

соблюдение гигиенических требований по отношению к местам проведения занятий и используемому инвентарю.

Медико-биологическая группа включает в себя рациональное питание, витаминизацию, физиотерапию и различные виды массажа. Данные методы назначаются врачом и протекают строго под его контролем. При разработке режима питания следует пользоваться рекомендациями Института питания РАМН, в основу которых положены принципы сбалансированного питания.

На стадии начальной подготовки спортсменов рекомендуется восстановление организма естественным путем:

- чередование дней тренировок и отдыха;
- постепенное увеличение интенсивности, количества нагрузок;
- проведение тренировок в форме игры.

Также важно применение таких гигиенических средств, как:

- контрастный душ;
- прогулки на свежем воздухе;
- витаминизация;
- рациональное питания.

На учебно-тренировочных этапах свыше 2-ух лет обучения основными являются педагогические способы:

- оптимальное построение тренировки и соответствие ее интенсивности состоянию организма спортсмена;
- рациональное соотношение нагрузок и отдыха.

На этапе совершенствования спортсмена и роста количества соревнований увеличивается время, которое требуется для восстановления организма.

В качестве дополнительных педагогических методов могут использоваться такие, как:

- переход с одного вида спорта на другой;
- чередование тренировок различного количества и интенсивности;
- смена длительности отдыха.

Способы восстановления применяются только в случае снижения работоспособности организма или при непереносимости текущих тренировочных нагрузок спортсменом. Если восстановление работоспособности происходит естественным путем, то дополнительные методы могут повлечь за собой спад тренировочного эффекта. В момент выбора методов восстановления особое внимание нужно обратить на индивидуальную выносливость спортсменов во время нагрузок на тренировках или соревнованиях. Измерителями выдержки могут служить личные ощущения спортсменов и объективные показатели (частота дыхания, сердцебиение, пульс, потовыделение, и т. д.).

Последовательное увеличение нагрузок на определенных этапах тренировок входит в противоречие с происходящими приспособительными изменениями в организме спортсмена. В следствие этого приходится на уровне с отдыхом на некоторое время уменьшать количество нагрузок, что позволяет произойти в организме спортсмена определенным перестройкам. Поэтому динамика тренировок приобретает волнообразный характер. Такие изменения нагрузки характерны как для небольших периодов тренировочного процесса, так и для этапов годового цикла.

Таким образом, можно сказать, что для эффективного восстановления спортсменов по чирспорту между соревнованиями требуется совокупность различных методов.

#### Список литературы

1. Гавердовский Ю.К. Техника гимнастических упражнений. - М.: Терра-Спорт, 2012. - 508с
2. Матвеев Л.П. Теория и методика физической культуры. - М.: ФиС, 2010. -543с.
3. Цыба И.А. Черлидинг в высших учебных заведениях: Учебное пособие. М.:2010. – 80
4. Черлидинг – как подготовить команду. Методическое пособие для тренеров по черлидингу. – Москва 2008г.
5. Чирлидинг [Электронный ресурс] // Википедия. – Режим доступа: <https://ru.wikipedia.org/wiki/Чирлидинг#Соревнования>

#### STUDENT'S SELF-RESEARCH WORK AS AN INTEGRAL PART IN THE PREPARATION AND TRAINING OF A DENTIST DOCTOR

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**Abstract**

The article dwells on the issues of conducting and organizing student's self-research work in the conditions of introduction in the educational process of the credit-module system. One of the most important components of the educational process is an independent self-research work, which involves the integration of various types of collective and individual learning activities, which is carried out both during indoor classes and outdoor classes, as well without the teacher's involvement, as under his direct leadership and mentoring.

**Keywords:** self-research, self-determination, credit-module system, forms and methods of education.

The main characteristic for understanding the student's educational activity is self-determination. Understanding the problem of autonomy of students in the educational process is the basis of a responsible attitude towards the professional training and education of future specialists. Reformation of the higher education led to an increase in interest in finding effective pedagogical conditions for the formation of student's autonomy, which also helped to manage mastership of the content of educational material qualitatively, deliberately planning self-development of intellectual, moral and physical abilities [1, 2, 3].

