "Human Biology", "Anatomy", "Physiology" and "Hygiene", as indicated by the authors of the training programs of the relevant disciplines [28; 29].

Personal communication between the doctor and patient is effective for individual disease prevention. But doctors usually communicate with citizens who have diseases, so they act within the scope of secondary and tertiary prevention of diseases, aimed at preventing their complications and relapses, at the transition of diseases into chronic stages. At the same time, the optimal environment for the systemic primary prevention of diseases and the formation of commitment to a healthy lifestyle is educational [30], which in turn should be safe for those seeking education. In order to create a healthy educational environment, special attention should be paid to the issues of physical safety of learning and stress reduction [31].

The State Service of Education Quality of Ukraine recommends that the organizers of the educational process in martial law conditions give preference to distance learning, and in classrooms to arrange the educational space more safely (remove open shelves, stands that may fall during shelling; remove things that will interfere with quick evacuation from premises), study evacuation routes, location of storage facilities, conduct evacuation drills, periodically repeat safety briefings and evacuation drills. It is necessary to monitor more carefully the signs of distress and professional burnout of participants in the educational

process. Psychological trainings, support groups and individual consultations of psychologists, emotion management techniques (self-training) are forms of psychological assistance that allow students to overcome the stress of wartime. Teachers are recommended to pay more attention to conflict resolution; prevention of bullying; development of empathy and communication skills of participants in the educational process; setting up the collective of education seekers and teachers to provide greater support to forcibly displaced persons, persons with disabilities, persons who have survived the stress of war; to teach methods of rescuing victims and providing emergency first aid [32].

Given the greater risk of injury in wartime conditions, prompt and effective emergency care is both health-saving and life-saving. For training in emergency care in non-medical higher education institutions, it is advisable to involve practicing doctors and students of higher medical education in senior years. Especially those who study and work in practical health care at the same time [33]. It is worth noting that before graduation, a graduate of higher education medical institution is already sufficiently motivated to engage in prevention, understanding the advantages of prevention over the treatment of a disease that has already developed [34]. But the interaction of non-medical higher education institutions of Ukraine with the health care system for the construction of health care education is not systematic, it is based on volunteer models. The higher education system does not order educational services from representatives of the health care system. The main achievement of the episodic interaction is actions dedicated to a healthy lifestyle and prevention of certain diseases, which medical non-governments organizations conduct in higher education institutions, as well as individual attempts to create valeological disciplines with the participation of medical professionals.

Valeological disciplines for students of higher non-medical education also consider the health-saving educational process from the point of view of ensuring the physical safety of learning and reducing the level of stress of participants in the educational process [35]. Physical safety includes issues of ergonomics, microclimate and room lighting, safety of physical culture and sports as part of the educational process, safety of work in educational and production workshops, with electrical equipment, chemicals, etc. Stress is often seen as a manageable risk factor for the development of

hypertension, peptic ulcer disease, obesity, myocardial infarctions, cerebral strokes, and other diseases that can affect students. Diseases with controlled and conditionally controlled risk factors are the main objects of preventive interventions and sanitary education [36; 37]. Stress is caused by overload during education, high competitiveness in the educational environment, and conflicts between students [38].

Educational programs of higher education students of Ukraine and other countries of the world, according to a number of researchers [39; 40], were compiled without proper calculation of a rational academic load, which causes chronic stress, against the background of which the risk factors of diseases are more easily realized negatively, existing diseases are aggravated or go to the chronic stage.

Excessive requirements regarding the number of program competencies in the higher education standards contribute to the information overload of the students. The discussion about the need to reduce the number of such competencies has been going on for two decades. But, in our opinion, the list of competencies in the standards of higher non-medical education cannot be shortened at the expense of valeological competence [41]. However, the content of this competence should be separated from issues of spiritual development, which can be discussed within other disciplines. When studying valeological disciplines ("Health Pedagogy", "Fundamentals of Medical Knowledge and Health-Saving", etc.), it is important to discuss only certain issues of psychology, ecology, moral and ethical norms (when discussing abortions, contraception, euthanasia, rights and responsibilities of patients, relationships with doctors, other higher education students, family members, disabled people, respect for family, religious and cultural food traditions, etc.). But the transfer of emphasis from medical issues to moral, ethical and spiritual issues while simultaneously ignoring the issues of physiology, pathology, and the possibilities of prevention harms the formation of valeological competence and optimal understanding of the principles of a healthy lifestyle. The inclusion of pseudo-scientific data about the "undeniable benefit" of folk medicine methods into the program causes even more damage; naturopathy; homeopathy; the advantages of Eastern medicine over European medicine; refusing vaccinations not because of medical reasons, but because of personal convictions; home births; practices of "hungry", vegan diets; hardening methods, etc. [42–44].

The inclusion of some issues in the programs of valeological disciplines and the refusal to discuss others is the right of the authors of such disciplines, but it is advisable to check the formed programs for compliance with the recommendations of leading international organizations. For example, "Characteristics of an Effective Health Education Curriculum" of the USA Center for Disease Control and Prevention (CDC) [44]. According to the developers of these recommendations, an effective educational program should be aimed at achieving behavioral results, without overloading with scientific facts. In addition, according to the CDC's experts, it is necessary to practice health care skills in order to teach a healthy lifestyle; the formation of personal values and beliefs that support healthy behavior, which corresponds to our ideas about the components of valeological competence [12]. The best health-saving curricula go beyond the cognitive level and consider determinants of health, risk factors for diseases, social opinions, values, norms of behavior, customs that affect health, build educational strategies on theoretical approaches (for example, on the theory of social cognition by Berger P. & Lukman T. [45]), are aimed at a long-term result. Meanwhile, health care values should promote protective behavior and negative perception of risky behavior, reinforce positive beliefs of a healthy lifestyle based on the principle of feedback using critical thinking, and help confidently overcome social pressure. An effective curriculum should take into account the needs and interests of learners, levels of development and emotional maturity, experience, knowledge and skill levels, provide tools for everyday life, cover topics in a logical sequence; should not contain culturally biased information, but provide examples of various cultures, customs, traditions, ways of life, take into account cultural diversity, teach intercultural interaction; if possible, rely on the cultural resources of families and communities. An effective curriculum devotes sufficient time to both key health concepts and practical skills. Changing behavior requires systematic and long-term training, is based on previously learned concepts and skills, and takes into account age determinants. An effective curriculum connects learners with influencers promoting health and successful learning strategies.

This understanding of health-saving programs demonstrates a close connection with competencies, the list of which contains both scientific publications and some national education standards [46–48], according to which a healthy lifestyle is

associated with the absence of harmful habits, protective behavior, prevention of known health risks.

Conclusions

Our findings suggest that the improvement of the preventive direction of valeological education is closely connected with the competence approach, in particular, with the formation of valeological competence. The public health system should use the potential of educational valeological programs to form a healthy lifestyle in new generations during their studies at higher education institutions. For the formation of high-quality valeological programs, a permanent partnership of educators and medical professionals is necessary.

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