

# MEDICAL SCIENCES

## TRAINING OF DENTAL STUDENTS UNDER CONDITIONS OF TODAY'S GLOBAL CHALLENGES

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### Abstract

The purpose of the work is to determine the problems of training medical students who study in the specialty "Dentistry" at specialized departments in the conditions of today's global challenges. Main part. The difficulty of training medical students in today's global conditions is the need to carry out educational and cognitive activities under new conditions. The replacement of the informational approach of educational programs from dental disciplines to a competency-based one involves the formation of the student's readiness to use the acquired knowledge, skills and abilities to solve practical tasks in the process of further professional activity. Therefore, in today's conditions, a practically-oriented approach among dental students is the most necessary. This is ensured by the discrete presentation of the material, increasing the visibility of the educational process, and the involvement of simulation technologies for mastering practical skills.

**Keywords:** higher dental education; methodological approaches; global challenges of today.

The twenty-first century is called the era of professionals. This emphasizes that the training of specialists in higher educational institutions is a factor of social change. Nowadays, professional training is interpreted in a different way, paying attention to such aspects of the problem that were not in the field of view until now: it is not enough to have a diploma, one must be a specialist who is recognized in most countries of the world. Such a motivation of the question leads to qualitatively new requirements for the training of specialists, requires new approaches to professional activity, and their implementation is modern scientific and methodological support of the learning process in a higher educational institution (hereinafter referred to as a higher educational institution) [1-5].

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The content load of the scientific and methodological support of the educational process in universities should reproduce the logic of the formation of the readiness of future teachers for professional and pedagogical activity and, together with other components of the pedagogical process, form a scientific, theoretical and conceptual unity of the professional training of university teachers (Yu. Alforyov, V. Baidenko, M.

Mokhova, I. Shendryk, etc.). However, the current requirements for the scientific and methodological support of the educational process in higher education institutions are not devoid of contradictions, the main ones of which are concentrated in the field of professional activity of teachers:

— on the one hand, the scientific and methodological support of the educational process in higher educational institutions is designed to form competences in students that will enable them to perform functional duties connections in the most optimal way on the basis of scientifically based solutions, which provides maximum focus on the individual trajectory of training by taking into account the specifics of future professional activity and professionalization, and on the other hand, its construction according to the requirements of credit-modular training, which maximally standardizes it;

— on the one hand, the logical structuring of the educational material by the teacher through the consistent presentation of the content of the study, tasks for self-examination, questions for in-depth control, which, in his opinion, enables the student to achieve significant results both at the intermediate stages of mastering the educational discipline and at the final stage on the basics its inclusion in a linear, orderly, rhythmic learning process, and on the other hand, the teacher's inability to fully ensure the systematicity and consistency of the student's independent work, since its format often takes

the form of sporadic, episodic, disordered, and even chaotic.

To resolve these contradictions, it is expedient to clarify the content of the scientific and methodological support of the educational process by establishing its functional purpose, types, and modern regulatory requirements for it, which is the purpose of the proposed article. Scientific and methodological support of the educational process is a set of documents, scientific, educational, methodical materials that:

- a) describe the content,
- b) establish the structure,
- c) determine the result,
- d) regulate the course of the educational process.

The regulation on the organization of the educational process in higher educational institutions defines the main components of the scientific and methodological support of the educational process. They are:

- state education standards;
- educational plans;
- educational programs from all normative and optional educational disciplines;
- programs of all types of practice;
- textbooks and training aids;
- instructional and methodical materials for seminar, practical and laboratory classes;
- individual semester tasks for independent work of students in academic disciplines;
- materials of current and final control (control tasks for seminar, practical and laboratory classes; control works to check the level of students' assimilation of educational material);
- methodical materials: for students to study specialized literature independently, to write coursework, diploma theses/projects.