The credit-modular system can intensify students' research paper; motivate their aspirations for a permanent, and not just a sessional participation in the learning process. Purposefully organized research paper allows creating the necessary conditions for forming a conscientious attitude to the educational process (student's apprenticeship), to cultivate a sense of obligation and responsibility, work ability and initiative desire, persistence and self-discipline, as well as to encourage to the creative start-up and other ethical norms, necessary for decent performance in professional activities.

The main goal is to form a creative personality of a dentist, capable for self-development and self-education. The solution of this problem covers not only the transference of already gained knowledge from a teacher to a student. It is necessary to transform students from the passive consumer of knowledge into an active creator, who can formulate the problem, analyze it, find a solution and get the optimal and suitable result.

Cooperating with that, the research work is an important form and basis for student apprenticeship. The student must study on his own, because the quality of the training and educating of specialists in the higher school is determined not only by the amount of certain knowledge and skills, but also by obtaining the ability to independent and by creative activity. It stimulates clinical thinking in the field of education, which aim is to achieve and fulfill the main goal: the student is an active participant in the educational process [4, 5].

The purpose and tasks of research work of students – is an independent study of separate blocks of the program, systematization, deepening, generalization, consolidation and practical application and usage of student's knowledge of the discipline.

The lecture was always considered as the most effective form of emotional influence on the formation of a professional position, individual education, and the formation of a responsible attitude to learning. The lecture course involves submitting the material in a problematic form with a preliminary text acquaintance of the students with the main content of the lecture. This tactic of the lecturer allows concentrating the attention of the students on the visualization of the main content

of the material, active involvement in understanding the information provided, mutual communication and discussion, rather than simply writing the abstracts of the lecture. It is important for lecturer to develop the student's interest and motivation by deepen independently in the material from the difficult sections of the discipline. The scientific developments that are being introduced into the lecture course allow us to obtain new data on contemporary views on issues of etiology, pathogenesis, early diagnosis, and tactics of treatment and prevention of dental diseases, to form clinical and creative thinking in students, cause their cognitive activity and encourage to the different types of researching activities.

The certain potential for students' self-development in the conditions of credit-module system may become the other forms of an organization of the studying process: seminars, scientific conferences, disputes, etc. The participation of students in them is a real opportunity to not only acquire knowledge and skills, expand the experience, but also to determine the level of competence on certain issues, express their own vision, and simply establish themselves in their own self-sufficiency [6].

Modern technologies of teaching provide gradual mastership of student's knowledge. This implies a detailed, solid assimilation of the theoretical material and its complete reproduction, the formation of a system of professional skills (sensorimotor, perceptual, and professional) and skills (use of knowledge and action skills) and creative work of the student in preparing him as a doctor. This process takes place and is being achieved at the theoretical and clinical departments [7].

At practical lessons during clinical reception and consultations of patients we work out the tactics of, which includes discussion of possible variants of treatment, drawing up a plan, stage, and sequence of manipulations and forecasting the results. Students must be involved in this process.

During the practical training, the technology of flexible situational learning in the system of vocational training is widely used by solving clinical problems and tasks. The purpose of technology situational learning means that the main emphasis is taken not only in order to master the knowledge, but also on remaining their own acquisition. The most important functions of the teacher in this work is the development of a model of a specific clinical situation that took place in real life with conflict and contradiction. Everyday practical training is conducted by solving typical problems, while during the analysis, situations are also solved with the aim of solving professional non-typical tasks, which in their own terms are the elements of complication, possibly an atypical clinic, diagnostics, treatment with surplus data, require urgent decision, etc.

A compulsory component of training is clinical analysis – a form of development of clinical thinking and research skills. The subject of clinical examination are the most complex cases in the diagnosis, errors and complications that have arisen during and after treatment, traditional and new methods of diagnosis and treatment. The complex of these activities together with an active cognitive position contributes to the development of their thinking, finding the right choice of action and solution in one or other typical or atypical situations.

