УДК 615.322:454.1:615.415.16 **TEACHING ECOLOGY IN HIGHER MEDICAL SCHOOL**

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Introduction.

Intensive multifactorial pollution leads to long-term effects on the population of the set of pollutants [1]. Highlight some diseases in a group depending on the ecology - was the result of evidence of etiological value chronic exposure of pollutants in the process of formation of the level of public health [2]. That is why knowledge of the fundamentals of ecology is a necessity for medical students - for the understanding of the pathogenesis of many diseases. Today greening education in European countries, USA, Canada, Japan, China appears more widespread approach to training as the pupils of schools and students universities [3]. Undoubtedly, in the modernization of Ukrainian higher school recognized by world standards is the most appropriate way of reform.

Objective: To evaluate the teaching system of environmental knowledge to students of all specialties of higher medical school in Ukraine.

Materials and methods. Evaluation of knowledge on the ecology of students every medical specialty Higher School of Ukraine was held. The efficiency determines the selection of forms, methods and means of instruction. At the same time, the achievement of the main goals of education - the issue of qualified professionals - is not possible without the continuous updating of pedagogical approaches. Greening of medical education makes new demands on professional skills and level of training of future specialists. Adaptation to regional socio-economic and cultural conditions of a precondition of success of environmental education, and national and religious differences necessarily need to take into

account the population. Accordingly, the existing curriculum of medical students in need of a timely introduction of the necessary changes.

Results discussion. and Environmental issues are considered during the educational process in the discipline "Health and Ecology" at the 3rd year of higher medical school (19 hours), 3-year student of the Faculty of pharmacological (6 hours), 2nd course of the Faculty of Dentistry (10 hours) and 6th training course on specialties "General Medicine" (4 hours), "Pediatrics" (5 hours) and "medical and prophylactic business" (60 hours). In addition, training is provided for students of 1st course of pharmacological faculty on the subject "Fundamentals of Ecology" (54 hours). Quantitative and qualitative content of programs for the study of environmental issues by students of various specialties differ greatly. For example, the training of future specialists of preventive medicine covers various aspects of the impact of pollution the natural. industrial. of consumer, and educational environment for people of all age groups. Environmental issues are considered at each of the five training modules for all hygienic disciplines. However, the amount of environmental knowledge for training students of specialty "Medicine" and "Pediatrics" is limited to questions of hygienic importance of ultraviolet radiation and climate for the formation of human health. The program of training of future specialists pharmacists a paid little more attention to the environmental laws and the general laws of interaction of individual environmental factors with a population of people. Than, the assessment of health effects is carried out only in the projection of enterprises chemical and pharmaceutical industry. The need to make adjustments to existing

training programs of students of higher medical education is influenced by the quality of the environment on health. WHO experts associated with exposure to adverse environmental factors from 20 to 40 % of diseases. The content of certain contaminants in the environment are increasingly recorded at levels in excess of hygienic standards in more than 10 times. This upward trend in morbidity of 1,5 - 4,5was seen. Changes in health in ecologically unfavorable regions appear in the prevalence of immunodeficiency (10 - 40 %) and allergic diseases (5 - 28 % of the population). The level of environmental carcinogenic risk to residents of such settlements increases by 1,5 - 4,0 times the level oncologic mortality population in the total reaches 12,49 - 14,24%. The frequency of registration of congenital abnormalities is among one of the most ecologically representative parameters, the incidence of which in recent years has increased by 1,2 – 1.7 times. All of the above determines the main directions of the changes of the thematic content of training programs of medical students. First of all, the impact of environmental health hazards for the population it is advisable to be taught from the perspective of risk assessment methods of individual environmental factors and their various complex impacts. Environmental risks to the population caused not only by pollution of the living environment and chemicals. Researchers assign a greater role in shaping public health share of physical factors such as electromagnetic fields, noise,

vibration, and psychogenic stress factor. From our point of view, the amount of academic sessions on the assessment of the nature of their impact on human health of different age groups should be given priority in the current socio-political conditions. Moreover, the total time learning the basics of medical ecology is recommended to extend up to 40 hours for the 3rd year students of the Faculty of Medicine and 30 hours - 6th year specialties "Medicine" and "Pediatrics". The program pharmacological faculty need to review the content within a specified volume. And training of specialists preventive medical profile does not require significant changes. For planned saturation of the educational process in the entire volume of environmental education with modern methodological developments, tutorials. computer training programs necessary to develop new teaching materials on the basis of scientific and educational research.

Conclusion. Some of the quantitative and qualitative changes in the existing courses students need to be made for the formation of new national standards of medical education to meet modern international trends. These adjustments provide training highly qualified specialists of various medical profiles. So, will create conditions for adequate prevention, early diagnosis and treatment of various health disorders. Thus, the understanding of issues of environmental medicine will improve the quality of life of the population of Ukraine.

Literary sources.

^{1.} Liverman, C.T. <u>The Use and Effectiveness of Powered Air Purifying Respirators in Health</u> <u>Care:</u> Workshop Summary / C.T. Liverman, B.D. Sarah, M.A. McCoy; Board on Health Sciences Policy. – <u>Institute of Medicine</u>, 2015. – 80 p.

^{2. &}lt;u>Review of NASA's Evidence Reports on Human Health Risks</u>: 2014 Letter Report / C.E.H. Scott-Conner, D.R. Masys, C.T. Liverman, M.A. McCoy; Committee to Review NASA's Evidence Reports on Human Health Risks; <u>Board on Health Sciences Policy</u>. – <u>Institute of Medicine</u>, 2015. – 92 p.

^{3.} Altbach, P.G. Trends in Global Higher Education: Tracking an Academic Revolution, Report for the UNESCO 2009 / P.G. Altbach, L. Reisberg, L.E. Rumbley; World Conference on Higher Education. – United Nations Educational, Scientific and Cultural Organization, 2009.–247p.

ВИКЛАДАННЯ ЕКОЛОГІЇ В ВИЩІЙ МЕДИЧНІЙ ШКОЛІ

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У статті розглядаються питання викладання основ екологічної освіти студентам різних медичних спеціальностей. Дана оцінка програмного матеріалу з дисциплін «Гігієна та екологія» та «Основи екології». Запропоновано раціональні корективи для забезпечення високої ефективності навчання студентів-медиків.

ПРЕПОДАВАНИЕ ЭКОЛОГИИ В ВЫСШЕЙ МЕДИЦИНСКОЙ ШКОЛЕ

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В статье рассматриваются вопросы преподавания основ экологического образования студентам различных медицинских специальностей. Дана оценка программного материала по дисциплинам «Гигиена и экология» и «Основы экологии». Предложены рациональные коррективы для обеспечения высокой эффективности обучения студентов-медиков.