However, the implementation of job duties in the most optimal way, based on scientifically substantiated decisions, implies the greatest possible focus on individualization of training by taking into account the specifics of future professional activity [2]. Therefore, this list can be (and preferably) supplemented, expanded by decisions of the department, faculty, higher educational institution or at the initiative of the teacher himself. We will give an example of an option to expand the list, approved by the decision of the department meeting: providing the pedagogical process with visual, handout material; preparation of abstracts of lecture-practical classes and methodical recommendations for pedagogical practice in electronic format; development of methodical materials for the independent work of students who study according to an individual schedule, in accordance with the requirements of the organization of the pedagogical process according to the credit-module system; development of the topics of course, bachelor's and master's theses. We think that the disorganization in the organization of independent work by students can be corrected precisely by expanding the list of the main components of the scientific and methodological support of the educational process. First of all, it is advisable to provide annotated catalogs, reference magazines, video recordings of lectures, seminars, discussions, conferences, and "round table" meetings, which record the discussion of the educational material in the volume

of at least the entire module, and preferably several. It will be appropriate to include in the list also video recordings of speeches by well-known specialists (both domestic and foreign) on the problems provided for in the curriculum [3, 4]. The educational and methodological complex of the discipline is a complex of specially developed materials, which is a complete education and ensures students' mastery of a certain educational discipline. The components of the educational and methodological complex of the discipline are:

- materials for classroom work on the academic discipline: plans-summaries of lectures, plans for seminar and practical classes, multimedia support for classes;
- materials for students' independent work: textbooks and manuals, methodological recommendations for preparation for practical and seminar classes, self-control materials from each module, individual tasks, topics of creative works, etc.;
- materials for monitoring students' educational achievements: control questions, control tasks, tests for current and final control, etc.

The listed components can be supplemented by others, the availability of which is initiated either directly by the teacher, or by the department or university. The responsibility for the scientific and methodological support of the educational discipline rests with the teacher who is entrusted with its teaching. Educational and methodological complex of the discipline materials, in addition to current and final control tests, can be provided to students for use. Regarding current and final control tests, our opinion is as follows: for self-testing of knowledge, students need to be offered different test tasks to prevent getting used to a familiar format. Yes, tests can contain from one to several correct answers or no correct answers; may involve choosing the correct definition or supplementing the given definition with several words from the proposed list. The issue of compliance with the quantitative normative requirements of the Ministry of Education and Science, Youth and Sports of Ukraine regarding providing students with educational literature, methodical instructions and recommendations necessary for mastering the academic discipline remains difficult. It is generally known that for full-time education it is considered complete to provide students with educational and educational-methodical literature in the presence of educational materials (printed or electronic) at the rate of one set per three people who master this educational discipline, for part-time education — one set of educational and methodological materials materials from the discipline per student. Methodical literature is stored in the library of the educational institution and/or in the relevant departments. In order to expand access to resources, it is possible to recommend that teachers have not only their own textbooks, manuals, methodical recommendations in electronic form, which, without a doubt, are available, but also in translation (and preferably in originals) foreign educational and scientific works.

The following should be available for use by each student:

- textbooks, educational and teaching-methodical guides from the list of basic literature from the educational work program of the discipline (it is good when the authors are university teachers who are entrusted with its teaching);

- course of lectures;
- plans for lectures and seminars, practical, laboratory classes;
- methodical recommendations for preparation for seminar, practical and laboratory classes;
- instructions for performing all types of work provided for in the work training program;
- a list of control tasks, questions, etc.

An important aspect of the teacher's methodical training is his ability to methodically support classroom classes, which is understood as a set of educational and methodical materials used in the natural course of lecture, seminar, practical or laboratory classes. It is clear that the preparation of such materials rests with the teacher who conducts these classes. The lecturer must prepare a summary of the lecture. As the practice of the authors shows, it is not uncommon for experienced teachers to come to a lecture without a synopsis. It is important to understand that such a synopsis is necessary not so much for them as for a student who could be late, leave or be distracted for objective reasons. If the current monitoring of students' knowledge is planned for the lecture session, then it is necessary to have test tasks that can be presented in the form chosen by the teacher (test tasks, individual questions, etc.). It is advisable to prepare a reference synopsis, where special attention is paid to the conceptual and categorical apparatus, with the help of which the problematic and thematic presentation of the lecture material was carried out. Such a synopsis can be given to students at the end of the lecture. It is not superfluous to supplement the lecture presentation of the educational material with multimedia presentations.

Therefore, the methodical provision of a lecture class involves:

- a synopsis of the current lecture — without fail;
- verification tasks — if necessary.