It should be noted that the independence of the student is especially important in this system of training. The implementation of this system facilitates compliance with the following didactic conditions:

- joint educational activity of a teacher and a student when establishing cooperation between them;
- integration of indoors and outdoors classroom activities;
- combining external and internal control, which ensures the intensity and efficiency of feedback.

Here is a brief description of each of the conditions:

1. The joint educational activity of a teacher and a student is based on the positions of cooperative and collaborative learning, in which the effect of community is formed, especially when participants work together in an unstructured group and create an educational situation. In practical classes, the student may feel somewhat in the role of a doctor. Providing the opportunity of directly performance of individual manipulations at the stages of treatment – is a motivation for more professional work, which leads to independent work with special literature, obtaining additional information, acquaintance with modern developments in the field of dentistry. Professionalism is formed in the process of practical activity. The functions of a teacher in implementing this condition are to help students achieve the best results.

2. Integration of indoor and outdoor classroom forms of educational activities.

The principle of integrality involves the presence in the educational process of a mutually interdependent and interdependent integrity, the establishment of connections and relationships between the components of educational activity by incorporating them into new communication systems.

Observations of the real process show that the optimal correlation of different forms (indoor and outdoor) of the organization of the educational process contributes to the development of students' self-independence and self-sufficiency, creative transformation of educational skills in the new communicative conditions.

G. Trofimova formulated the requirements for indoor classroom work, which should:

- been characterized by a high aesthetic level of content, forms and methods;
- organically combined with classroom work;
- be based on the level of students' training;
- based on a combination of the leadership role of the teacher with the activity and independence of students;

- to combine individual, group and mass work.

Among the forms of indoor classroom work, the so-called forms of formal cooperative learning are the most effective; when students work together for the same period, reach the goals that have been distributed, and those that involve joint implementation. The groups formed on this basis provide a platform for all other common general training procedures.

3. The combination of external and internal control, which provides the intensity and efficiency of feedback.

An independent way of evaluating academic work helps to master the general ways of action, self-control skills and self-esteem, and helps to develop self-independence. In order for students to have a clear benchmark in their evaluation activities, the normative method of control is also used in order to provide students with visual examples for work. Readiness of the student to internal semantic evaluation of his activity indicates the development of reflexive opportunities, the ability to make feedback, which allows him to see the reasons for his academic success or failure, evaluate the degree of achievement of the planned result, correlating it with their own actions.

Among the own forms of control, one can distinguish the following:

- educational commentary, which consists in the fact that one of the students, by carrying out certain actions, explains them based on a specific source;
- structuring texts and compiling various kind of notes, while developing the ability to analyze evidence, control the process of working with text;
- self-examination of answers;
- delegation of roles (assistant, consultant, speaker, opponent, etc.);
- drawing up plans of practical and mental actions in the performance of various tasks;
- mutual verification of oral and written answers (useful in small verification check-outs, students exchange works and reviews, independently develop (read, comprehend) new material, working in pairs, write questions to what they have already read, using «letters for mutual control»).

In modern conditions, the introduction of a credit-module system of training, test control of the acquisition of knowledge and skills solves the problem purely by not only the control and examination, but also performs training and demonstration functions. As a result, the biggest emphasis is being expressed on the most important positions for dentistry, on the formation of a certain logic, on the formulation of conclusions (clinical thinking), on the increasing of motivation in learning and mastering the basic knowledge. Only the self-analysis and self-examination help students to increase their motivation in studies and the capacity of grasping the basic knowledge. The teacher, assessing the nature of the answers to various tasks, should analyze, including the quality of the tests created, to improve and increase their level in the future.

The above-mentioned conditions for the development of self-deterrence in the conditions of a credit-module system, together with pedagogical means,

forms and methods of teaching, provide a developing personality function during educational activities.

### References

1. Gayvoronskaya T, Gulenko O, Sevastyanova I. Independent work of students as leading forms of organization of educational process at the Faculty of Dentistry. *International Journal of Experimental Education*. 2013; 4: 74-8.
2. Gurska O. Place and role of independent work of students in the educational process. *Origins of pedagogical skill*. 2014; 13: 103-7.
3. Korotych N. Independent work of students as a factor of preparation of a specialist in the credit-module educational system. *World of Medicine and Biology*. 2017;1(59):219-22.

