

## FUNDAMENTAL AND CLINICAL SUBJECTS IN A MEDICAL DOCTOR TRAINING

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**Summary.** Objective: to substantiate the ways of improvement of fundamental subjects teaching at a higher medical school. Materials and methods: analytical review, discussion of the work experience. Results: recommendations relating to the improvement of theoretical subjects teaching at the medical institutions of higher learning have been developed. Conclusions: the role of fundamental medical subjects is growing in the modern higher medical school; teaching of pathological physiology is rational to conduct at three stages: junior grades, senior grades and internship.

**Key words:** fundamental science, pathological physiology.

*Background.* At the present time in the higher medical education there are several urgent problems and they need their prompt solution as efficacy of teaching process greatly depends upon them.

To our mind, constantly swelling rupture, breach between rapid stream of the new data the medical science obtains and real possibilities of the teaching process is one of the leading present day points. We mean time of education, mental possibilities of the students, etc.

The last is clearly illustrated by the relation between fundamental and clinical subjects in the curricula of the medical institutions of higher learning. This problem has been analysed from different points of view under different periods of its development. Traditionally, the teaching of fundamental subjects at the first three courses is believed to create theoretical base for the further teaching in clinics. Besides, at this stage great attention is paid to the acquiring of practical skills, and their importance is considered to be a great importance. Till now, such a two-staged process was agreed-upon. Meanwhile the key changes take place in modern medicine being stipulated by appearance and use of new diagnostic, therapeutic and

rehabilitative technologies. *Objective:* to substantiate the ways of improvement of fundamental subjects teaching at a higher medical school. The occurrence of new technologies at the end of the XX<sup>th</sup> century and skyrocketing of technological progress in the medical sector changed it and required a considerable reorganization of the teaching system in medical educational establishments.

It is stipulated by the following reasons:

- development of medical technologies on the base of the latest achievement of fundamental sciences;
- considerable shortening of the period of installation of the achievements of fundamental sciences in medical technologies and clinical practice (3-7 years instead of 20-30 years earlier);
- necessity of adequate theoretical training;
- significant increase of theoretical knowledge;
- increase of the number of practical knowledge a practical doctor needs for successful fulfilment of his duties;
- specialization of medical specialties and the necessity of integrative approach to a patient

Thus simultaneous increase of theoretical knowledge and practical skills a modern doctor needs, states practically unsolvable problem in doctors' training.

This is stimulated by several reasons. First, now practical training of a doctor lasts some 7-9 years and its further increase is just impossible. Second, real possibilities of a trainee are limited as well. Third, the whole volume of theoretical and practical knowledge and skills are unnecessary for the doctors of all specialties, while now there specialties of integrative content, e.g. family medicine. Fourth, the perspective of the medical science and practice development .leads to the worsening of the situation under discussion.

The mentioned above dictates terms to reform higher medical education both by its content and organization. E.g. at the learning of theoretical subjects their content should be differentiated at conceptual construct and information content.

A further doctor should know and understand all main common factors of medical science theory. Simultaneously, the volume of the factual material, taught now in medical universities, should be reduced. Such subjects as Human Anatomy, Histology and Medical Chemistry may be exemplified. Their knowledge are necessary for understanding of the structure and functioning of a human body. While every student does not need the whole volume of the factual material by every subject mentioned. Because the further clinical

specialization supposes necessity of a concrete volume of knowledge for every specialist. Besides, a modern specialist has a real time access to the whole information. Now, a doctor cannot know the whole information by all subjects, but he/she understands the main points and common facts he can get and create an informational bank on the questions necessary.

Such differentiation of the learning material will allow to free up time for delivering special courses on the perspectives of medical science.

For taking into account the development rate of science and working out the new medical technologies we can predict for surely that in several years of the university graduation the doctor will meet in his clinical practice new, may be even basically new technologies which conceptual construct did not exist in the learning material some 6-8 years ago, i.e. till the beginning of his practical activity. That why the perspective of medical theory and practice development should be obligatory delivered under the course of the modern doctor training.

We suppose that reorganization of the teaching process and practical skills a doctor needs, should be done according to the same scheme and it includes the change of the teaching process as well.

Teaching of Pathological Physiology may illustrate such an approach. For example, the third year students crown medical theoretical training and to our mind just now it is desirable to teach the common pathophysiological theory of disease, the content of which moulds the general imaginations of the further doctor about reasons and mechanisms of a disease. We believe, it is desirable to teach clinical pathophysiology at the 5<sup>th</sup>-6<sup>th</sup> grades. And during the internship training learning of special pathological physiology and perspectives of medical theory development are most appropriate, effective.

The approaches to the reorganization of the higher medical education content and organization suggested, acquire a broad discussion in the higher medical school for the search of the appropriate and absolutely necessary improvements of professional training. This is predetermined by the modern state and perspectives of the development of medicine.

*Conclusions:* (1) The role of fundamental medical subjects is growing in the modern higher medical school;

(2) teaching of pathological physiology is rational to conduct at three stages: junior grades, senior grades and internship.

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