A complete set of methodical support for the lecture includes:

- reference synopsis of the current lecture;
- plans of all lecture classes;
- plans for seminar classes;
- full synopsis of all lectures;
- multimedia presentation of the lecture.

Instructive and methodical materials for them are a mandatory component of methodological support for seminar, practical and laboratory classes. Such materials should highlight:

- the subject of the lesson;
- its purpose, formulated as its threefold purpose (didactic, developmental and educational);
- a list of questions to be considered at the lesson;
- course of the lesson;
- control questions to check the scope and level of learned educational material;
- criteria for evaluating students' work in class

Methodological support for students' independent work is a set of educational, educational and methodical materials, the purpose of which is to provide the necessary information for the full mastery of the academic discipline through its study, critical analysis and comprehension in free time from educational classes. Instructions for searching, summarizing the material, its schematization can be supplemented with annotated catalogs, a link to reference journals. Since independent work constitutes a significant part of the total volume of the academic discipline (not less than a third and not more than two-thirds of the total number of hours allocated to its study), it is clear that its mastery outside classroom classes creates a rather significant burden on the student. We will formulate methodical guidelines for the organization of the student's independent work:

- in terms of content and scope, the independent work must correspond to the modular structure of the academic discipline;

- independent processing of educational material should be limited to a list of literature, questions, problems, types of activities, etc.; it refers to the content and scope of the educational material of each thematic section, individual topic, as well as each classroom session;

- materials for questions submitted for independent study must be available to the student; this especially applies to mastering the theoretical and methodological problems considered within the educational discipline;

- the forms and types of independent processing of educational material by students must be diversified: these can be reports, essays, annotated lists of literature, bibliographic indexes, essays, etc.;

- it is necessary to ensure the possibility of self-checking of self-worked questions;

- for in-depth self-control, a list of control questions, concise answers to them or tests with answers should be given in the methodological recommendations for independent work;

- for evaluating the results of independent work, establish a list of control measures and their terms, which should be brought to the attention of students;

- the total amount of time allocated according to the plan for independent work cannot be changed.

Students can be informed about the planned independent work activities in different ways. As an option, we suggest bringing to their attention the measures regarding the current verification of independent work in the format of a table.

It is expedient to expand further investigations into the issues of scientific and methodological support of the educational process in higher education institutions in the direction of the theoretical justification of such a procedure for monitoring the quality of training and the quality of education, which will provide an opportunity not only from the outside, but also for the student himself to monitor the acquired knowledge and take adequate actions in order to bring it to the desired level [5]. The expectations of the scientific and pedagogical general for the development of transnational agencies for monitoring the quality of education, according to which

the quality of the education of graduates will be determined, do not in any way level the toolkit, which is already extremely necessary today, for a convincing and objective determination of the extent to which the activities of the main subjects of educational educational process is productive.

As for dentistry, the main difference between dental disciplines and other medical disciplines is the need for perfect mastery of manual skills. Moving on to the professional training of English-speaking students, we note that modern trends in the development of medical education require replacing the informational approach of educational programs with a competency-based one, which involves the formation of a dental student's readiness to use the acquired knowledge, skills and abilities to solve practical tasks in the process of professional activity. Accordingly, according to the new training program for specialists of the second (master's) level of higher education in the specialty 221 "Dentistry" of the educational qualification "Master of Stomatology", professional qualification "Dentist", special attention is paid to the level of competences, both general and special (professional). The modern idea of preparing a master of dentistry involves not the influence of the one who teaches on the one who studies, but first of all, the formation of a personality characterized by competences, that is, the ability to do various types of activities. According to the matrix, competencies require certain knowledge, skills, communications, as well as autonomy and responsibility. Therefore, despite the new wording, as before, the final success in fulfilling the educational goal is achieved under the condition of the implementation of all links of the pedagogical triad "knowledge - ability - skills".

Therefore, a possible way to solve the problem that has arisen is to replace the informational approach of educational programs with a competency-based one, which involves the formation of a dental student's readiness to use the acquired knowledge, skills and abilities to solve practical tasks in the process of professional activity. As our experience shows, in today's conditions, such a practically oriented approach among English-speaking dental students can be ensured by the discrete presentation of material, increasing the visibility of the educational process, and the involvement of simulation technologies in order to master practical skills.

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