4. Meretskiy V. The role of independent work of students in the organization of the educational process. *Medical education*. 2015; 3: 113-5.

5. Moroz V, Guminskiy Y, Fomina L. Moderation of higher medical education in the context of the Bologna Convention - the idea, purpose, reality. *Medical education*. 2012; 2: 42-5.

6. Sidash YuV. Motivational component as a success to organize an independent work of students at the department of therapeutic dentistry. *Ukrainian Dental Almanac*. 2019; 1: 48-51.

7. Vitenko I, Dzyak G, Bereznitskiy Y. Organization of educational process and control of its effectiveness in application of credit-module educational system at clinical departments of higher medical educational institutions of Ukraine. *Medical education*. 2010; 1: 41-4.

## THE LAW OF POPULATION SURVIVAL AS AN INFORMATION AND METHODOLOGICAL BASIS FOR THE TECHNOLOGIES OF PUBLIC HEALTH MANAGEMENT IN THE TRAINING OF MEDICAL STUDENTS AND MEDICAL ORGANIZERS

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### Abstract

To determine the basic information and methodological technology for teaching medical students and health care organizers to manage public health. Materials and methods. Census materials and the health dynamics of rural residents of Northern Bukovina in 1970 were processed using our own methods (1, 2, 3).

**Keywords:** education, medical students, survival, population.

### The law of survival of populations Stage.

**I. Collecting and arranging data** by means of the traditional statistical processing of the materials of the population mortality, using the tables of mortality and survival. At the same time, the authenticity and validity (consistency) of the results which corresponded to the demands of scientific rigidity. A check-up has shown that the known methods of constructing the mortality tables do not exactly realize demographic reality. Therefore, for the purpose of arranging the data a new method was worked out and used by the authors especially for this purpose aimed at compiling mortality tables [43], the shortcomings of the former methods have been eliminated in it.

**Stage II. Modeling the process of survival** was carried out by means of testing the models of survival by B.Gompertz-W.Makeham, P.Weibull, P.M.Ogibalov, V.P.Voitenko and others. The results of the approbation have demonstrated that each of the models has its own shortcomings and a number of drawbacks, common to all models, namely:

- M.Puason – according to the strength of mortality in it does not depend on age, there isn't an age limit in generations, as it were, in principle and, correspondingly the life span does not depend on the demographic reality.

- P.Weibull's model, transferred from the theory of the fatigue of metals and alloys (not living objects) into the field of demography does not give a clear description of the dynamics of survival of older ages (after 70 years), has no restrictions of the age limit of generations i.e. does not approach a zero (0), where 0

is a condition that all those born will die on the expiry of the finite interval of time.

- B.Gompertz-W.Makeham's model. B.Gompertz stated that mortality grows with time (age) in geometric progression. W.Makeham introduced a permanent correction – for leveling the mortality curve, but arbitrary without any substantial sense. Moreover, the strength of mortality is monotonously increasing according to their model in other words, the corresponding curve may be (in letters) only J – shaped.

At the same time, their model does not envisage the presence of the age limit in generations in principle and is unable to describe exactly the parameters of survival in the youngest age groups. These shortcomings in total do not permit a model to present accurately the demographic realities of the process of survival:

- V.P.Voitenko's model (a combination of two models: P.Weibull and B.Gompertz-W.Makeham) preserved non-coordination of the internal and external parameters of survival, peculiar to former models and was based on the assumption that the causes of the children's and senile mortalities are interdependent (the first contradiction of the model): the formula of the model is derived on the basis of an ordinary multiplication of the survival functions of Weibull and Gompertz-Makeham) and on this particular basis it turned out with a calculated analysis of the formula that the model age of death – the internal (biological) characteristic of the population, does not depend on the environmental conditions under which it exists (the second contradiction of the model). The following contradiction of the for-